Architecture Program Report 2017

University of Manitoba
Department of Architecture

September 15, 2017

Submitted to the
Canadian Architectural Certification Board

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Clownmade City (M.Arch Design Thesis, 2017)
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Contents

Front Matter 1

1 Introduction to the Program

1.1 Program Identity and Mission 7
1.2 Program Action Plan and Objectives 13

2 Progress Since the Previous Site Visit

Program Responses To:
.1 Causes of Concern 21
.2 Conditions "Not Met" 26
.3 Other Team Comments 36

3 Compliance with the Conditions for Accreditation

3.1 Program Response to the CACB Perspectives 41
3.2 Program Self-Assessment
.1 Faculty 55
.2 Students 65
.3 Alumni 71
.4 Architectural Community 77
3.3 Public Information 82
3.4 Social Equity 94
3.5 Human Resources 102
3.6 Human Resource Development
.1 HR Opportunities 119
.2 Appointment, Promotion & Tenure 121
.3 Faculty Development 123
.4 Currency in Practice & Licensure 125
.5 Student Field Trips 126
.6 Student Societies 130
.7 Student Support Services 133
.8 Guest Lecturers, Critics & Cultural Events 135
.9 Exhibitions 155
3.7 Physical Resources 157
3.8 Information Resources (Library) 176
Information Technology 184
3.9 Financial Resources 187
3.10 Administrative Structure 195
3.11 Professional Degrees and Curriculum 210
3.12 Student Performance Criteria (SPC) 219
SPC Matrix 239

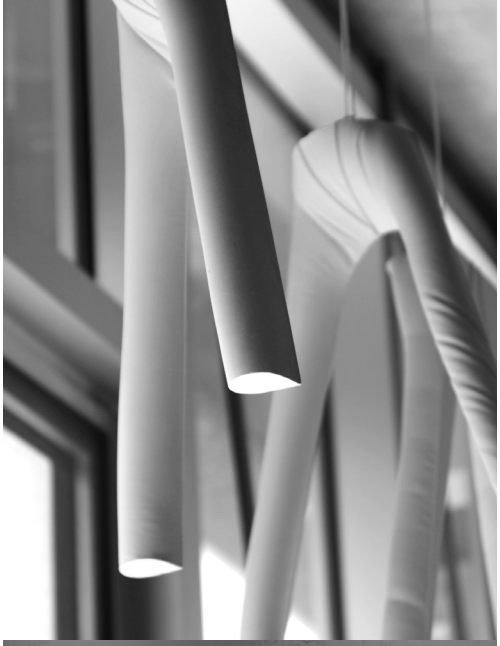
4 Supplemental Information

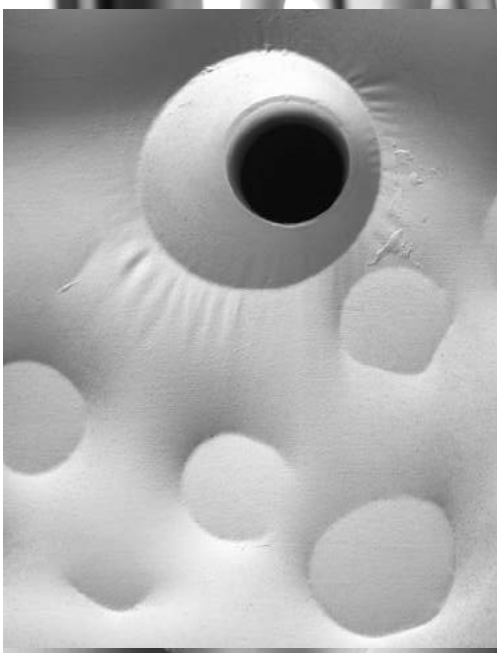
4.1 Introduction to the Institution and Program History 243
4.2 Student Progress Evaluation 248
4.3 Current Course Descriptions 257
4.4 Current Faculty Resumes 290
4.5 Visiting Team Report from the Previous Visit 335
4.6 Annual Reports Appendix 397

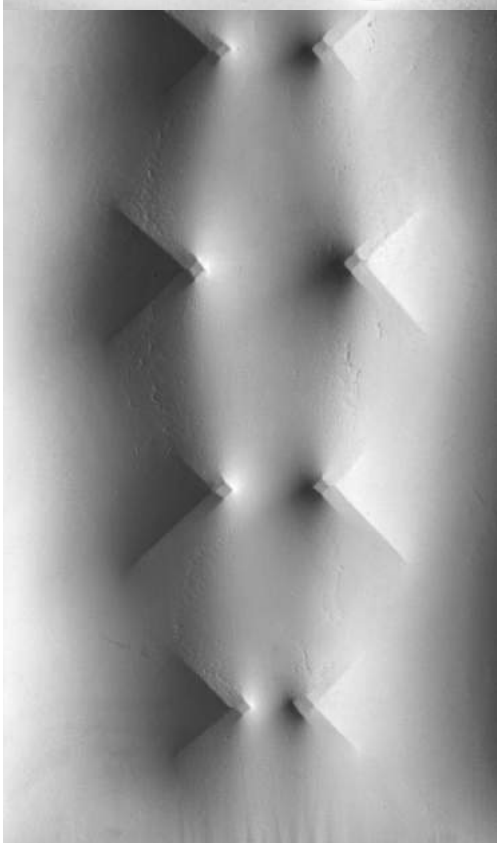
Abbreviations

ACSA	Association of Collegiate Schools of Architecture
AMP	Architecture Masters Preparation (program)
APR	Architecture Program Report
B.Env.D.	Bachelor of Environmental Design
B.Env.S.	Bachelor of Environmental Studies (former name for B.Env.D.)
CACB	Canadian Architectural Certification Board
CALA	Canadian Architectural Licensing Authorities
CCUSA	Canadian Council of University Schools of Architecture
DoA	Department of Architecture
ED	Environmental Design
ED1/U1	Environmental Design, year 1/University 1
ED2	Environmental Design, year 2
ED3	Environmental Design, year 3
ED4	Environmental Design, year 4
EDPAC	Environmental Design Program Advisory Committee
FAUM	Faculty of Architecture, University of Manitoba
FGS	Faculty of Graduate Studies
M1	Master of Architecture, year 1
M2	Master of Architecture, year 2
MAA	Manitoba Association of Architects
PCC	Product Catalogue Collection
RAIC	Royal Architectural Institute of Canada
SPC	Student Performance Criteria (established by the CACB)
U1	University 1
UM	University of Manitoba
UMAAS	University of Manitoba Architecture Students Association
UMFA	University of Manitoba Faculty Association (Union for all full-time academic staff, heads and librarians)
VTR	Visiting Team Report

1 Introduction to the Program







1 Introduction to the Program

1.1 Program Identity and Mission
1.2 Program Action Plan and Objectives

1 Introduction to the Program

1.1 PROGRAM IDENTITY AND MISSION

Accreditation requires an understanding of the program's specific scholastic identity and mission.

The APR must include:

- *A summary of the program's identity, uniqueness, strengths and challenges;*
- *The program's current mission statement, the date of its adoption or revision, and the date of its endorsement by the institution (if such statement and objectives do not exist, the program's plans for completing one must be outlined).*

Program Introduction

The Department of Architecture at the University of Manitoba offers a two-year graduate curriculum leading to a fully accredited professional Master of Architecture degree (**M.Arch**). Students entering this program typically have a four-year pre-professional degree in architectural design, or environmental design with an architecture focus. Years one and two of this 2-year M.Arch program are referred to as **M1** and **M2**.

The Department of Architecture also delivers the architecture curriculum for the last two years of the four-year undergraduate Environmental Design program leading to a Bachelor of Environmental Design degree (**B.Env.D.**). The first two years of this ED program (U1/ED1 and ED2) consist of general multidisciplinary foundation studies, not presently taught by any full-time member of the Department of Architecture. ED1 is also called U1, or "University 1," a University-wide program requiring all students entering from high school to sample multiple arts and science courses while also taking qualifying courses for targeted degree programs. Years three and four of the Environmental Design program, called **ED3** and **ED4**, consist of disciplinary specific studies, also referred to as intermediate studies. At the completion of ED2, students submit portfolios and competitively elect into one of three disciplinary-specific options: Architecture; Interior Environments; or Landscape + Urbanism. Students earning a Bachelor of Environmental Design degree, having successfully completed the ED3 and ED4 Architecture Option years, are eligible to apply directly to our professional 2-year Master of Architecture program, or any other professional M.Arch program in Canada, or elsewhere. Graduates of our ED Architecture Option program are eligible for advanced standing in a three-year professional Master of Architecture.

For students without a first pre-professional degree, the Department of Architecture offers an Architecture Master Preparation program (**AMP**). This option is for students wishing to pursue an M.Arch degree who have a three or four year degree from a recognized University in any area of study other than architecture. Qualified students with a non-design degree (such as a B.A. or B.Sc.) are admitted into **AMP1**, requiring two years of study before applying to the 2-year M.Arch program. Students holding a non-architectural but related design degree (such as Interior Design or Landscape Architecture) may be admitted into **AMP2**, requiring one year of study before applying to the professional M.Arch program. AMP students complete a minimum three years of professional studies to earn a first professional M.Arch degree. AMP1 and AMP2 students follow the ED3 and ED4 Architecture Option curriculum of the Environmental Design program. AMP students who complete both ED3 and ED4 earn a B.Env.D.

Throughout this report "**architecture program**" refers to the program of professional architecture curriculum delivered by the Department of Architecture at both the graduate and undergraduate levels: **M1** and **M2** of the two-year professional Master of Architecture program; and the **ED3** and **ED4** Architecture Option years of the four-year pre-professional Bachelor of Environmental Design program, which correspond to **AMP1** and **AMP2** of the Architecture Master Preparation program.

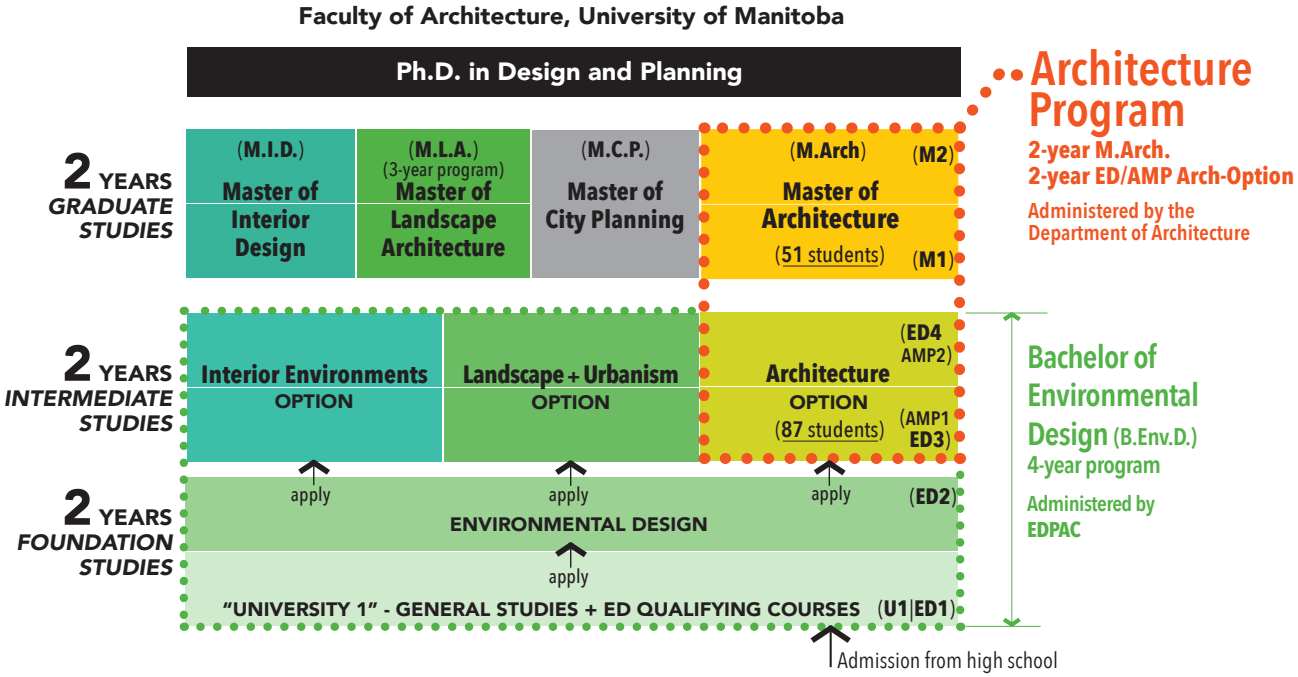
The Architecture Program within the Faculty of Architecture

The architecture program at the University of Manitoba is one of four professionally accredited programs within the Faculty of Architecture. The others are Landscape Architecture, Interior Design, and City Planning. The University of Manitoba is unique in Canada – indeed in much of North America – in having these four allied professional disciplines together in a single Faculty.

Each professional program is administered by a Department, chaired by a Department Head. The 4-year Bachelor of Environmental Design program is collectively managed by the Environmental Design Program Advisory Committee (EDPAC), comprised of an ED Program Chair, the Head of each Department, a student, an ED instructor, and the Faculty Dean. EDPAC reports to Faculty Council. (Improvements to this shared governance structure were made in response to the 2015 VTR. See Section 2.1).

The Faculty of Architecture also offers an interdisciplinary Ph.D. in Design and Planning. (One doctoral student is presently enrolled; another is expected to commence in January 2018).

Overall, the Faculty of Architecture serves approximately 515 students: 318 undergraduate ED students, including 87 ED3/4 Architecture Option students (including 16 in AMP1/2); and 197 graduate students, including 51 in the M.Arch program. The Department of Architecture presently serves about 138 students. An overall picture of the professional architecture program within the Faculty of Architecture looks like this:



Program Identity

People, place and passion make our architectural program unique, imaginative and real. Our urban-prairie setting is Canada's central crucible of creativity and cultural complexity, offering fertile grounds for work that is as artistically ambitious as it is socially and environmentally responsible. Our faculty and students are dedicated to advancing the discipline, and everyone shares a passion for hands-on making and research. We explore, discover and learn through making. The core of our curriculum is the design studio. This is the place where thinking and doing converge in heuristic acts of making and world-making. In studio, students work through a variety of challenging questions, media and scales to explore vital tensions between technical and natural processes, cultural and artistic practices, experiential qualities and worldly phenomena. Design studio enables individuals to experiment widely, while ultimately making responsible design decisions for local situations in a dynamically interconnected world. Studios are augmented by a growing array of making and thinking facilities: a FABLab, CADLab, Workshop, Architecture/Fine Arts Library, and Centre for Architectural Structures and Technology (C.A.S.T.). Architecture students benefit from interactions with colleagues in our Faculty's kindred disciplines (Environmental Design, Interior Design, Landscape Architecture and City Planning) and across the University. Students design everything from adaptable furniture to sustainable cities, from enduring buildings to transformative events. In the process we learn how the built environment not only supports and enhances lived experience, but is also meaningfully shaped by personal and collective imagination. Students are fueled by their own expanding curiosities and convictions, guided and challenged by professors engaged in diverse research, and invigorated by conversations and collaborations with professionals, industry partners, community members, and international leaders in architecture and design.

Program Uniqueness and Strengths:

- **Program History**. The University of Manitoba's architecture program (est. 1913) is the first architecture program in Canada west of Toronto and the third oldest in the country, after that of the University of Toronto (founded 1890), and McGill University (founded 1896). Our program played an important role in the rise of modern architecture in Canada and around the world.
- **Notable Alumni**. Graduates of our program are recognized internationally for outstanding contributions to the field of architectural design and advocacy, notably: Bill Allen (B.Arch 1936); Barbara Humphreys (B.Arch 1941); John C. Parkin (B.Arch 1944); Harry Seidler (B.Arch 1944); Etienne Gaboury (B.Arch 1958); Richard Henriquez (B.Arch 1964); John Patkau (B.E.S. 1969, M.Arch 1972); Patricia Patkau (B.I.D. 1973); Ron Keenberg (M.Arch 1989); and founders of 5468796 Architecture Johanna Hurme (B.Env.D. 1999, M.Arch 2002) and Sasa Radulovic (B.Env.D. 1999, M.Arch 2003). Nationally and regionally, numerous founders, presidents and partners of accomplished firms both small and large, as well as several emerging practitioner award-winners in Canada, have their pedagogical roots in our program.
- **Facilities**. The John A. Russell Building is the first purpose-built facility for architectural education in Canada, completed in 1959 by Smith Carter Katelnikoff Associates. The design was inspired, in part, by Mies van der Rohe's Crown Hall at IIT, which was completed three years earlier. The Russell Building remains today the inspiring and dignified locus of the Faculty of Architecture. It is also an accessible crossroads for the University community, with its generous open foyer, centre space and courtyard.
- **Research Resources**. The program benefits from world-class making and thinking facilities, including: **FABLab**, an interdisciplinary lab supporting design research in the realm of digital fabrication, parametric design, modeling, mapping, and full-scale prototyping; **CADLab**, a network of facilities for printing, editing and scanning, as well as for learning state of the art equipment and software; the **Workshop**, fully equipped with traditional woodworking tools and assembly spaces; **C.A.S.T** (the Centre for Architectural Structures & Technology), a unique cross-disciplinary facility enabling large-scale creative research and collaborative innovation among students, teachers, researchers and industry professionals; the **Architecture and Fine Arts Library**, housed in the Russell Building, with over 100,000 physical items in its collection, including architectural drawings; the **Elizabeth Dafoe Humanities Library,** plus the **Archives** and **Special Collections** with unique architectural holdings ranging from the 1950 personal travel letters of Arthur Erickson to a 1499 edition of the *Hypnerotomachia Poliphili*, an erotic architectural novel.
- **Cultural Connections**. The Faculty of Architecture organizes an ambitious Cultural Events program, hosting diverse and distinguished speakers. 2016-17 programming included lectures by Brigitte Shim, John Patkau, Billie Tsien, David Leatherbarrow, John Ochsendorf, Guy Maddin, Diarmuid Nash, and others. Faculty programming is invigorated by an extensive variety of local events and professional development opportunities, led by the architectural community, notably the Winnipeg Architecture Foundation, Storefront Manitoba (StorefrontMB), and the Manitoba Association of Architects (MAA). Some of the local institutions and annual events involving students and faculty members include: the Winnipeg Design Festival; the Architecture+Design Film Festival; Warming Huts, a famous international design competition; Cool Gardens, a summer shade pavilion design competition; the New Music Festival; Thin Air–Winnipeg's International Literary Festival; Send + Receive Festival of Sound; the Winnipeg Art Gallery; Plug In Institute of Contemporary Art; and the Canadian Museum for Human Rights. Winnipeg's ballet, opera and theatre, as well as the city's architectural heritage, further contribute to the program's cultural vitality and depth.
- **Community Connections**. In addition to cultural connections, the program fosters mutually beneficial exchange with local and regional community groups, members of which participate in design studios as clients, critics, and participatory designers. Winnipeg's size and location make community outreach and involvement accessible and appealing. In recent years, a number of studios and design-build projects have been run in conjunction with urban, rural and northern community groups, notably the *Rainbow Gardens* M1 studio (Fall 2016/Coar) and related elective (Summer 2017/Veness); and the Indigenous Architecture/Truth and Reconciliation studio (2016-17/Epp).

- **Indigenous Connections**. Winnipeg has the largest urban population of Indigenous peoples in the country. Our University has the second oldest Native Studies program in Canada (est. 1974). With the 2015 opening of the National Centre for Truth and Reconciliation (NCTR), the University of Manitoba is becoming a centre of excellence in Indigenous education. Creating pathways to Indigenous achievement is one of the University's five priorities in its *2015-2020 Strategic Plan: Taking our Place*. Initiatives are underway to increase Indigenous student enrolment and faculty complement, and to infuse curriculum and research with Indigenous content. The University has articulated five Indigenous Planning and Design Principles to guide the implementation of its 2016 *Visionary (re)Generation Master Plan*. Faculty of Architecture members have been involved in these processes. Recent design studios have cultivated Indigenous awareness and knowledge by directly addressing the design challenges raised by the NCTR. Our architecture program is well positioned to collaboratively advance the rights and agency of Indigenous peoples, to learn from past mistakes, and to expand and deepen knowledge about Indigenous design, and, more generally, social justice and the built environment.
- **Environmental Design Foundation**. The multidisciplinary studies in U1/ED1 and ED2 are a unique and enriching element of our Faculty, both academically and socially. These foundational ED years mix future architects, landscape architects, interior designers, city planners, and environmental designers in a broad arts and science curriculum, which is also oriented toward cultivating creative care for our fragile global ecologies.
- **Research-driven Architecture Curriculum**. Faculty research and student interests invigorate the professional architecture curriculum. Design studios are framed by open-ended topics and questions requiring interpretation. Students are empowered to pursue personal fascinations, to make choices about the direction of their studies, and to take risks by engaging design processes that involve experimentation and informed discovery. The program cultivates creativity and criticality; intertwines making and thinking; embraces diverse modes of inquiry and representation; encourages both independence and collaboration; integrates field studies with design projects; and fosters hands-on learning and design-build opportunities at many scales. (More unique features of the curriculum are highlighted below in section 3.12).

Challenges

Our geographical situation is both our strength and challenge. Our location in the prairies holds exciting and unique opportunities, and cultivates a culture of self-reliance, resourcefulness, and fearless creativity. However, our relatively isolated situation also creates challenges, especially in attracting and retaining highly qualified faculty from other regions. The nearest architecture school is in Fargo, at the University of North Dakota, 350 km south. The architecture schools at South Dakota State University and the University of Minnesota in Minneapolis (the closest major city) are about 700 km away, which is twice as close as the University of Calgary to the west and Laurentian University to the east. Winnipeg is a large complex city, so there is no feeling of cultural isolation. Yet, the cost and time of travel mean that exposure to world-class architecture and architects can be limited compared to other schools. Substantial time and resources are invested in facilitating architectural visitors and student travel.

Within Winnipeg, the campus setting in a southern suburb also presents some challenges for civic connections. There are very few serendipitous encounters between architecture students and the public. To compensate, faculty members invest significant time in cultivating connections, by inviting guests and organizing regional site tours and office visits. The physical separation means that coordination and communication between the academy and the profession require concerted effort.

Together with geography, the Department of Architecture faces the challenge of maintaining strong student enrolment. Developing a recruitment strategy and optimizing the admissions process is part of the program action plan.

DEPARTMENT OF ARCHITECTURE – MISSION AND TENETS

The Department of Architecture reviewed and refined its Mission and Tenets at its Department Council Meeting on April 18, 2017. The Mission and Tenets are now posted online and provided below, together with the Faculty of Architecture's Vision Mission and Tenets, which the Department supports. The University of Manitoba's Mission Vision and Values are provided in section 4.1.1.

MISSION

The Department of Architecture upholds an architectural education that encourages the intellectual, artistic, technical and professional development of students through exceptional teaching, scholarship and community service in architecture and emerging areas of design education and professional practice. The Department of Architecture supports and builds upon the Faculty of Architecture's Vision, Mission and Tenets and the University of Manitoba's Mission, Vision and Values.

TENETS

1. To foster excellence from instructors and students in an open and equitable teaching and learning environment.
2. To support diverse positions and interests within the Department and with allied disciplines.
3. To foster a learning environment in which faculty research contributes to student education and to a culture of research excellence within the department.
4. To cultivate an aptitude for critical thinking and making in the design studio and related disciplinary studies.
5. To provide students opportunities to determine their course of studies and participate in defining the ambitions of the program and the profession.
6. To empower students to take creative and intellectual risks that lead to discovery, self-actualization, and professional growth.
7. To contribute to interdisciplinary teaching and research within the university and with allied institutions locally and globally.
8. To support a culture of open discourse through collective reviews, public lectures, exhibitions and the dissemination of knowledge both locally and globally.
9. To advance professional perspectives and expertise in the program by engaging local and international practitioners, community groups and industry partners.
10. To advance societal and environmental well-being by preparing our students to take leadership roles in practice and the community.

http://umanitoba.ca/faculties/architecture/programs/architecture/MissionandTenets.html

(Approved by Department of Architecture Council April 18, 2017)

FACULTY OF ARCHITECTURE – VISION, MISSION AND TENETS

VISION

The Faculty of Architecture aspires to offer widely recognised and highly valued design and planning undergraduate and graduate programs that promote a respectful, collegial, interdisciplinary culture of teaching, scholarship and service within the University and beyond.

MISSION

We aspire to provide exceptional teaching, scholarship and community service in architecture, city planning, environmental design, interior design, landscape architecture and emerging areas of design education and practice.

TENETS

1. The Faculty believes the disciplines and programs represented in the Faculty of Architecture are autonomous, complementary, equal and specific.
2. The Faculty supports innovation and rigour in knowledge creation and creative problem solving in an intellectually and culturally diverse environment.
3. The Faculty promotes collegiality, creativity, and interdisciplinarity in advancing the planning, design and management of the built and natural environments.
4. The Faculty encourages advancement and improvement in the culture of planning and design through collaboration internally and externally.
5. The Faculty champions an evolving, vibrant curriculum that is regularly evaluated and widely discussed.
6. The Faculty offers locally, nationally and globally recognised programs which attract high quality students, expertise and funding.
7. The Faculty promotes freedom of expression, open discourse and accountability among its members.
8. The Faculty affirms an equitable assignment of teaching, scholarship and service that respects individual skills, interests and collective needs.
9. The Faculty encourages and recognises contributions from partnerships with the professions and community in the development and dissemination of knowledge.
10. The Faculty fosters the development of an ethical and professional environment.

http://umanitoba.ca/faculties/architecture/facstaff/academic_handbook/vision.html

(Approved by Faculty of Architecture Council December 16, 2004)

1.2 Program Action Plan and Objectives

Accreditation follows an action plan that guides the program in achieving the objectives of its mission. This plan, which should be used to structure the program's self-assessment process, helps the visiting team understand the program's role within the institution and the parameters of its future development.

The APR must include:

- *The program's action plan and objectives developed in accordance with institutional norms;*
- *Its measures of success, and a time line for executing the plan.*

This action plan is based on nearly three years of departmental discussions, including retreats and focused meetings aimed at addressing specific concerns raised in the 2015 CACB Visiting Team Report, while also pursuing long-standing objectives with renewed leadership and support. During a Department of Architecture retreat on May 18, 2017, specific elements of this plan were drafted, a summary of which was distributed to Department Council on May 23, 2017. The following plan elaborates on agreed points.

The Department of Architecture's action plan is first and foremost to pursue its mission and uphold its tenets (see Section 1.1). The plan is further framed by four strategic areas:

Student Experience **Human Resources** **Research Culture** **Connections & Community**

Each area has specific goals, each with a corresponding series of supporting actions:

1. **STUDENT EXPERIENCE**

GOAL: ***Attract and retain outstanding students.***

Actions

- develop and implement a detailed recruitment strategy for both the graduate and undergraduate/AMP programs. This will involve cooperation with the Faculty and University to engage regional high schools and grade schools; greater involvement of the Department of Architecture in regional career fairs; and targeted program promotion at national and international levels;
- expand publicity and visibility of the Department of Architecture by promoting student work, faculty research and educational events via the University website, social media, digital and print publications, strategic partnerships, and involvement with national and international forums, including the ACSA;
- continue to promote and disseminate student work: in *ArchFolio* (the Department's annual digital publication of studio work); *Warehouse* (the Faculty's award-winning student journal), *Network* (the Faculty Partners Program journal); the Department and Faculty of Architecture's website; UMToday; the 3-Minute Thesis (3MT) contest; faculty publications; public exhibitions; and other venues;
- encourage and support students, especially thesis students, in submitting their design and research work to national and international competitions and prizes, as well as conferences and publications.

GOAL: ***Maintain graduate enrolment of 30 incoming M1 students (grow the graduate program to 60).***

Actions

- implement the recruitment strategies noted above;
- optimize the admissions process, via the following:
- work toward creating an option for automatic M.Arch acceptance for ED-Arch option students with a high GPA, encourage top ED graduates, where appropriate, to study in our program;
- facilitate online portfolio submission as part of the M.Arch application process;
- work with student services, the Faculty of Graduate Studies and the Department's admission committee to ensure timely review and processing of applications and letters of offer;
- develop guidelines to facilitate review of curricular equivalencies and transfer credits for M.Arch and AMP admissions, to ensure applicants have general and professional studies requirements, including, where applicable, equivalencies to SPC-weighted courses in our ED-Architecture Option years;
- work toward offering teaching assistant and research assistant positions upon M.Arch acceptance;
- continue to offer recruitment awards and scholarships upon M.Arch acceptance;
- continue to develop new award and scholarship opportunities.

STUDENT EXPERIENCE con't –

GOAL: ***Enhance curriculum.***

Actions
- continue to improve delivery, content and scope of current architecture program curriculum;
- enrich graduate topics offerings with faculty research and trans-disciplinary opportunities;
- review and refine architecture program curriculum in response to the anticipated 2018 CACB Visiting Team Report, and the new CACB Student Performance Criteria, which will take effect on the next accreditation cycle 2018-2024;
- implement the ED1 and ED2 curricular refinements recommended by EDPAC, which Faculty Council has already approved (to take effect in the 2018-19 academic year);
- work toward acknowledging the Architecture Option designation on the Bachelor of Environmental Design degree parchment (with EDPAC support, and following University procedures);
- continue and expand the existing online forum for sharing Design Thesis projects: in addition to posting student abstracts and representative images, pursue online posting of Design Thesis books via MySpace, in coordination with the Faculty of Graduate studies;
- coordinate interdisciplinary summer elective offerings to ensure advanced notice to all students and involvement of interested faculty members – develop procedures and advanced deadlines to organize summer offerings in experiential learning, design-build, and field studies;
- facilitate and encourage student involvement in the new Sunday software seminars and "tech Tuesdays" being launched in 2017-18 by the Faculty's CADLab and FABLab – these sessions are intended to advance digital competency so students can critically engage these tools in higher level course work;

GOAL: ***Enhance student services and access to information.***

Actions
- provide advanced public postings of all graduate topics offerings and electives, so students can plan their studies, establish research directions, and pursue career goals;
- support students in applying for scholarships and in submitting design projects and research to competitive venues;
- aim to coordinate timetables within the Faculty of Architecture to make it easier for graduate students to take electives within the different allied professional programs;

GOAL: ***Enhance professional opportunities.***

Actions
- proceed with the Cooperative Education/Integrated Work Program (Coop/I) and the creation of new EVDS Coop Work Report courses (approved by Faculty Council August 29, 2017; with anticipated implementation in summer 2018);
- review Coop/I work term options specifically for M.Arch students;
- continue and expand support for social events mixing students and professionals, including the annual Meet & Greet (organized by UMAAS); and the Meet Mingle & Mentor event (with Partners Program);
- continue and expand the engagement of regional architects and individuals with experience and expertise in the field as guest critics and lecturers, and continue to encourage interested professionals to participate in such sessions, as well as in the Faculty Year End Exhibition and other cultural events;
- continue and expand organization of focused discussions, reviews and social events between students and visiting professionals who come to Winnipeg as part of the Cultural Events lecture series;
- continue to announce professional work opportunities on the Faculty webpage and expand postings through the creation of a new Coop/I webpage, in conjunction with the Coop Coordinator.

GOAL: ***Enhance learning facilities.***

Actions
- proceed with upgrading the design studios and review spaces of the Architecture 2 Building with new furnishings, partitions and presentation panels, via the Teaching Laboratory renewal initiative, to be completed summer 2018 (see details below, Section 3.7);
- continue to support the vitality and growth of the CADLab, FABLab, Workshop, C.A.S.T., Architecture2 Gallery, and the Architecture and Fine Arts Library;

GOAL: ***Enhance alumni relations.***

Actions
- work with the Faculty's Partners Program and the University's Alumni Relations office to track and celebrate accomplishments of architecture graduates.

2. HUMAN RESOURCES:

GOAL: ***Increase the number of full-time faculty.***

Actions
- proceed with the new hire in process (with a target start date of January 1, 2018);
- initiate procedures to secure at least one additional full-time position. (The Department of Architecture presently has nine full-time faculty members; however, in 2017-18 one member is 100% reassigned, another is on a research-study leave, and two have reduced teaching loads due to administrative duties, leaving six full-time equivalent members for teaching);
- review long-term staffing plans in view of anticipated research-study leaves, administrative leaves, and retirements;

GOAL: ***Improve the gender balance of full-time faculty.***

Actions
- make efforts to achieve gender balance among full-time architecture faculty that better reflects the gender balance of architecture students. (The female student ratio has ranged from 31% to 48% over the last 10 years. For the first time on record, the incoming 2017 class will have a majority of female students at 66%. Of the nine full-time faculty members in the Department of Architecture, just two (22%) are female. The last five hires have been male. Whereas our student gender ratio is now among the best in Canada, our faculty gender ratio is among the worse).

GOAL: ***Ensure equitable teaching loads and administrative duties.***

Actions
- complete and implement the Faculty's teaching load guidelines, according to 19.A.1.3 of the Collective Agreement (two Faculty Council meetings in 2017 have already made progress toward this goal);
- ensure equitable assignments of administrative duties and committee work;

GOAL: ***Improve conditions and support for sessional instructors.***

Actions
- continue to ensure timely posting of sessional positions and support with administrative procedures;
- provide mentoring to first-time instructors;
- provide appropriate office space to sessionals during and in advance of the term;
- wherever possible, provide support for miscellaneous expenses associated with course deliver, including field trips and supplies;

GOAL: ***Support visiting researchers.***

Actions
- maintain and optimize the C.A.S.T. Researcher in Residence Program to include (where appropriate) opportunities for leading workshops, teaching, and/or serving as a guest instructor;
- maintain and optimize other visiting researchers, including doctoral and post-doctoral students; (it must be emphasized, however, that visiting researchers do not replace the need for full-time academic staff).

3. RESEARCH CULTURE:

GOAL: ***Enhance research productivity.***

Actions
- continue to support faculty members in diverse modes of meaningful scholarly production, including those described in the Faculty of Architecture's Tenure and Promotion Guidelines: applied scholarship; creative work; professional practice; and research;
- ensure equity among faculty workload, such that teaching and service loads do not hinder research;
- support and advance the integration of faculty research into the curriculum, where appropriate, especially via the framing of topical studios and graduate topics courses;
- foster faculty member's ability to submit competitive research proposals and to secure research funding internally, externally and with Tri-Council agencies: Natural Sciences and Engineering Research Council (NSERC), Social Sciences and Humanities Research Council (SSHRC), and Canadian Institutes of Health Research (CIHR);
- facilitate grant writing assistance;
- develop and expand alignments with UM Strategic Research Priorities (see below),

RESEARCH CULTURE con't –

GOAL: ***Develop and expand research collaborations.***

Actions
- continue to advance the reactivation of C.A.S.T. through the Researcher in Residence Program; the Atmosphere: *Fabrications* symposium, Feb. 1-3, 2018; and ongoing faculty and student research;
- pursue strategic opportunities, including engagement with the University Grants Facilitators for NSERC and SSHRC;
- cultivate trans-disciplinary partnerships within the University of Manitoba to help leverage institutional support for external funding (see the University's Strategic Research priorities listed below);
- continue and expand community research collaborations in and beyond the context of design studios and appropriate coursework;

GOAL: ***Enhance research impact.***

Actions
- encourage and support faculty in pursuing research publication opportunities through various appropriate venues, including high quality peer-reviewed journals, conferences and exhibitions;
- continue and expand the publication of Departmental achievements on the Faculty's website and various digital and print publications produced by the Faculty and Department of Architecture;

4. CONNECTIONS & COMMUNITY:

GOAL: ***Strengthen and expand meaningful relations with regional stakeholders.***

Actions
- advance relationships with professions, industry and academic partners;
- continue to meet with the leadership of the Manitoba Association of Architects (MAA) on a regular basis and proceed with reactivating the MAA-DoA Strategic Committee;
- develop and expand meaningful interactions already underway with the various arts and architecture organizations, including StorefrontMB, the Winnipeg Architecture Foundation, the Winnipeg Film Festival, the Winnipeg Free Press Café, the regional RAIC representatives, etc;
- develop and expand meaningful interactions with community groups, including Indigenous communities.

GOAL: ***Strengthen and expand collaborations with national and international partners.***

Actions
- expand participation in meetings and surveys of the ACSA (the Association of Collegiate Schools of Architecture) to ensure our program is represented in this important North American forum;
- develop and expand existing research collaborations with partner institutions in and beyond Canada;
- develop and expand existing professional collaborations with national architectural associations, including CCUSA, CALA, and RAIC.

MEASURES OF SUCCESS AND TIME LINE FOR EXECUTING THE ACTION PLAN

A number of actions toward the objectives highlighted above have already been initiated within the Department of Architecture. Some curricular refinements have already been implemented (notably in the M1 comprehensive studios – ARCH 7050/7060); others are being implemented in 2017-18 (including improvements to the ED3 drawing class – EVAR 3014). Architecture curriculum enhancements, such as reviewing courses in view of new CACB SPCS, will be discussed during a May 2018 retreat, and by an ad-hoc committee over the summer of 2018. Several goals noted above are agenda items for EDPAC and/or Faculty Council in the 2017-18 academic year.

The Department of Architecture's action plan supports and builds upon strategic priorities established by the Faculty of Architecture and the University of Manitoba. These over-arching priorities are noted below.

FACULTY OF ARCHITECTURE
Strategic Priorities:

1. Enhance student experience.
2. Enhance/support scholarship capacity.
3. Foster connections for teaching and scholarship between departments and programs within the Faculty of Architecture and beyond.
4. Foster community (internal and external).

– *Faculty of Architecture Strategic Plan 2015-2020* (adopted April 7, 2015), p. 3-5. http://umanitoba.ca/faculties/architecture/media/DO_Strategic_Plan_FAUM_April_7_2015.pdf

UNIVERSITY OF MANITOBA
Strategic Priorities

1. **Inspiring minds** through innovative and quality teaching.
2. **Driving discovery** and insight through excellence in research, scholarly work and other creative activities.
3. **Creating pathways** to Indigenous achievement.
4. **Building community** that creates an outstanding learning and working environment.
5. **Forging connections** to foster high impact community engagement.

– *Taking our Place: University of Manitoba Strategic Plan 2015-2020* (adopted Nov. 2014), p.16. https://umanitoba.ca/admin/president/media/PRE-00-018-StrategicPlan-WebPdf_FNL.pdf

UNIVERSITY OF MANITOBA
Strategic Research Priorities

The Strategic Research Plan recognizes and supports the importance of a full spectrum of impactful research, scholarly activities and creative works. It also reflects a number of core thematic and signature areas for enhancement.

CORE STRATEGIC RESEARCH THEMES:

1. Arctic System Science and Technology
2. Culture and Creative Works
3. Fundamental Research
4. High Performance Materials, Structures and Processes
5. Human Rights and Social Justice
6. Integrative Research in Health and Well-Being
7. Safe, Healthy, Just and Sustainable Food Systems
8. Sustainable Water Management Systems

SIGNATURE AREAS (established areas of excellence):

1. Arctic System Science and Climate Change
2. Immunity, Inflammation and Infectious Disease
3. Population and Global Health
4. Immunity, Inflammation and Infectious Disease

– *The University of Manitoba Strategic Research Plan 2015-2020* (adopted Nov. 25, 2014) pp.1-5. https://umanitoba.ca/research/media/Strategic_Research_Plan.pdf

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2 Progress since the Previous Site Visit

2 Progress since the Previous Site Visit

Program Responses To:

2.1 Causes of Concern

2.2 Conditions "Not Met"

2.3 Other Team Comments

2 Progress Since the Previous Site Visit

Accreditation is contingent on the assurance that deficiencies, both minor and serious, are being systematically addressed. ***The APR must include:***

- *The program's summary of its responses to the previous team findings (VTR) as documented in the Annual Reports (AR). This summary must address the conditions identified as "not met", as well as the "causes of concern". It may also address the conditions identified as "met" or it may address "team comments".*

2.1 CAUSES OF CONCERN

The 2015 VTR noted four causes of concern. Each is quoted below, together with the program response.

CONCERN #1

GOVERNANCE: *Governance was the issue most consistently raised over the course of our visit. The Team observed that the matter of Governance had been a central concern raised by the last two visiting teams. The situation does not seem to have improved, indeed things seem to have deteriorated. We cannot stress firmly enough that the members of the Programs in the Faculty of Architecture must take steps to develop an effective governance model that is transparent and representative of the interests of all the members… it is imperative that the Faculty of Architecture develops systems of leadership and accountability that take into account the unique complexity and richness of this multi-layered, multi-disciplinary academic enterprise.*

Response to the Concern about Governance

Since the last CACB visit, a new Faculty Dean (Dr. Jonathan Beddoes), a new Department of Architecture Head (Dr. Carlos Rueda) and a new Environmental Design Program Chair (Dr. Karen Wilson Baptist) have been appointed. The respective leadership and accountability of these roles is clear:

- The Dean is responsible for managing resource allocation to meet academic program requirements, representing the Faculty internally and externally, and working with the Associate Deans, Program Chair and Department Heads to coordinate Faculty endeavours;
- The ED Program Chair is responsible for the overall undergraduate ED program and coordinating its curriculum development with Department Heads;
- The Department of Architecture Head is responsible for leading curriculum development in the architecture program, including the M.Arch program and the ED3/AMP1 and ED4/AMP2 Architecture Option years, and for contributing to the development of common Environmental Design curriculum through the re-constituted ED Program Advisory Committee (EDPAC).

Significantly, in April 2016 Faculty Council approved a revised membership structure to the Environmental Design Program Advisory Committee (EDPAC). This committee oversees the Bachelor of Environmental Design degree program, which includes two years of multidisciplinary foundation studies and two years of disciplinary-specific intermediate studies. EDPAC reports to Faculty Council, which discusses and approves changes, before such changes may be sent to University Senate.

Previously (2008-2016) the EDPAC committee was comprised of the ED Program Chair, four ED faculty members, four Department representatives (one from each professional discipline), and four students (one from each discipline). Now, since April 2016, the committee is comprised of the four Department Heads, the ED Program Chair, one elected ED faculty member, and one ED student representative – the elected Senior Stick. The Dean (non-voting) chairs the committee.

In addition to streamlining this committee from thirteen to eight members, the committee is now more effective, since Department Heads – who oversee disciplinary-specific curriculum in the ED3 and ED4 years – can now collaboratively engage in the development of the foundational multidisciplinary curriculum in the ED1/U1 and ED2 years.

Faculty Council approved this change to the EDPAC membership during a single-agenda item meeting on April 5, 2016, after several months of open consultation. This change has already had beneficial results.

Since spring 2016, numerous productive meetings have been held, including seven over the spring and summer of 2016. This is a hard-working committee. EDPAC is meeting about once a month during the academic year. Related EDPAC matters are flagged for committee discussion during bi-weekly Deans and Heads meetings. Communication between EDPAC and Department Councils has improved: Heads regularly bring topics of importance to Department Council meetings for discussion, then return to EDPAC with concise reports. The new EDPAC composition is enabling effective management of curriculum improvements. Since the new committee structure has been in place, Faculty Council has approved several items of business brought forward from EDPAC by the ED Program Chair. These approved items include: revised Supplemental Regulations; updates to ED2 & ED-AMP admissions policy and amended Admissions Bulletins; reinstatement of EVDS 1680 Environmental Technology; updates to calendar descriptions for the required EVDS 1000-level courses; an adjustment to the grading policy for EVDS 2100 Urban Media Lab; and a new prerequisite requirement for EVDS 2800 Visual Media 2. Most changes will formally take effect for fall 2018. The new EDPAC composition is also enabling the ED Program Chair, Department Heads and other members to strategize how to introduce new opportunities, such as interdisciplinary electives, study abroad options, direct entry from high school, and accommodation for Co-op work-term placements.

Although, at this time, the architecture program does not rely on the multidisciplinary foundation courses in U1/ED1 and ED2 to satisfy Student Performance Criteria, the Architecture Department is confident that the improvements underway will better prepare students for disciplinary-specific streams and professional programs. These improvements are also preparing the groundwork for comparable refinements to the ED3 and ED4 option-year curriculum.

The re-constituted EDPAC committee is a key component of the Faculty's improved governance model. It is improving the delivery of U1/ED1 and ED2 courses, clarifying the relationship between these multidisciplinary foundation years and the disciplinary-specific years (ED3 and ED4); and enabling Departments to focus on governing their professional programs and graduate-level courses.

As noted above, reforming EDPAC was the result of a Faculty Renewal Initiative, which has so far entailed three Faculty retreats, two special Faculty Council meetings; the constitution of a Faculty Re-structuring Advisory Group; as well as presentations, consultations, reports and discussions. All aspects of this Faculty Renewal Initiative were distributed by email and posted to the Faculty website to maximize transparency and involvement <http://umanitoba.ca/faculties/architecture/facstaff/facuultyrenewal.html>. Highlights include:

Faculty of Architecture Renewal Initiative:

May 22, 2015	Announcement of the appointment of Dr. Jonathan Beddoes as Interim Dean of the Faculty of Architecture for the period September 1, 2015 to June 30, 2017.
Sept. 1, 2015	*My View on Arrival and Looking Ahead* – Presentation by Interim Dean Beddoes, together with an open request for input from students, alumni, staff and faculty.
Oct. 25, 2015	Report by Interim Dean Beddoes summarizing the 26 submissions of input.
Nov. 2015	Re-structuring Advisory Group formed, Chaired by Interim Dean Beddoes, with 3 appointed members, 5 members each selected by their unit, and 1 member voted by support staff.
Dec. 2, 2015	Announcement of the appointment of Dr. Karen Wilson Baptist as Associate Dean (Academic) and Chair of the Environmental Design Program for the period Jan. 1, 2016 to June 30, 2017.
Dec. 11, 2015	**Faculty Retreat**. Agenda included discussion on the need for change; a Re-structuring Advisory Group report on principles for a renewed Faculty; and open table conversations.
Dec. 21, 2015	Report by Interim Dean Beddoes, summarizing the retreat discussions.
Jan. 27, 2016	Report by Interim Dean Beddoes on potential renewal.
Feb. 16, 2016	**Faculty Retreat**. Agenda included discussion on potential renewal; a Re-structuring Advisory Group report on opportunities and challenges; and conversations around particular aspects of the ED Program, including the composition of EDPAC.
March 4, 2016	Report by Interim Dean Beddoes, summarizing the retreat discussions.
April 5, 2016	**Faculty Council approves revised EDPAC committee membership.**

June 7, 2016	Faculty Council approves EDPAC business: ratifies revised ED Program Supplementary Regulations, which incorporate important clarifications as to program structure and admissions. These regulations have since been approved by Senate (April 2017) and posted in the UM Undergraduate Calendar, under Academic Regulations.
Sept. 6, 2016	Faculty Council approves EDPAC business concerning refinements to the general ED1 course descriptions and agrees to reactivate EVDS 1680 Environmental Technology, which had not been offered for several years.
Oct. 6, 2016	**Faculty Retreat**. Agenda included presentations on international opportunities, cooperative education and indigenization, and group discussion of ED curriculum areas.
March 22, 2017	Announcement of the appointment of Dr. Jonathan Beddoes as Dean of the Faculty of Architecture to June 30, 2021. This announcement by the Provost and Vice-President (Academic) brought to a close an Internal Dean Search, which had followed all UM policies on recruitment and hiring, as announced in Faculty of Architecture Council on Sept. 6, 2016.
April 25, 2017	Special Faculty Council meeting – approval in principle of initiating Co-op program.
May 1, 2017	Special Faculty Council meeting – approval in principle of ED2 Admission requirements.
May 12, 2017	Announcement of the re-appointment of Dr. Karen Wilson Baptist as Associate Dean (Academic) and Chair of Environmental Design Program until June 30, 2021; announcement of the appointment of Dr. Lisa Landrum as Associate Dean (Research) until June 30, 2021.
June 6, 2017	Faculty Council approves EDPAC business concerning grading, prerequisites & admissions.
Aug. 29, 2017	Faculty Council approves EDPAC business concerning ED2 and ED-AMP Admissions; ED1 and ED2 course description adjustments; and new EVDS courses for the Co-operative Education/Integrated Work Program. Pending Senate approval, these changes will take effect in 2018-19.

To reiterate – with respect to governance – under new consultative leadership since September 2015, the Faculty of Architecture has made tangible progress toward improving its governance model and ensuring Faculty governance is, to the greatest extent possible, transparent and representative of all its members. Evidence for improved governance is found in the efficient and effective track record of EDPAC and Faculty Council business over the last two years.

CONCERN #2

HUMAN RESOURCES: *The Team must express deep concern about the apparent erosion of the human resource base in the Faculty and Department of Architecture. The departures of several members of the core faculty in Department of Architecture is troubling. Key academic support staff members have departed. The student intake at the graduate level has been relatively consistent, but the Architecture Program is now the smallest in the country. These trends must be reversed for the continued health of the professional program.*

Response to the Concern about Human Resources

The University of Manitoba is investing in the rejuvenation of the Department of Architecture. Since the last accreditation visit, the Department has hired a full-time Head as of Sept. 2015 (Rueda); a full-time Assistant Professor in Building Technology as of July 2016 (Neil Minuk); and initiated a search for a full-time Assistant Professor in Building Systems, with a target start date of January 2018. Additionally, a C.A.S.T. Coordinator has been hired (Liane Veness), appointed halftime in C.A.S.T. and as a halftime Instructor in the Department of Architecture. Both Neil and Liane have been valuable long serving sessional instructors in the Department.

As of January 2018, the Department of Architecture will have 10.5 faculty members: Aquino, Coar, Enns, Epp, Fuglem, Landrum, and Stern; plus Minuk, Rueda, a new hire, and Veness (.5). At the time of the last accreditation visit in March 2015 there were 10 faculty members: Aquino, Coar, Enns, Epp, Fuglem, Landrum, and Stern; plus Harrop, Subotincic and West, who either resigned or announced their retirement in 2015.

The anticipated replenishment of Department of Architecture faculty to 10.5 members is encouraging. However, it does not account for two previous departures in 2013 (Chard and Fantauzzi). Neither does it fully

account for the fact that three current Department of Architecture members have reduced teaching loads: Rueda 50% as Head; Landrum 50% as Associate Dean (Research); and Stern 100% as Special Advisor on Internationalization for one year (2017-18). Also, one member (Epp) is on Research/Study leave for 2017-18. This leaves 7.5 full time members for 2017-18 (counting the anticipated hire as of Jan. 1, 2018). As outlined in the Program Action Plan 1.2, the Department of Architecture hopes to secure at least one additional full-time tenure-track appointment in the next year.

In addition to dedicated Departmental hires, the architecture program will benefit from other academic appointments in the Faculty, including a new full-time Instructor in Environmental Design and Landscape Architecture (Leanne Muir), as of July 2017; an Assistant Professor in Landscape Architecture, to start in July 2018; and an Indigenous Scholar in the Faculty of Architecture and/or Engineering (search underway).

With respect to support staff, the Faculty of Architecture has made the following hires and appointments since the last CACB visit:

- hired a new Financial Administrator Tammy Sim to replace Lynn Bohonos, who resigned in 2015;
- appointed Michele Brown initially as Interim Business Manager, and now on an ongoing basis, to replace Robbin Watson, who retired in 2016 (Michele is Business Manager for both the Faculty of Engineering and Faculty of Architecture);
- re-assigned the Human Resources and Facilities duties of Watson to Philippa Alexiuk and Laura Kryger;
- hired a new part-time Financial Assistant, Celina Bonilla, and part-time student financial assistant;
- reassigned student services duties of Richard Bar, who resigned to return to graduate school in 2015;
- hired a new full-time Co-op/Awards/Student Services assistant, Corrine Klekta.

At the time of the last CACB visit in 2015 there were 8 full-time administrative support staff in the main office (Alexiuk, Halden, Johnson, Kryger, and Mamott; plus Bars, Bohonos, and Watson, who have since either resigned or retired). Now (Sept. 2017), there remain 8 full-time equivalent staff (including 3 part-time appointments): Alexiuk, Halden, Johnson, Kryger, Mamott, plus Sim, Klekta, Brown (.5); Bonilla (.2), and a student assistant (.3). The communications and Partners Program Office has remained consistent with Brandy O'Reilly and a full-time Communications Assistant. (See section 3.5.4 Human Resources: Staff, for support staff position descriptions).

To reiterate – regarding Human Resources – the difficult situation of numerous resignations and retirements in 2015 (around the time of the last CACB visit) has been ameliorated. The University of Manitoba has made a strong commitment to replenishing the valuable Human Resources in the Department and Faculty of Architecture. Human resources in the Faculty have been stabilized. There have been no resignations in the Department of Architecture since September 2015.

> CONCERN #3
> **MORALE**: *The Team witnessed a situation in which there has clearly been a breakdown in the morale, sense of trust, respect and collegiality within the fabric of the Faculty of Architecture. While the individuals who make up that fabric appear to be deeply dedicated and passionately committed to the success of the Program, there has been a failure to establish a context in which these people can work in concert for the overall good. This situation must be remedied.*

Response to the Concern about Morale

Since the last accreditation there have been three Faculty Retreats and two special Faculty Council meetings, each well attended by academic, administrative and support staff, as well as student representatives. These open discussions are helping to collectively define priorities and to renew a sense of trust. If resignations are a potential indicator of difficulty, no architecture program faculty member has resigned in the last two years.

As mentioned above with respect to governance, the Faculty's renewal Initiative has been as transparent and inclusive as possible. Since September 2015, there have been several presentations, consultations,

and requests for input. Much of this process, including summaries of feedback, have been circulated and/or posted online. Faculty Council meetings have been well attended and progress has been made on important items of business – notably, the reconstitution of EDPAC. Clear and cogent governance is helping to create a context for effectiveness and collegiality in the Faculty.

Together with replenishing and stabilizing human resources, faculty members have renewed confidence and support to pursue academic and research initiatives. For instance, the Faculty has re-launched the Ph.D. in Design and Planning Program. Constituted in 2005, yet idle for years with no students, the program has been attracting strong applications for the last two years. One full-time student is now enrolled (since Fall 2016), and another is commencing January 2018. Faculty Council has ratified Terms of Reference for a Doctoral Studies Committee, and new Supplemental Regulations for the Ph.D. program have been prepared and approved by the Faculty of Graduate Studies. Additionally, the Faculty's Centre for Architectural Structures Technology (C.A.S.T.) is being rejuvenated. A part-time Technician / Coordinator has been in place since fall 2016, a C.A.S.T. standing committee of Faculty Council has been formed, and the C.A.S.T. Researcher in Residence Program has been reactivated. (For more on C.A.S.T. programming, see section 3.6.8). At a special Faculty Council meeting on April 25, 2017, Faculty agreed in principle to develop a Faculty-wide Co-op/Integrated Work Placement program. A Co-op Assistant has been hired and details of the program are in development for placements to commence in summer 2018. Another initiative includes a major Teaching Laboratory Renewal plan for the Architecture 2 Building, involving over one million dollars in studio upgrades to be implemented in summer 2018. (For more on this facilities upgrade, see section 3.7). Furthermore, architecture program admissions are rebounding. The 2017-2018 incoming M1 class is on par with class size from 2010-12. (See section 3.5.1). On an individual level, faculty members in the last 2 years have been earning teaching awards, and securing major national funding for research projects. By many measures, the Faculty of Architecture is effective and successful.

Maintaining morale is an ongoing process. The three-week strike of full-time academic staff in November 2016 highlighted the need to restore confidence between the University of Manitoba and the University of Manitoba Faculty Association (UMFA) with respect to collective bargaining in the areas of compensation, academic freedom, job security and teaching loads. The strike ended with agreement to a one-year contract (2016-17). On August 31, 2017, good news was announced: after a month of negotiations, a tentative settlement was reached for a four-year Collective Agreement (2017-2021). (The UMFA strike is briefly discussed below, section 3.2.1b). Within the Faculty of Architecture, the UMFA-recommended process to create teaching load guidelines is already well underway. The first special meeting on this topic was held March 27, 2017, a second on August 29th, 2017. This Faculty business, like other Faculty Council business described above, is proceeding in an effective and collegial manner. Confidence in the Faculty of Architecture leadership and trust among its members is being restored.

CONCERN #4

CLARITY: *There is a lack of clarity in the relationship between the professional programs & the interdisciplinary program, between the graduate and undergraduate levels in the Faculty of Architecture. This issue appears to lie at the root of the problems described above. The curricular and governance models must be reformed.*

Response to the Concern about Clarity

This concern relates to concern #1 about governance, discussed above. The reconstitution of EDPAC to include all four Department Heads, together with the ED Program Chair (and others) has improved communications between the undergraduate and graduate levels, and between the interdisciplinary and professional programs. EDPAC has worked hard to bring clarity to ED regulations, program structure and course descriptions. Faculty Council has ratified several newly-refined governing documents brought forward by EDPAC, including the ED Supplemental Regulations, the ED Admissions Bulletin, the ED-AMP Admissions Bulletin, the Undergraduate Course Calendar, and ED1 Course Descriptions. Some items are pending Senate approval in 2017-18. Corresponding websites are being updated.

In addition to clarifications concerning the ED Program, the Faculty of Architecture Dean's Office has:

- created a Faculty organization diagram, showing clear areas of responsibility and accountability (see 3.10 Administrative Structure);
- updated the list of responsibilities for the Associate Dean Research, the Associate Dean Academic, and the ED Program Chair (see 3.10 Administrative Structure);
- updated the list of responsibilities for Administrative and Support Staff (see 3.5 HR: Staff);
- posted new Standing Committee Terms of Reference to the Bylaws page of the Faculty of Architecture website, including the new Terms of Reference for EDPAC (ratified by Faculty Council April 5, 2016), the Doctoral Studies Committee (ratified Sept. 6, 2016), and the C.A.S.T. Committee (ratified August 29, 2017). http://umanitoba.ca/faculties/architecture/facstaff/academic_handbook/BylawsStanding.html

2.2 CONDITIONS NOT MET

a) Program Assessment Areas

The 2015 VTR indicated that three of the fifteen Program Assessment Areas were not met. Each area, together with the program response to meet the criteria, is noted below.

> NOT MET in 2015
> **3.2 Program Self-assessment**: *The program must provide an assessment of the degree to which it is fulfilling its mission and achieving its action plan.* **The APR must include:**
> - *A description of the program's self-assessment process;*
> - *Faculty, student, and alumni assessments of the program's overall curriculum and learning context, as outlined in the CACB Perspectives…*
>
> *2015 VTR COMMENTS: The reporting on Program self-assessment in the current APR is neither candid nor rigorous… The content is largely descriptive in nature and fails to provide a clear articulation and understanding of strengths and weaknesses of the Program. Aside from a passing mention concerning the lack of clarity in governance of the Environmental Design Program, the self-assessment does not reflect the profound challenges facing the Program with respect to governance and administrative tensions. Additionally, the Program self-assessment is encumbered by a tri-partite organization that addresses the Faculty of Architecture, the Environmental Design Program, and the Department of Architecture. These appear to have been prepared independent of one another and do not present a coherent and consistent representation of the Program. This is consistent with observations made throughout the APR, and confirmed by evidence encountered by the Team, that the absence of a clear governance model within the Faculty is contributing to confusion and lack of clarity.*

Response to Improve 3.2 Program Self-Assessment

The architecture program has taken concerted efforts to prepare a comprehensive, coherent and candid self-assessment, as will be shown below (section 3.2).

The self-assessment by faculty members began immediately after receiving the 2015 CACB VTR in May 2015. Since then, there have been three Department Retreats, seven Department Council meetings, and a number of supplementary faculty conversations and ad-hoc committee meetings to evaluate aspects of the program, and to strategize and implement improvements.

Department of Architecture faculty members formally began preparing the self-assessment on May 18, 2017, during an all-day retreat – with this CACB item prominent on the agenda. Two student-led focused discussions for graduate and undergraduate architecture students were held in April 2017; an Alumni questionnaire was launched in May 2017; three public engagement discussions were conducted with the architectural community in June 2017; and a lunch meeting was held on June 29, 2017 with Council members of the Manitoba Association of Architects (MAA). These assessment methods and summaries of feedback received from each group are described in detail below.

The self-assessment process has been a collaborative and coherent effort: led by Associate Head and Associate Dean (Research) Lisa Landrum, with support from Department Head Carlos Rueda, and Faculty of Architecture Dean Jonathan Beddoes. A number of meetings concerning the self-assessment, and all

aspects of the Architecture Program Report, were held from April through August 2017, and communication with colleagues has been open. Throughout the process, faculty members, students, and members of the professional community were encouraged to forward comments to Dr. Landrum, Dr. Rueda and/or Dean Beddoes.

Also key to this APR's coherent preparation is the work and insights of former Acting Department Head, Terri Fuglem. Beginning in December 2016, Prof. Fuglem chaired a CACB Accreditation Committee (with Landrum and Rueda), which laid the groundwork for course work collection and APR preparations.

This self-assessment is also consistent: throughout this APR, the "architecture program" refers to the program of professional architecture curriculum delivered by the Department of Architecture. This includes graduate courses at the M1 and M2 levels, leading to a Master of Architecture degree; and undergraduate architecture-option courses at the ED3 and ED4 levels (AMP1 and AMP2), leading to a Bachelor of Environmental Design degree (with an architecture focus).

NOT MET in 2015

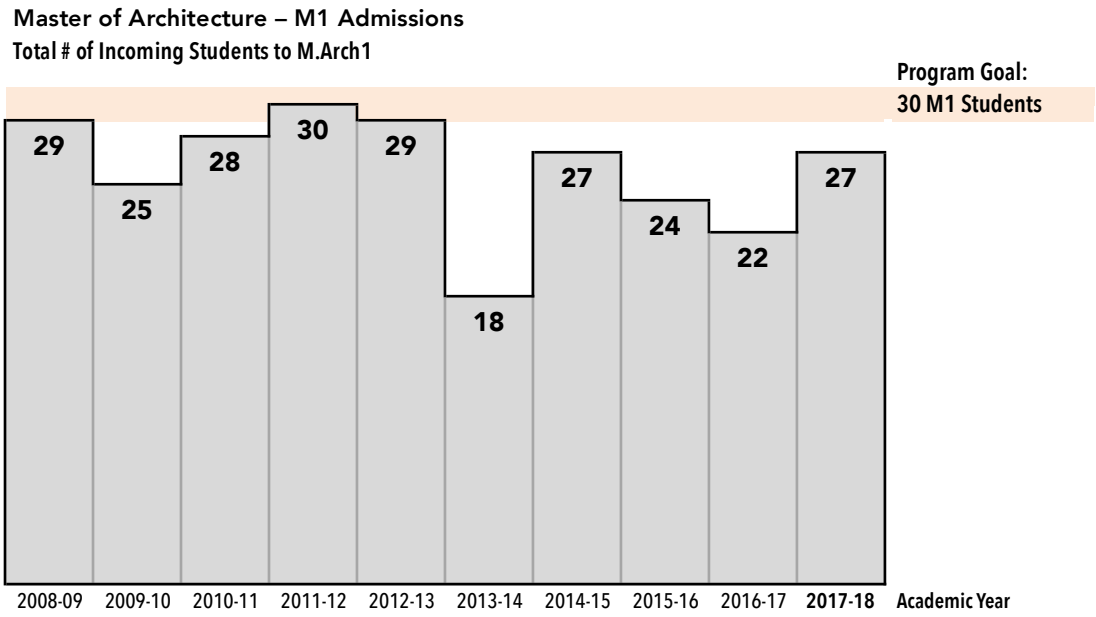
3.5 Human Resources: *The program must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient faculty complement, an administrative head devoting not less than fifty percent of his/her time to program administration, administrative and technical support staff, and faculty support staff.*

[2015 VTR TEAM COMMENTS]: The loss of full-time faculty members through resignation and secondment has left the Department of Architecture seriously short-staffed… The hiring of several new faculty members, including a Program Chair, should take place as soon as possible… [T]he number of students admitted has fluctuated and remains quite low. Steps should be taken to assure quality through increasing both the number of applicants and the number accepting offers of admission. This will require a thorough review of recruitment and outreach programs in the Faculty. The number of support staff appears adequate, but there is a serious morale problem arising from workload and stress…

Response to Improve 3.5 Human Resources

The program response to Human Resources is addressed above with respect to concern #2, Human Resources. To reiterate – the University of Manitoba is investing in the replenishment of faculty members in the Department of Architecture. A new Head, dedicating 50% of his time to program administration, was hired as of September 1, 2015. An Associate Head, who participated in the last two CACB accreditation visits, was appointed October 1, 2016 for a period of two years to assist with program administration and CACB preparations. As of January 2018, the Department of Architecture is expected to have 10.5 full time members, compared to 10 at the time of the last team visit in March 2015. There have been no resignations in the Department of Architecture since September 2015. Support staff numbers have remained consistent since 2015, and administrative tasks have been adjusted and clarified. Improved morale across the Faculty of Architecture has alleviated some degree of stress associated with workload.

Regarding student resources: following an anomalous dip in admissions in Fall 2013, the M.Arch program is rebuilding its M1 intake to a target enrolment of 30 students. The incoming M1 class for September 2017 is 27. Statistics for the last 10 years may be compared in the M1 Admissions graph (below). Details of student enrolment are enumerated more fully in section 3.5.1, Human Resources: Students.



The rebounding 2017 M1 admissions may be attributed, in part, to a nation-wide surge in international student applications, and to the University of Manitoba's 2015 implementation of an online application process. The Department of Architecture's recruitment efforts may have also played a role. These outreach initiatives have involved the rejuvenation of C.A.S.T., website enhancements, and a new publication of design studio work in an *ArchFolio*, which was launched digitally in September 2016 and in print in January 2017. (*ArchFolio2017* was launched September 1, 2017). As emphasized in the Department's Action Plan, recruiting bright and motivated students with potential to excel, and maintaining a high-quality incoming M1 class of about 30 diverse individuals are top priorities.

The architecture program at the University of Manitoba is not among the largest programs in Canada, but its size is appropriate to the region and resources. There are about 550 registered architects in the province of Manitoba (compared to almost 4000 in Ontario, about 2000 in British Columbia, and nearly 1200 in Alberta). There are approximate 90 architectural interns currently in Manitoba. A majority of graduates from UM's architecture program pursue professional opportunities in Winnipeg. Adding up to 30 able and eager M.Arch graduates to Manitoba's architectural field each year is a fitting goal.

NOT MET in 2015

3.10 *Administrative Structure*: *(Academic Unit & Institution): The program must be part of, or be, an institution accredited by a recognized accrediting agency for higher education. The program must have a degree of autonomy that is both comparable to that afforded to the other relevant professional programs in the institution and sufficient to assure conformance with all the conditions for accreditation.*

2015 VTR TEAM COMMENTS:

The Team has three concerns with the governance structure. The first concern is that the common naming of the Faculty and a Department (Architecture) has led to confusion, both inside and outside of the Faculty, as to where the responsibility resides for administration of the professional program in architecture.

The second concern is that degrees with significantly distinct content (potentially 66% of the courses) share a common name. An important aspect of this concern is that the specialty is not at all obvious as it appears on neither the parchment nor the transcript.

The third concern is that, although the Department of Architecture is academically responsible for the content of the ED3 and ED4 ARCH courses, they do not appear to have a formal position in the administration of the Environmental Design program. Conversely, the Program Chair, who is formally responsible for the ED program, appears to have no role in the progress of students to the last two "Option" years.

Response to Improve 3.10 Administrative Structure

i) Naming of the Faculty – The Faculty of Architecture at the University of Manitoba has existed since 1963. Previously, it was a School of Architecture (from 1948-63). Before that, a Bachelor of Architecture degree was offered through other entities: a School of Architecture and Fine Arts (1945-48); a Faculty of Engineering and Architecture (1920-45); and the Faculty of Arts (1913-20). The architecture program at the University of Manitoba was founded in 1913. It is the third oldest program in Canada, after that of the University of Toronto (est. 1890) and McGill University (est. 1896). There are compelling arguments to be made for honoring the long-standing name of the Faculty and the program that gave rise to it. However, there are different views on this matter within the Faculty of Architecture, the University, and the Province.

During his September 1st, 2015 presentation, *My View on Arrival and Looking Ahead,* Interim Dean Beddoes invited feedback specifically on the question of the Faculty name. The results, shared in his report of October 25th, 2015, indicate that the feedback was inconclusive: some considered the name appropriate; some others considered it inappropriate. The topic was discussed again at the Faculty retreat on December 11, 2015, but Faculty of Architecture members did not deem the matter a priority at this time. Instead, energy was devoted to improving ED governance and curriculum. In April 2016, Faculty Council approved a reconstituted ED Program Advisory Committee – key to the Faculty's improved administrative structure.

It should also be noted that, at the time of the previous CACB Team Visit, the apparent confusion of a Department of Architecture within a Faculty of Architecture might have been exacerbated by inconsistencies in governance between the Department of Architecture, the Faculty of Architecture, and the ED Program. As outlined above, in response to Concern #1, such inconsistencies have been addressed.

ii) Degrees – There is general agreement among faculty members and students that it would be appropriate and beneficial to have majors indicated on the Bachelor of Environmental Design degree. ED students spend two full years in a disciplinary-specific stream: Architecture; Interior Environments; or Landscape + Urbanism. ED Architecture-option students take 63 credit-hours of architecture-specific courses (majors in Arts and Science at the University of Manitoba typically require 48 to 60 credit-hours). Having a B.Env.D. (Arch) degree would acknowledge an ED graduate's major. It would also make patent their degree status when applying to professional Master of Architecture programs, since 2-year M.Arch programs require pre-professional architectural studies. The nomenclature of B.Env.D. (Arch) would be comparable to a B.Sc (Arch), and competitive in name with a Bachelor of Architectural Studies. Any change to degree names requires a University application and approval process. The topic of ED degree majors and the application process to amend them will be agenda items for EDPAC in 2017-18.

iii) ED Administration – As elaborated in response to concern #1 (Governance), the renewed leadership team in the Faculty has made responsibilities between the ED Program Chair and Department Head clear:

- The ED Program Chair is responsible for the overall undergraduate ED program and coordinating its curriculum development with Department Heads;
- The Department of Architecture Head is responsible for leading curriculum development in the architecture program, including the M.Arch program and the ED3 and ED4-architecture options years, and for contributing to the development of common Environmental Design curriculum through the re-constituted ED Program Advisory Committee (EDPAC).

More details on the Administrative Structure of the Department of Architecture and the Environmental Design Program within the Faculty of Architecture, including position descriptions of the Dean, Associate Deans, Heads and ED Program Chair, are provided in section 3.10: Administrative Structure.

2.2 CONDITIONS NOT MET

b) Student Performance Criteria

The 2015 VTR indicated that four of the thirty-one Student Performance Criteria were not met. These four areas, together with program initiatives to meet the criteria, are noted below.

> NOT MET in 2015
> **B4 Sustainable Design**: *Ability to apply the principles of sustainable design to produce projects that conserve natural and built resources, provide healthy environments for occupants/users, and reduce the impacts of building construction and operations on future generations.*
>
> *2015 VTR COMMENTS: The team found little convincing evidence that the ability to apply the principles of sustainable design was met. While some studios and courses address these issues it is unclear that all students are exposed to the material.*

Response to Improve B4 Sustainable Design

The Department of Architecture embraces a holistic approach to sustainable design. This encompasses: passive and active systems; new technologies and reclaimed materials; sensible siting; durable design strategies and adaptive reuse; as well as recognizing the role communities play in creating resilient buildings and cities. The aim is to create purposeful and meaningful architecture, in harmony with environmental and cultural ecologies. Since the last accreditation visit, all core courses and some electives have been reviewed and refined to address this student performance criterion. An ad-hoc Sustainability committee (consisting of Coar, Aquino, and M.Arch student Lebel) was formed during a Dept. Council meeting on June 12th, 2015; a report was distributed Sept. 4th, 2015. The findings and recommendations, together with subsequent discussions and instructor initiatives, have generated a multi-faceted approach to integrating sustainable design knowledge and capabilities into all areas of the curriculum.

Core Technology Courses

EVAR 3004 Arch Tech 1: *Structural and Sustainable Use of Materials* – This course includes an introductory lecture on sustainability in material selection, structural design & construction assemblies; plus culminating lectures on sustainable systems and passive energy. In Fall 2016, this course hosted a special lecture by Manitoba Hydro engineer Mark Pauls on energy conservation and the role of digital tools in energy systems.

EVAR 3006 Arch Tech 2: *Building Construction, Structures and Envelopes* – This course delivers a dedicated lecture on energy efficiency in houses and small buildings. In 2017, Eric Bjornson, founder of Sundial Building Performance (a local construction company specializing in energy efficient homes), was a guest lecturer, presenting the Aspen Root Passive Home project. EVAR 3006 reviews the newly adopted National Building Code Section 9.36 Energy Efficiency, including the review and testing of Calculation of Effective Thermal Resistant of Assemblies (Section 9.36.2.4); introduces the LEED rating system, passive design strategies, material harvesting and life cycle costing; discusses thermal insulation and building envelopes; includes test questions on window performance ratings and requires students to complete a dedicated assignment on Sustainable Building Analysis, involving research and study of a project's full environmental impact from material manufacturing to reuse and material harvesting at the end of the life cycle. In Winter 2017, this assignment was linked to a major design-build project, involving all ED3/AMP1 students. The *Warm Hut* project, constructed as part of the international Warming Hut design competition at the Forks, integrated a stove burning eco-friendly fuel pellets (made of plant material). For more on *Warm Hut,* see *Carbuncle* (DoA Press, 2017). http://umanitoba.ca/faculties/architecture/programs/architecture/DoAPress.html

EVAR 4002 Arch Tech 3: *Building Systems.* This course introduces basic strategies for integrating low energy systems and daylighting; incorporates *The Green Studio Handbook* (Kwok and Grondzik, 2007) as a recommended text; and encourages responsible design decisions through construction document assignments. LEED and the National Energy Code are introduced in relation to specific projects, including discussions around certification and calculating compliance.

EVAR 4008 Arch Tech 4: Comprehensive Technology Report. This course requires synthetic understanding of sustainability, while designing & selecting appropriate construction assemblies and systems. Students are exposed to the new National Energy Code of Canada for Buildings (NECB) via lecture and case study.

Graduate Technology Electives

In 2016-17 a new graduate Topics Course was introduced on *Sustainability by Design: Passive Energy Systems* (ARCH 7000/Gosch). This course explores the principles, strategies and solutions for passive energy systems in contemporary architecture. Students prepare group assignments on energy calculations, and individual presentations and critical analyses of architectural case studies. Other Technology Topics, including *Hands On Masonry* and *Architectural Lighting and Shadows* (ARCH 7010/7000/T.Landrum), provide students opportunities for in-depth study and hands-on experimentation with sustainable lighting and building envelope design.

Design Studios

All architecture program design studios are giving closer attention to environmentally responsible siting, material reclamation and selection, and passive mechanical systems. The Comprehensive Design Studio (ARCH 7060) included dedicated lectures for all M1 students on the National Energy Code, and on the University of Manitoba's award-winning sustainability initiatives, led by engineers at the University's physical plant. Certain studios have taken issues of sustainability as central to the pedagogical framing. For instance, the Rainbow Gardens Studio (ARCH 7050/Coar, Fall 2016), and related Elective (ARCG 7080/ Veness, Summer 2017), consisted of a design build project for a community garden. The structures incorporated sustainable site design strategies, passive water catchment and retention, reuse of recycled materials, and a composting toilet.

History and Theory Curriculum

Core lectures in the History and Theory of Premodern Architecture (EVAR 3000 & 3002) regularly impart lessons in sustainability by emphasizing the fundamental sympathy between architectural constructs, regional conditions and worldly phenomena, definitive of pre-modern world views; by cultivating appreciation for Indigenous ways of life and making; and by teaching the Greek origins of *eco-logy* in the *logos* of *oikos* – in "discourses" concerning the ancient "household," its self-sustenance and interrelations with region and city. Since 2015 the History and Theory of Modern Architecture Modern Architecture (EVAR 4000 & 4006) has addressed sustainability by showing how certain modern architects embraced environmental and cultural conditions as reciprocal and complementary; and by integrating new recommended course texts. These include: Kevin Bone, *Lessons From Modernism: Environmental Design Considerations in 20th Century Architecture, 1925-1970* (Monacelli Press, 2013); and David Leatherbarrow and Richard Wesley, *Three Cultural Ecologies: Frank Lloyd Wright and Le Corbusier* (Routledge 2017).

NOT MET in 2015

B12 Building Economics and Cost Control: *Understanding of the fundamentals of development financing, building economics, construction cost control, and life-cycle cost accounting.*

2015 VTR COMMENTS: In the APR, coverage is claimed in ARCH7040 – Professional Practice and ARCH 7350 Legal Aspects of Architectural Practice. However, no claims are made in the SPC matrix or in the course outline. Examination of these courses showed coverage of fees and hour-requirements for jobs but does not discuss any aspects of development financing, building economics, construction cost control, and life-cycle cost accounting. Although some of these topics are referenced in some of the studios, there is no comprehensive coverage of these topics.

NOT MET in 2015

D4 Project Delivery: *Understanding of the different methods of project delivery, the corresponding forms of service contracts & the types of documentation required to render competent & responsible professional service.*

2015 VTR COMMENTS: There was only partial evidence to support this SPC as being met. Whilst ARCH 7040 and ARCH 7350 demonstrated good understanding of delivering a project from a stipulated price client-architect perspective, there was little to no evidence showing an understanding of delivering a project from any other form of professional service, types of contractor procurement, the role of the architect in administering a construction contract, bidding and negotiation etc. The Program is encouraged to update course material to include reference to current and diverse regulatory frameworks of architectural practice.

NOTE: B12 & D4 are treated together, as they are interrelated, and both pertain to improvements in ARCH 7040.

Response to Improve: B12 Building Economics and Cost Control; plus D4 Project Delivery
Building Economics and Cost Control (B12), and Project Delivery (D4) are both met in the graduate M1 course ARCH 7040 Professional Practice. While aspects of these two SPCs are introduced in the context of some studio and technology courses, and touched upon in ARCH 7350 Legal Aspects of Architectural Practice, they are directly met only in the Professional Practice course, ARCH 7040. This core graduate level 3-credit course is offered in the M1 year, usually in the fall.

From summer 2015 to winter 2017, this course underwent numerous changes and improvements, including the introduction of a new instructor, new lecture content, and new assignments.

The ARCH 7040 instructor has always been an experienced and respected Winnipeg architect, teaching as a sessional instructor. Due to professional obligations of the previous instructor, a new instructor took over the delivery of Professional Practice in fall 2015 and is continuing to offer the course. Dean Syverson is a registered architect with 24 years of professional practice experience and 15 years of sessional teaching experience, having previously taught in the Department of Architecture at the University of Manitoba from 1995-2007. He is registered to practice in Manitoba, Ontario and Saskatchewan, and is a past president of the Manitoba Association of Architects.

Informed by discussions at Department of Architecture retreats (on May 19, 2015 and April 29, 2016) and by the findings and advice of an ad-hoc committee (consisting of Aquino, Fuglem, Landrum and Rueda), Syverson has implemented several course improvements that directly address concerns raised by the 2015 VTR. These improvements include:

<u>B12 Building Economics and Cost Control</u>
- developing and delivering new lecture topics: on Financial Management and Architecture Services and Fees (week 5); and on Cost Planning and Control, Development Financing, Building Economics, Construction Cost Control, and Life Cycle Cost Accounting (week 7);
- implementing a new assignment, *Construction Cost Estimation,* to cultivate and test student understanding of Building Economics and Cost Control (assignment #3, worth 25%);

<u>D4 Project Delivery</u>
- developing and delivering new lecture topics: on various aspects of the Construction Industry (week 3); on Types of Construction Project Delivery and Types of Contracts (week 6); and a series of lectures addressing several facets of Practice Management (weeks 4-5, 8-9, and 10-11);
- implementing two new assignments to cultivate and test student understanding of Project Delivery: *Practice Type Case Studies* (assignment #2, worth 20%), & *Seeing Patterns* (assignment #4, worth 20%);

<u>Overall Adjustments / Improvements to ARCH 7040 Professional Practice</u>
- updating the course outline to include explicit objectives / learning outcomes and reference to the required CACB Student Performance Criteria;
- expanding the course references to include more current and more diverse sources and articles;
- introducing a final exam (worth 15%), with multiple choice and short-answer questions, to serve as a valuable overview of course content;
- introducing a new assignment to give students an immersive experience in professional practice – the "mock interview" – for which students apply to local firms of their choice, participate in an interview at the architectural office, and receive feedback on their cv, portfolio, and interview skills. (This assignment was strongly appreciated by both students and professionals).

To reiterate – the Department of Architecture, together with the new sessional instructor for Professional Practice ARCH 7040, have made significant progress in incorporating new content and assignments that address the 2015 VTR concerns about Building Economics & Cost Control (B12) and Project Delivery (D4). Evidence for improvements cited above will be found in the Professional Practice ARCH 7040 binder, in the Team Room, as part of the exhibition of student work.

NOT MET in 2015

C4 Comprehensive Design: *Ability to project a comprehensive design based on an architectural idea, a building program and a site. The design or designs should integrate structural and environmental systems, building envelopes, building assemblies, life-safety provisions, and environmental stewardship.*

2015 VTR COMMENTS: …there is no comprehensive presentation of all of the required documentation within a design. Further, there is inconsistency between the vertical studios with respect to the level and content of the documentation presented (p. 26).

Projects vary widely from studio to studio… The Team is concerned that these varying levels of complexity do not provide students with consistent expectations and requirements… This poses a particular difficulty in verifying that all students coming through the program are exposed to appropriate and consistent degrees of difficulty and areas of study. As noted above, this is of particular concern with respect to ARCH 7060, the winter studio in M1, which the APR identifies as satisfying all four SPCs under the rubric of Comprehensive Design (p. 7).

It is the Team's view that a more rigorous and explicit structure should be developed in order to fulfill the requirements of criterion C4: Comprehensive Design. Linking Comprehensive Design to a Vertical Studio with students of differing levels, graduate and undergraduate, even thesis students, appears to work against the focus required in a comprehensive studio (p. 20).

Program Response to Improve C4 Comprehensive Design

The program has addressed this concern. The Department of Architecture discussed this concern immediately after receiving the 2015 VTR in May 2015, and took action that summer to improve the delivery of the M1 Comprehensive Design studio as of September 2015. Improvements address both organizational and curricular concerns: the program changed the structure of studio offerings to level-specific options (eliminating vertical studios, except for M2 Design Thesis students); and, within those level-specific studios, the program introduced curricular enhancements to help make studio expectations more consistent and more focused on the Student Performance Criteria associated with Comprehensive Design.

Level-Specific Studios: Comprehensive Design and studio structure were discussed at a Department of Architecture retreat on May 19, 2015, with the recently received CACB VTR and Graduate Program Review Report in hand. Both reports raised concerns about the Vertical Studio structure, highlighting it as a potential hindrance to delivering consistent and rigorous Comprehensive Design studios. Based on conversations at the May 19th retreat, an ad-hoc group (Coar and Landrum) met and prepared a 2-page Vertical Studio Restructuring Proposal, recommending the separation of ED4 and M1 studios. The report was circulated on June 3rd and its recommendation was passed by vote in a Department Council meeting on June 12th, 2015. In that same June 12th meeting, another ad-hoc Comprehensive Design committee was formed to review curricular implications and opportunities of the revised structure. This ad-hoc committee (consisting of Coar, Enns, Epp, Landrum and graduate student Lebel) met and corresponded over the summer of 2015, and submitted a report for information to Department Council on September 4th, 2015.

Since September 2015, the M1 Comprehensive Design Studio has been delivered as a level-specific studio in three sections. The 2017-18 academic year will be the third year with this revised structure. The results have been very positive in terms of the quality and resolution of design work. Some students familiar with vertical studios, however, have indicated that they miss certain benefits of the previous structure, particularly the benefit of interacting with—mentoring and being mentored by—students at different levels within the same studio. Such interaction builds strong personal and professional relationships, and helps lower-level students know what to expect in more advanced years. The Department of Architecture and the UMAAS student group are working to foster such mentorship across levels via other mechanisms (such as inviting students to one another's reviews and introducing new social events), while maintaining the pedagogical focus of the different years.

Curricular Enhancements: Building on the work of the Comprehensive Design Ad-hoc Committee over the summer of 2015, the full-time instructors of the M1 studios for the last three years (Coar, Enns, Landrum and Minuk) have met several times to discuss and implement curricular improvements. These include:

- *greater distinction between first and second term learning outcomes* – The first term exploratory work is expected to meaningfully inform the second term major design project; yet, the two terms (typically taught by the same instructor) now have more clearly defined project descriptions and deliverables. Such distinctions had always been part of the general course descriptions for the fall and winter term studios (ARCH 7050 and ARCH 7060). Instructors now are giving this distinction greater attention.
- *consistency in scale and civic/cultural importance of the M1 winter term building program* – To avoid significant disparity between the three sections of M1 studios, it was agreed that winter term projects (ARCH 7060) would be of a similar size and programmatic complexity – usually a mixed-use cultural institution, involving a contextually complex site.
- *better integration of technology by keeping it under the purview of the design studio instructor* – To avoid dividing building technology and design in the Comprehensive Design Studio, it was decided (after a series of Departmental conversations over the summer 2016) that M1 design studio instructors, not technical consultants, would be responsible for ensuring technical integration in the studio. Technical consultants are still involved in the studio as guest critics and lecturers, and are invited to give one-on-one technical reviews of student work. Yet, M1 design studio instructors are responsible for delivering an integrated pedagogy, emphasizing the interdependence of design, building technology and building systems.
- *explicit reference to the CACB Student Performance Criteria in the course outlines*;
- *careful attention to design sequencing in the winter term studio, also linked to CACB criteria*;
- *introduction of case studies, site visits, and lectures linked to the Comprehensive Design sequence*;
  – To these three points, in winter 2017, the M1 instructors (Enns, Landrum and Minuk) collaboratively developed and offered a series of lectures and site visits mandatory for all students across the three sections. The nine sessions involved six site visits (each led by local architects or engineers, and involving a detailed power point presentation, questions and discussion); three lectures by local professionals (including the Winnipeg Plan Examiner, a local construction manager, and a LEED/Energy expert); plus lectures by the studio instructors. This practice of having a shared series of lectures and site visits integrated with the M1 Comprehensive Design winter studio will continue in 2017-18, and subsequent years. The shared handout of lectures for the winter 2017 ARCH 7060 Comprehensive Design Studio is appended (below). This handout, and others shared by the three M1 Comprehensive Design Studio sections, will also be found in the ARCH 7060 Studio Binders, under Course Outline, in the Team Room, as part of the exhibition of student work.

To reiterate – the Department of Architecture has taken several significant steps to improve the delivery of Comprehensive Design. Both organizational and curriculum adjustments have been implemented. The M1 Winter Term studio (ARCH 7060) is now a level-specific studio, with three sections. Although building programs, topical emphases, and design approaches may differ from section to section, the three instructors are collaborating to ensure comparable expectations and deliverables, and to offer a common set of lectures and site visits linked to design sequences and to CACB SPCs.

Regarding Comprehensive Design, it must further be noted that although the SPCs for Comprehensive Design are explicitly met in the M1 Winter Term Studio (ARCH 7060), the ED4 Winter Studio (EVAR 4010), supported by Arch Tech 4 (EVAR 4008), strives to meet the same criteria – imparting understanding, if not ability, in each SPC area. The Department of Architecture is proud of effectively delivering two Comprehensive Design studios: one at the undergraduate and one at the graduate level.

Winter 2017—ARCH 7060, Comprehensive Design Studio Lectures—for all M1s

Mon.
Jan. 30 #1 Standards, Systems, Sites
Lecture by Prof. Neil Minuk and Winnipeg Plan Examiner Rick Derkson. /NM
Using the case study of 257 Osborne (currently under construction), this session covers all aspects of preliminary design, especially in relation to site restrictions, soil conditions, foundation design, construction regulations, building permit processes, and the new National Energy Code. —Covering SPCs: Site Design (B3); Accessibility (B5); Life Safety Systems, Building Codes and Standards (B6); Environmental Systems (B8).

Mon.
Feb. 6 #2 Sustainability, Common Sense, Uncanny Opportunities /NM
Lecture by Prof. Neil Minuk and Gerry Humphreys of Milestone Project Management.
Introduction to environmentally responsible construction through a variety of case studies, including Mountain Equipment Co-op, Westend Commons. —Covering SPCs: Sustainable Design (B4), Building Materials and Assemblies (B11); Structural Systems (B7)

Mon.
Feb.13 #3 Constructive Synthesis: Case Study UM's ArtLab, Patkau Architects + LM Group /LL
Lecture and site tour by architect David Kressock, LM Architectural Group.
Presentation of overall design philosophy, daylighting strategies, steel structural system, building envelope innovations, and material assemblies for integration with historic building fabric and floodway foundation design. —Covering SPCs: Site Design (B3); Structural Systems (B7); Building Envelope (B9); Building Materials and Assemblies (B11)

Thurs.
Mar. 2 #4 Urban Verticality: Case Study, Stantec GlassHouse + 311 Portage /NM
Lecture and site tour by Stantec architects Michael Banman and Fletcher Noonan.
Presentation of overall design philosophy, structural system and building envelope innovations, including urban infill site conditions, curtain wall design, and elevators. —SPCs: Structural Systems (B7); Building Service Systems (B10); Detailed Design Development (C1); Building Systems Integration (C2); Life Safety Systems, Building Codes & Standards (B6).

Mon.
Mar. 6 #5 Case Study, UM's Active Living Centre /HE
Lecture and site tour by Michael Robertson, Cibinel Architecture.
Presentation of overall design philosophy, structural system, materials, and building economics. —Covering SPCs: Building Envelope (B9); Building Economics and Cost Control (B9).

Mon.
Mar.13 #6a Mechanical and Environmental: National Energy Code /NM
3pm—Lecture by Tammy Harper, LEED, Civil Engineering Instructor at Red River College, and Board Member of the Canadian Commission on Building and Fire Codes;
Presentation of National Energy Code —Covering SPCs: Environmental Systems (B8); Building Systems Integration (C2).

Mon.
Mar.20 #6b Mechanical and Environmental: UM's Wallace Building & Physical Plant /LL
2:30pm—Introduction to UM's Sustainability Initiatives by Eng. Mike Ferley; + Site Tours
HVAC principles and overview of environmental systems and systems integration. — SPCs: Bldg. Materials and Assemblies (B11); Detailed Design Development (C1); Bldg. Systems Integration (C2).

Thurs.
Mar.23 #7 Technical Documentation + Grade 4 Labs and Human Rights Museum Case Study /HE
Lecture with architects Kevin Humeniuk, Grant van Iderstine, Ana Coppinger, & Larry Wiens at Architecture49.—Covering SPCs: Technical Documentation (C3); Building Systems Integration (C2).

Mon.
Mar.27 #8 Water, Stone, Weather and Steel /HE|LL|NM
Lecture by Profs Herbert Enns, Lisa Landrum and Neil Minuk.
Presenting principles of preservation, adaptive reuse, weather contingencies, weatherproofing and detailing strategies for the care and longevity of buildings, with case studies from Winnipeg and New York. Covering SPCs: Building Envelope (B9); Building Systems Integration (C2)

2.3 TEAM COMMENTS

This section addresses the Team Comments regarding certain Program Assessment Areas and Student Performance Criteria that were satisfactorily MET in 2015, albeit with minor concerns. The VTR comments, together with the program response for each area, are noted below.

TEAM COMMENTS:

3.3 Public Information: MET… *However, the information about professional accreditation, and link to CACB Professional Accreditation Terms Appendix A1 does not appear to be consistent and the accreditation status of the program is not easily accessible. Public access to consistent and current information and status of the program is essential to maintain public confidence in the institution and the program.*

RESPONSE: The Department of Architecture has overhauled its website since the last CACB Team visit. The Department homepage now includes a dedicated link to "Accreditation," where one finds the CACB recommended text for University Calendar and Promotional Materials. This text appears verbatim in the University Graduate Calendar. On the Department of Architecture's Accreditation web page, one also finds a statement about the program's current accreditation status, and links to the 2015 VTR, to the CACB Perspectives, and to the CACB Guide to Student Performance Criteria.
DoA Homepage: http://umanitoba.ca/faculties/architecture/programs/architecture/index.html
Accreditation page: http://umanitoba.ca/faculties/architecture/programs/architecture/architectureaccreditation.html Calendar: http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=320&chapterid=3851&loaduseredits=True

TEAM COMMENTS:

3.4 Social Equity: MET… *However, student admissions standards are not well described. Given the complexity of access into the Masters Program, this lack of clarity and consistency affects the public's understanding of the wide range of program choices and entry points into the Program.*

RESPONSE: Admissions Guidelines to the Master of Architecture Program have been updated and clarified since the last CACB Team Visit, and the relevant website has been completely revamped: http://umanitoba.ca/faculties/architecture/programs/architecture/admissions_package.html

The Applicant Information Bulletin to the Environmental Design Program: Architecture Master Preparation (AMP) Option Program has been clarified to more succinctly describe the Academic Requirements and Supplementary Documentation required. Faculty Council ratified these revisions on August 29, 2017. Pending Senate Approval, they will be posted for the 2018-19 admissions cycle.

The Applicant Information Bulletin to the Environmental Design Program, for students entering ED2 from U1, has also been clarified to more fairly establish entrance requirements and prerequisites. Faculty Council ratified these revisions on August 29, 2017. Pending Senate approval, they will be posted for the 2018-19 admissions cycle.

TEAM COMMENTS:

3.7 Physical Resources: MET… *However, the Team does note that ARCH2 is in need of an upgrade to finishes and life safety systems…*

RESPONSE: New funds have been secured to upgrade the Architecture 2 Building interiors, including over one million dollars from a University of Manitoba Teaching Laboratory Renewal Proposal for furnishings and general upgrades. Preparatory work is already underway. Implementation is to commence in summer 2018. Additionally, long-awaited exterior refurbishments, commenced in the summer of 2016, are to be completed in fall 2017. This work entailed basement level window replacements, masonry repairs, waterproofing, roof work and bulkhead repairs. (See below, section 3.7 Physical Resources).

SPC A8 History and Theory:
Understanding of diverse global and local traditions in architecture, landscape, and urban design, as well as the factors that have shaped them.

TEAM COMMENTS:
MET… *However, while the curated EVAR courses (3000 / 3002 / 4000 / 4006) provide opportunity for depth in specific areas of study, the evidence suggests that this occurs at the expense of breadth. As the opportunity for depth in focused areas of study occurs in graduate seminars (ARCH 7020/7030), the EVAR courses could provide greater breadth…*

RESPONSE: This concern has been addressed, especially in the pre-modern lecture courses (EVAR 3000 / 3002). This course covers a comprehensive range of lectures, including the addition of new non-western lectures on World Vernacular; and Indian/Mughal architecture in 2015; and on Balinese and Indigenous architecture in 2017. Twelve new non-western topics for the major essay assignment have been added, including works from China, Japan, Africa and Indonesia. Evidence will be found in the EVAR 3000/3002 course binders in the Team Room, as part of the exhibition of student work.

SPC B3 Site Design:
Ability to analyze and respond to context and site conditions in the development of a program and in the design of a project.

TEAM COMMENTS:
MET… *However, there is little evidence demonstrating design of sites beyond the building footprint. There are few studio projects that convey manipulation of the built environment beyond the immediate footprint of the building or principle structures.*

RESPONSE: This concern has been addressed. It was discussed in Departmental retreats (on May 19, 2015; and April 29, 2016), and again in a meeting of Design Studio instructors on January 11, 2017. Site plans are required as a key deliverable of ED4 and M1 Winter term studios (EVAR 4010 and ARCH 7060). Evidence will be found in the Team Room, as part of the exhibition of student work for these studios.

SPC B8 Environmental Systems:
Understanding of the basic principles that inform the design of environmental systems, including acoustics, illumination and climate modification systems, building envelopes, and energy use with awareness of the appropriate performance assessment tools.

TEAM COMMENTS:
MET… *However, There is limited, but adequate coverage of environmental systems in EVAR 3004 [and] EVAR 4002… Environmental systems do appear in some design work done in Vertical Studios, but the Team saw minimal evidence that the principles of HVAC are explored in a comprehensive manner.*

RESPONSE: Since the last accreditation visit, all core Technology course content has been reviewed and refined. In EVAR 3004 ArchTech1, *Structural and Sustainable Use of Materials*, environmental systems are introduced via lectures on sustainability and passive energy models. In EVAR 3006 ArchTech2, *Building Construction, Structures and Envelopes*, presentations and discussions cover mechanical systems and electrical integration, passive strategies and human comfort. Students analyze a case study (Mini cO2 House Challenge), demonstrating passive heating/cooling and daylighting, and prepare a comprehensive assignment on the sustainable analysis of a particular project. In 2017, students analyzed their *Warm Hut* design-build project. In EVAR 4002 ArchTech3, *Building Systems*, students have dedicated lectures on Heating Systems Integration, Electrical Systems, Plumbing Systems, Lighting and Acoustics. EVAR 4002 also has a specific assignment on HVAC System and Layout (A.4, worth 15%), requiring students to select a system based on design and building occupancy requirements. In EVAR 4008 ArchTech4, *Comprehensive Design Technology Report*, students prepare a complete construction drawing set based on their studio

design project. Systems integration drawings – describing mechanical, electrical, lighting and acoustic features – are required. Environmental systems are also introduced in the M1 Comprehensive Design Studio (ARCH 7060), via special lectures on the National Energy Code, and sustainability initiatives of UM's physical plant. Drawn descriptions of environmental systems were required of all M1 design studio students. Evidence will be found in the Team Room, within the course binders of the referenced courses and the exhibition of student work.

SPC B10 Building Service Systems:
Understanding of the basic principles that inform the design of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection systems.

TEAM COMMENTS:
MET… *However, it is not clear that the students have sufficient understanding of these systems to do detailed designs.*

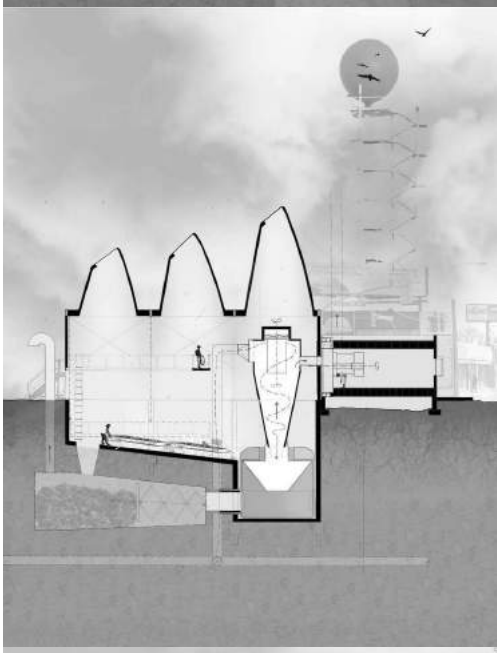
RESPONSE: Building Service Systems receive dedicated attention in EVAR 4002 ArchTech3, with two lectures and case study analyses. For EVAR 4008 ArchTech4 and ARCH 7060 M1 Design Studio 6, students integrate building service systems with their comprehensive studio project designs. Drawing sets are required to include construction details of vertical transportation and Life Safety features. Evidence will be found in the Team Room, in the course binders and the exhibition of student work.

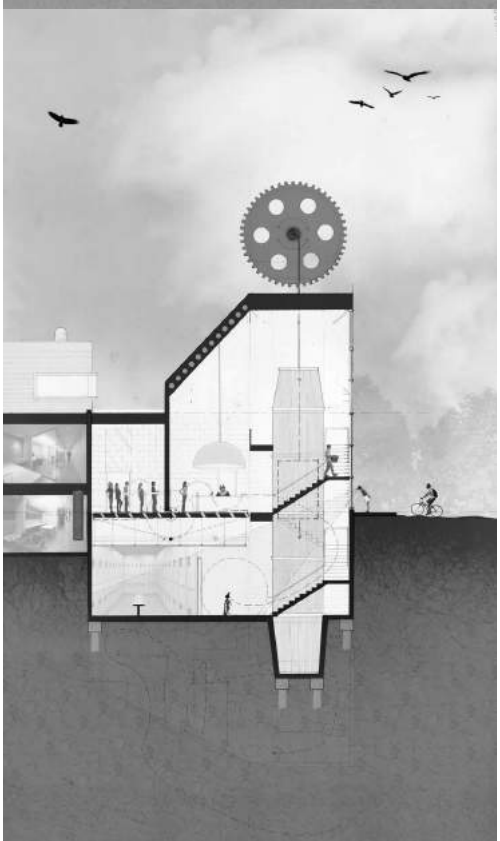
SPC D3 Legal Responsibilities:
Understanding of the architect's responsibility to the client and the public under the laws, codes, regulations and contracts common to the practice of architecture in a given jurisdiction.

TEAM COMMENTS:
MET… *However, the Program is encouraged to update course material to include reference to current and diverse regulatory frameworks of architectural practice.*

RESPONSE: The course outline for ARCH 7040 Professional Practice has been updated (see the response above to the "not met" SPC of B12 and D4, p. 32). The course outline for ARCH 7350 Legal Aspects of Architectural Practice has also been updated to include the 2015 Edition of Samuels and Sanders' *Practical Law of Architecture, Engineering and Geo Science*, among other resources. Evidence will be found in the Team Room, in the ARCH 7040 course binder.

3 Compliance with Conditions for Accreditation





3 Compliance with Conditions for Accreditation

3.1 Program Response to the CACB Perspectives
3.2 Program Self-Assessment
- .1 Faculty
- .2 Students
- .3 Alumni
- .4 Architectural Community

3.3 Public Information
3.4 Social Equity
3.5 Human Resources
3.6 Human Resource Development
- .1 HR Opportunities
- .2 Appointment, Promotion & Tenure
- .3 Faculty Development
- .4 Currency in Practice & Licensure
- .5 Student Field Trips
- .6 Student Societies
- .7 Student Support Services
- .8 Guest Lecturers, Critics & Cultural Events
- .9 Exhibitions

3.7 Physical Resources
3.8 Information Resources and Information Technology
3.9 Financial Resources
3.10 Administrative Structure
3.11 Professional Degrees and Curriculum
3.12 Student Performance Criteria (SPC)

3.1 Program Response to the CACB Perspectives

Programs must respond to the relevant interests of the constituencies that make up the CACB: educators and regulators, as well as members of the practicing profession, students and interns, and the general public. Together, each of these stakeholders brings specific concerns to the accreditation process, comprising the broad range of perspectives that frame a professional education in architecture. The CACB encourages each program to address these perspectives in a manner consistent with its identity and mission.

The APR must include:

- *The program's discussion as to how it addresses each of the following Five Perspectives.*

Note: this section should be read in conjunction with section 3.2.1b – program self-assessment by faculty.

A. Architecture Education and the Academic Context

The program must demonstrate that it both benefits from and contributes to its institutional context. Given its particular mission, the APR may cover such issues as: the program's academic and professional standards for both faculty & students; interaction between the program and other programs in the institution; contributions of the students, faculty, and administrators to the governance as well as the intellectual and social life of the institution; and contributions of the institution to the program in terms of intellectual and personal resources.

With new leadership in place since September 2015 in both the Department of Architecture and the Faculty of Architecture, most academic members, including students, have renewed confidence and optimism that the program is fulfilling its mission and tenets, and that the University, at every level of administration, is committed to helping us foster architectural and academic excellence through teaching and research. While acknowledging there are challenges at hand and improvements to make, faculty members in the program are cognizant of the many mutual benefits of our institutional context.

Institutional Context: The Department of Architecture offers a professionally accredited curriculum within the context of a research-intensive university. This research setting positively enhances the program. In 2011, the University of Manitoba joined the U15 Group of Canadian Research Universities, founded in 1991 as a group of 10. The U15 promotes the value of higher education, drives national policy discussion and provides critical advice and analysis on higher education, research and development. The association also offers a model of comparison for research-intensive universities, sharing data and strategic alliances between institutions. The U15 members are: Dalhousie University, Université Laval, Université de Montréal, McGill University, the University of Ottawa, Queen's University, the University of Toronto, the University of Waterloo, McMaster University, Western University, University of Saskatchewan, University of Manitoba, University of Alberta, University of Calgary, and the University of British Columbia. In 2014, the U15 became a member of the Global Network of Research Intensive Universities, formed to tackle mutual challenges faced by research institutions and to advance innovation and discovery worldwide. The University of Manitoba is also a signatory participant in Canada's Tri-Council framework for academic research, making academic members eligible for major funding from the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Canadian Institutes of Health Research (CIHR).

This research-intensive context establishes high standards for students and faculty members in the Department of Architecture. While our program must meet professional accreditation standards set by the CACB, it must also meet scholarly expectations of the academy. Faculty members meet rigorous criteria for hiring, tenure and promotion, and are expected to have significant research agendas on par with academics at other U15 institutions, and around the world. The Faculty of Architecture has its own tenure and promotion guidelines that account for an appropriate variety of applied, creative, professional and traditional forms of scholarship. The University of Manitoba, the Faculty of Graduate Studies, and the Office of Vice-President Research and International establish strategic research goals in consultation with individuals and faculties, and offer numerous resources for research mobilization and growth.

Department of Architecture faculty members benefit from these university research programs and resources. For instance, L.Coar is currently one of 17 contributors to a major SSHRC-funded research grant led by Dr. Shirley Thompson in the UM Natural Resources Institute. Individuals also earn competitive peer-reviewed internal grants. Recent awards include: the Creative Works Grant (L.Landrum/2016); the UM/SSHRC Travel Grant (L.Landrum/2015); and the UM/SSRHC Research Grant (L.Landrum/2014). The University of Manitoba and Faculty of Architecture provide teaching enhancement funds based on detailed proposals. Recent awards include: the Teaching and Learning Enhancement Fund (Aquino/2017); and the FAUM Studio Enrichment Fund (E.Epp; L.Landrum; R.Stern/2017). The University further recognizes teaching excellence. Recent awards include: the Excellence in Graduate Student Mentoring Award from the Faculty of Graduate Studies (L.Landrum/2017); and the Outstanding Teacher Recognition Award from the Centre for Teaching and Learning Enhancement (Aquino/2016).

Students benefit directly from University research programs. For instance, in 2016, M2 student Sakshi Misra was a finalist in the Three Minute Thesis competition (3MT®). The University of Manitoba has facilitated this communication contest since 2011 to promote graduate student research, and to connect researchers with their communities. 3MT challenges students to consolidate their ideas and research discoveries so they can be presented concisely to a non-specialist audience. All finalists are promoted via professional live performances and YouTube videos. Sakshi's presentation of *Architecture as Stage, Choreographer and Performer* may be found here: https://www.youtube.com/watch?v=a-lLYgDpRO8&list=PLlYd78BcX9oM-MSV68pLNhjXyti5ooXf4&index=8 .

Every year since the last accreditation ED Architecture Option students have won undergraduate research awards based on competitive applications, including written proposals and interviews with faculty researchers. Students earn summer stipends and have a chance to advance academic and career goals by experiencing research first-hand, while faculty members gain skilled assistance. Recent winners include:
2017 – Violet Jiang and Jessica Piper, working on bending active frame structural research with L. Coar.
2016 – Ilana Elbaze and Dana Veisman, working on *Campus Architecture 1967-2017* with L.Landrum.
2015 – Mengzhu Jiang, working on *Chinese architects in myth and history* with L.Landrum.
2014 – Emily Bews, working on *Polycinema, László Moholy-Nagy and the digital*, with L.Coar.

Students earn research assistantship positions when faculty grants permit. Recent RA awards include:
2015-16 – Cameron Cummings, Digital modeling for elastica framing systems with L.Coar.
2016 – Benjamine Bosiak, Design and fabrication of bending active frame components with L.Coar.
2016 – Xue Wei, Architecture's Body Politic with L.Landrum.

The University of Manitoba's institutional research profile helps attract high achieving students and faculty, as well as funds and opportunities, to our program. In the other direction, our program and its graduates help bolster the University profile and inspire both potential applicants and the general public. For instance, Sasa Radulovic (B.Env.D. 1999; M.Arch 2003), co-founder of 5468796 Architecture, was featured in the award-winning *Trailblazer* advertising campaign, with billboards across the city and country. In 2017, John and Patricia Patkau were among the distinguished alumni award winners for lifetime achievement. Students and faculty are also regularly featured in the UMToday news, helping to maintain awareness and appreciation of architecture within and beyond the academic community. These promotional and recognition programs are mutually beneficial to the program and University.

http://news.umanitoba.ca/sasa-radulovic-is-compelled-to-challenge-the-uninspired/

http://news.umanitoba.ca/the-2017-distinguished-alumni-award-recipients-for-lifetime-achievement-are-john-and-patricia-patkau/

Faculty Context: The Department of Architecture is part of the Faculty of Architecture, together with Departments of Landscape Architecture, Interior Design and City Planning; an undergraduate program in Environmental Design; and a Ph.D. program in Design and Planning. Having these allied design disciplines together in a single faculty carries numerous mutual benefits for shared resources. The faculty offers well-equipped facilities: an Architecture/Fine Arts Library; product catalogue library; woodworking workshop; CADLab; FABLab; and the Centre for Architectural Structures and Technology (C.A.S.T.) for large-scale collaborative innovation. (For more on facilities, see section 3.7). The Student Technology Fee Fund, which aggregates contributions from students across the entire faculty, supports purchases of equipment and software. Each physical resource is complemented with knowledgeable and friendly staff.

With the financial support of generous donors and administrative support from the Partners Program and the University Awards Office, the Faculty of Architecture provides numerous awards, scholarships and bursaries. The total amount of scholarships available to architecture students in the graduate program is nearly $100,000 (and growing); the total amount of bursaries for graduate architecture students is nearly $50,000. Students also benefit from the Faculty of Architecture Endowment Fund. This fund pools student contributions for cultural programming that advances the Faculty's mission and enriches academic and social life. Students, faculty, and affiliates make detailed proposals for allocating funds. The Endowment Fund committee, inclusive of students and external stakeholders, evaluates and awards proposals based on agreed criteria, including merit, appropriateness, student involvement and enhancement of the Faculty's presence in the community. (For more details on finances and endowments, see section 3.9).

The Faculty of Architecture further supports students in their academic and career goals by providing numerous well-paid teaching assistantship (TA) and grader positions, as well as paid technician and support roles in the CADLab, FABLab, C.A.S.T. and Product Library. The Partners Program recently launched the Student Ambassador program, to engage motivated students as volunteers to help promote the Faculty of Architecture at various functions, including recruitment and community outreach events. External job opportunities pertaining to design fields are posted on the faculty website. The Faculty is currently pursuing more work opportunities for students by creating a Co-op/Integrated Work program, currently in development, for implementation in summer 2018.

Interdisciplinarity: Beyond facilities, and together with personal and financial resources, the Faculty of Architecture provides a stimulating intellectual milieu for trans-disciplinary exchange. Learning across disciplines is instilled from the start through the general studies foundational curriculum. In U1/ED1 future architects study with students in the humanities and science. In ED2, architecture-option students learn alongside future landscape architects, city planners, interior designers and environmental designers. Friendships in ED2 tend to persist through later years. In some cases, cross-disciplinary collaboration in ED2 has developed into cross-disciplinary professional partnerships after graduation. The ED3 and ED4 years are more focused on disciplinary studies, but instructors from other units are frequent guest critics, and students across the faculty interact during public reviews, exhibitions, cultural events, social functions, and in shared electives – especially summer electives involving field studies and/or design-build projects.

The professional architecture program in M1/M2 and the AMP1/2 - ED3/4 option years integrates trans-disciplinary work into core curriculum. Architecture instructors often involve professors and staff from other Faculties as guest contributors. Within the last three years, there has been participation from units across the university: Art History, Fine Arts, English Film and Theatre, the Centre for Creative Writing and Oral Culture, Music, Classics, Native Studies, Business, Law, Philosophy, the Centre for Professional and Applied Ethics, St. Johns College, Science, Chemistry, Agriculture, the Faculty of Environment Earth and Resources, Civil Engineering, the Centre for Engineering Professional Practice and Engineering Education, Natural Resources Institute, Health Sciences, the Campus Planning Office, and the University Physical Plant. Specific examples include the Fall 2016 M1 *Rainbow Gardens* studio (ARCH 7050/Coar), in collaboration with Landscape Architecture (Prof. Brenda Brown) and Civil Engineering (Dr. Dimos Polyzois). This hands-on cross-disciplinary project enabled students to design and build a series of small garden structures for and with an immigrant community. The 2016-17 M1 studio *Radical Campus* (ARCH

7050/7060/L.Landrum), required research and meetings in other disciplinary areas of students' interest (including Science, Music and Agriculture) and involved design reviews with members of the UM Planning Office. The 2016-17 ED4 studio led by E.Epp (EVAR 4004/4010) involved members of the Faculty of Law, Native Studies and the Indigenous Students Centre (Migizii Agamik) in a project to design the new Centre for Truth and Reconciliation. Collaborations in 2017-18 include: the ED4 studio (EVAR 4004/10) team-taught by professors of Architecture and City Planning (Rueda & Milgrom); the M1 studio (ARCH 7050/60/Landrum) involving professors and technicians from UM's Theatre Program; and a winter term graduate Elective on energy analysis of buildings, offered in collaboration with Mechanical Engineering (Minuk/DeGagne & Labossiere). Some cross-disciplinary exchanges grow into long-term research collaborations.

Students and Internal Academic Governance: The program cultivates leadership potential in students by requiring their active participation in governance. Students are always involved in strategizing initiatives and evaluating the program. The Department of Architecture Council Bylaws include provisions for four voting student positions, representing M1, M2, AMP, & ED-Arch Option. Most ad-hoc committees, include student representation, especially those dedicated to refining curriculum areas, such as the comprehensive design studios or sustainability. There is a standing item on the Department Council agenda for student reports, which students take seriously. Students participate in Departmental retreats, exhibitions, social events, and orientations. Faculty of Architecture Council also requires participation and reporting from each student president of their respective graduate association, as well as the senior stick (undergraduate). The senior stick (representing all ED students) plays an especially important role by bringing the student perspective to EDPAC and other Faculty committees. The student groups themselves have sophisticated internal governance structures and leadership roles that extend beyond the school. For instance, in 2016-2017 the student representative on the Manitoba Association of Architects (MAA) Council organized a student Meet & Greet event with professionals, which was attended by over 70 people. Student leaders also facilitated the CACB student self-assessment. (For more on student societies see 3.6.6). Each year the Department of Architecture awards the Alpha Rho Chi Medal in recognition of a student who has shown the ability for leadership, performed willing service for his/her school and Department, and gives promise of real professional merit through his/her attitude and personality. Some of these individuals have gone on the serve as intern representatives on the MAA Council and take leadership roles in the community. At least two recent graduates have served nationally as RAIC intern representatives.

Faculty and External Academic Governance: The architecture program is part of the Canadian Council of University Schools of Architecture (CCUSA). Just as the University of Manitoba confers with the U15, our program converses and collaborates with the eleven other architecture schools across Canada. Meetings of program heads occur at least twice a year. Agenda items vary from special initiatives, to regular reporting from representatives on national and international boards (RAIC, ACSA, CALA), to discussion of issues of curriculum, governance, accreditation and professional relations. In 2017, two academic members representing CCUSA, including one from our program (L.Landrum), were elected to join a national task force with CALA (the Canadian Architectural Licensing Authorities) on the Future of Architecture.

As members of a research university, architecture faculty members benefit from and contribute to numerous national and global associations as peer reviewers, board members and/or conference participants. Faculty currently have active affiliations with the Association of Collegiate Schools of Architecture; the Society of Architectural Historians; International Society for Philosophy of Architecture, the Architectural Humanities Research Association; and Public Interest Design. Faculty also maintain research relations with other institutions, including the Bauhaus University Weimar (Stern/ Visiting Fellow & research toward Ph.D.); Vrije University, Brussels (Coar/research toward Ph.D.); the Universidad Piloto de Colombia (Rueda/associate researcher); and McGill University (Ph.D. advising/Landrum). See full-time faculty resumes for further academic affiliations and service (section 4.4).

B. Architecture Education and the Students

The program must demonstrate that it provides support and encouragement for students to achieve their full potential during their school years and later in the profession, and that it provides an interpersonal milieu that embraces cultural differences. Given its particular mission, the APR may cover such issues as: how students

participate in establishing their individual and collective learning agendas; how they are encouraged to cooperate with, assist, share decision-making with, and respect students who may be different from themselves; their access to the critical information needed to shape their futures; their exposure to the national and international context of practice and the work of the allied design disciplines; and how students' diversity, distinctiveness, self-worth, and dignity are nurtured in the academic environment.

Student experience is central to the architecture program mission and tenets. The primary purpose is to foster students' intellectual, artistic, technical and professional development. The summary below outlines how the program supports students by providing opportunities for personal and academic enrichment.

Cultural Diversity: Both the curriculum and the composition of the student body teach cultural diversity. In the M.Arch program, international students typically comprise 10-20% of the group. Students come from nearly all parts of the world, including various regions of China, Iran, Pakistan, India, Bangladesh, Vietnam, Russia, Belarus, the Ukraine, and the United States. Exchange students from the Technical University of Munich (TUM) complement the international student cohort. In 2016-17 there were three TUM students in the ED4-Arch Option. The majority of students from Manitoba and other parts of Canada are themselves diverse, both culturally and by their academic background. The AMP program, which admits students with various non-architectural degrees, further helps expose students in the program to different knowledge bases, points of view and modes of research. Cooperation among students often happens naturally in the close and collegial atmosphere of studio. Teamwork is fostered through collaborative discussions, group research, group assignments and design-build projects. Student societies organize social mixers between levels and disciplines, as well as between new and returning students. The Student Architectural Society (SAS) has cross-cultural representatives specifically to encourage exchange and welcome newcomers. The student societies have multiple sub-committees, with teams of diverse students working together to foster a convivial and creative atmosphere. The program cultivates both individual and collective self-worth. The Department and Faculty of Architecture support equity and diversity in its academic programs, and are committed to upholding a respectful work and learning environment consistent with University policies. http://umanitoba.ca/faculties/architecture/facstaff/academic_handbook/equity.html

Learning Culture and Social Life: Despite individual ambitions to excel, students show a high level of mutual respect and support. The program facilitates and encourages activities that cultivate pride and a shared sense of success. Many initiatives are student-led and facilitated. The following are note-worthy:

- Year-End Exhibition – This faculty-wide event at the end of term each April is an excellent forum for the open display of the students' best work. Hundreds of visitors – students, family, alumni, professionals, and community members – roam through studios and public spaces, all transformed into open galleries. This event enables students to learn from each other, to see all the work in the faculty, and to meet new people interested in the success of the school. The event garners media attention in and beyond the University. http://umanitoba.ca/faculties/architecture/events/2017-2018events/yearendexhibition2015_2016.html
- Ditchball – This much-loved 40-year-old legacy involves architecture students decked in protective sports gear striving to raise a heavy over-sized sphere to an elevated goalie while slipping, sliding and colliding with opponents and teammates in a frozen fabricated ditch. This is a unique kind of hands-on experiential learning, which contributes to a positive interpersonal milieu and team spirit in the faculty. For more info, images and videos, see here: http://umanitoba.ca/faculties/architecture/ditchball.html.
- Student Socials and Fundraisers – Year End Exhibition After Party; Buddy Barbeque (intended to mix and mentor ED2 and ED3 students); Halloween social; the gingerbread contest; bake sales; a Christmas formal; a graduation party; a graffiti social; film events; the annual design and distribution of Faculty goods (T-shirts, hoodies, mugs, bags, etc.); and more (see section 3.6.6 on Student Societies);
- *Warehouse Journal* – Now in its 26th year, this student-edited annual journal is devoted to cultivating design discourse. The journal reflects, engages and extends the work of the Faculty of Architecture by publishing a broad selection of student projects, together with short contributions by faculty. The *Warehouse Journal* is a non-profit student effort that relies on the support and financial patronage of industry, academics, professionals, faculty, and students. Each year prospective student editors make a detailed thematic proposal, which is vetted by students. For several years in a row, the journal has won national recognition prizes for book design. More here: http://www.warehousejournal.org/

- *ArchFolio* – A newly launched journal of the Department of Architecture produced with student support, featuring highlights of student work from design studios and courses. It is now in its second year of production: http://umanitoba.ca/faculties/architecture/programs/architecture/DoAPress.html
- Cultural Events: Students gain exposure to national and international contexts of practice and allied design disciplines through the robust cultural events series. In 2016-17 there were over 35 speakers, including architects, teachers, authors and researchers. Distinguished guests included Billie Tsien, John Patkau, Brigitte Shim, David Leatherbarrow, and John Ochsendorf, as well as distinguished ED graduates as part of our ED 50th Anniversary Celebration (see section 3.6.8 for details). Five student reps (one from each program) participate in the Cultural Events committee and assist with the organization and promotion. Informal interactions between guests and students, round-table discussions and/or design reviews are arranged wherever possible. In addition to evening speakers, programming includes lunchtime Food for Thought presentations by regional researchers, industry partners, architects, interns and recent graduates. Students are always inspired by the activities of recent graduates, whose entrepreneurial spirit and civic involvement inspire their pedagogy and open possibilities for various careers. There is a vital sense of energy among our alumni that is circulating back to the next cycle of graduates. All of these events inspire high academic accomplishments and a positive social spirit.

Student Choice and Learning Agenda: The architecture program cultivates student participation in establishing their own learning agenda by providing a degree of choice in studio topics and graduate topics courses. At the start of each year, following presentations by instructors, students indicate their ranked preferences, with most students getting their first or second choice. Within each course, students are afforded many opportunities to choose design and research emphases. Self-direction is increasingly expected in the M2 Design Thesis year. Students work independently and self-critically, while still operating within the parameters of a professionally accredited curriculum and within over-arching schedules and themes. A basic premise of the program is that enabling choice helps make students invested in their own education and responsible for developing and pursuing individual interests.

Students gain assistance in establishing learning agendas over the course of their studies from instructors, the Head, Associate Head and Thesis Coordinator, as well as skilled and patient student advisors in the main office, including a dedicated undergraduate and graduate student advisor, and a student services administrator. These staff members help foster academic success through personal counseling and practical advice. They help students navigate options, to become aware of their responsibilities and opportunities, and to find the resources that guide personal development and informed career choices. They also connect students with other essential resources throughout the University (see student support services, section 3.6.7). Student judgment is further exercised in the context of Department and Faculty meetings in which students participate and represent their peers. Meeting discussions model collaborative deliberation and decision-making. The many active student societies similarly cultivate respect for one another's views, and provide opportunities for leadership, consensus-building, and constructive criticism.

Ditch Ball.

Year End Exhibition – Design Thesis Room.

MAA Meet & Greet with Students.

C. Architecture Education and Registration

The program must demonstrate that it provides students with a sound preparation for the transition to professional life, including internship and licensure. Given its particular mission, the APR may cover such issues as: the program's relationship with the provincial architectural licensing association or institute, the exposure of students to internship requirements and continuing education beyond graduation, students' understanding of their responsibility for professional conduct, and the proportion of alumni who have sought and achieved licensure since the previous visit.

The Department of Architecture provides a fully accredited architecture program for students intending to become registered architects. Faculty members are committed to educating students about the registration process and professional responsibilities. We are encouraged that many graduates enter the internship process soon after completing their degree and follow-through with licensing exams within four to eight years. To assist students in transitioning to professional life, the Faculty of Architecture is in the process of implementing a new Co-operative Education/Integrated Work Program (Coop/I). This program is being designed to complement and enrich academic programs with work experience. The work terms will provide students with practical experience, assistance in financing their education, and guidance for future career specialization. Faculty Council agreed in principle to this initiative at a special meeting on April 25th, 2017. Over the summer of 2017, the Faculty hired a Co-op Program Assistant/Coordinator, and the Dean and Associate Deans crafted a program description and course proposals. Prof. Lisa Landrum, a registered architect and Associate Dean Research, will serve as the Co-op program's academic liaison. On August 29, 2017, Faculty Council approved the detailed Coop proposal, including calendar descriptions for new undergraduate courses for the related work term reports. Pending Senate approval, these Co-op work term courses will available to students in summer 2018. Working with the Partners Program in this pilot year, the Faculty intends to have about 12 students in work placements by summer 2018. Procedural details are being developed and outreach sessions with local partner firms are being planned. One ED4-Arch Option student is already on a special Co-op placement (since January 2017), working as a Facility Planner for the Government of Nunavut in Iqaluit until December 2017. Her story is featured on *UMToday*: http://news.umanitoba.ca/appreciating-the-north/. Together with this new Faculty-wide Co-op program, the Department of Architecture assists students in transitioning to professional life in several other ways.

Coursework on Professional Life, Internship and Licensing: Graduate level courses, especially Professional Practice (ARCH 7040) and Legal Aspects in Architecture (ARCH 7350) equip students with a broad understanding of professional principles, the legalities of practice and its ethical contexts. The emphasis is on local practice, but assignments and discussions make connections to national and international practice. ARCH 7040 is taught by a practicing architect and former president of the MAA. ARCH 7350 is co-taught by a practicing lawyer with expertise in construction litigation, and a political philosopher who is also a past director of the University's Centre for Professional and Applied Ethics. As part of the Professional Practice course, students interact with numerous professionals. For a required interview assignment, students individually visit a firm with their portfolio to discuss their work and inquire about internships. In 2016-17, twelve local firms hosted students for interviews. In this course students also attend an information session at the MAA offices, led by the MAA Executive Director. The session covers regulatory issues, the internship process, and the path to licensure. Students also meet with the directors of the Winnipeg Architecture Foundation and Storefront Manitoba to learn about architectural advocacy and public responsibility. Further details on these courses are provided in sections 3.12 and 4.3.

Program Events: In addition to activities in dedicated courses, students have many opportunities to engage recent graduates, interns and registered architects in conversations about the internship and registration processes. Such conversations happen during and in between design reviews, especially when professionals serve as guest critics; at public events and exhibitions; and during cultural events lectures, when students and faculty learn from guest practitioners from across Canada and the world. Student groups and the Faculty Partners Program also organize events to cultivate conversation between students and registered professionals. Student members of UMAAS (the University of Manitoba Association of

Architecture Students), annually organize the student-MAA Meet & Greet. This year, under the leadership of MAA student representative Aaron Pollock, at least 40 students and 30 local professionals sat across from each another at a long table to chat about career ambitions and professional expectations. To mix things up, individuals on each side of this long table would periodically shift, enabling many different personal encounters. The photogenic event held at the newly restored Forks Marketplace, was featured in *UMToday*: http://news.umanitoba.ca/maa-meet-and-greet/

Our program has a strong ratio of registered architects as full-time academics. Six of the nine full-time faculty members in the Department of Architecture are professionally registered architects in the province of Manitoba (Enns, L.Landrum, Minuk and Stern) and/or another country (Rueda in Colombia; Aquino in Brazil; Landrum and Stern in New York State). Those registered in Manitoba and New York completed an internship process, passed licensing exams, and fulfill continuing education requirements. Minuk and Enns are actively involved in practice (as are Rueda and Aquino); Enns and Landrum serve as MAA mentors to local interns seeking licensure. Six sessionals are registered, and others have started internship processes. Faculty members are current in matters of registration and licensure. L.Landrum is presently serving on a national CCUSA-CALA task force on the Future of Architecture. This engagement and currency fosters respect for professional responsibilities and interest in creative and critical practices. (For further information on faculty currency in practice, see section 3.6.4).

The Program and the Provincial Licensing Association: Formal relationships between the program and the MAA are maintained on many levels. Four faculty members are MAA members (Enns, L.Landrum, Minuk and Stern), who usually attend the MAA annual general meeting. The program Head is typically invited to the AGM as a guest. One faculty (Stern) is a member of the MAA Council. The Head (Rueda) and Associate Head (L.Landrum) are the Department's elected representatives on the MAA-DoA Strategic Committee. A student representative, elected annually by and from students in the Department of Architecture, also serves on MAA Council. The MAA and its members contribute to the architecture program in many other ways: through generous scholarships, lecture funds, donations to the library, and participation on committees. For instance, in Fall 2016 the University of Manitoba Provost invited the MAA President to serve on the Presidential Advisory Committee to appoint a new Dean in the Faculty of Architecture. The MAA and DoA also collaborate on cultural events. In Winter 2017, the MAA and DoA worked together to mount an exhibition of the Manitoba Premier's Design Award winners and entrants panels in the Faculty's Russell Building. With MAA support, we are currently collaborating to bring a distinguished architect to Winnipeg for a lecture. MAA members engage faculty and students via the Partners Program and by attending faculty-supported lectures, exhibitions, especially the year-end exhibition, and the Meet and Greet events with students. MAA members participate in studio reviews, and as guest consultants and lecturers in studio and technology courses. (For the full list of participants, see section 3.6.8d).

Licensed Alumni: We have a strong rate of graduation to licensure. Of the 26 newly registered architects in the province of Manitoba in 2017, 24 are graduates of our program (22 M.Arch and ED grads, plus 2 B.Env.D.-Arch Option grads who earned their M.Arch elsewhere). Of these 24 new architects, only three individuals took more than ten years to complete their licensing exams after graduation. The remaining took four to eight years (seven in 4 years; four in 5 years; four in 6 years, three in 7 years, and 3 in eight years). In 2016, all 18 newly registered architects were graduates of our program, with the average time to registration being just four to five years.

While we believe our program plays some role in fostering this professional success, we attribute the good registration rate to the strong design skills and commitment of our graduates, the support of regional architectural firms in the internship process, and the advocacy of the provincial regulatory body, the MAA. Since 2008, the MAA annually administers the Examination for Architects in Canada (ExAC). The two-day exam with four sections is often held in our school. The MAA encourages interns in the process and provides study materials for the exams. The MAA celebrates newly registered members with a luncheon and proud announcement of recognition in the Winnipeg Free Press, publicly acknowledging their achievement and noting their availability to serve Manitobans.

The results of our recent alumni survey further prove that a strong proportion of graduates are becoming licensed. Of the 151 respondents, 48% indicated they are registered architects; 25% are interns; and 10% are working in the field with the intention of becoming an intern. It other words, 83% of graduates responding to the survey are either already licensed or on the path to licensure. Respondents also indicated that they found work in the field quickly: 72% within 3 months of graduating, an additional 20% within 4-12 months. Put differently, 92% of graduates find work in their field of choice within a year.

Evidence of successful transition to professional practice is found as well in the awards and recognition of new firms established by our graduates. Recent press includes:

2017 RAIC Emerging Architectural Practice Award: **D'Arcy Jones** (B.Env.D. 1995; M.Arch. 1999), D'Arcy Jones Architecture (DJA), est. 2005, Vancouver – http://news.umanitoba.ca/raic-2017-award/

2017 Canadian Architect Emerging Talent – **1x1 Architecture**, est. 2010, Winnipeg – with seven alumni having graduated with M.Arch degrees from 1998 to 2019 (expected).

1x1 Architecture – https://www.canadianarchitect.com/features/emerging-talent-1x1-architecture/ – Left to Right: **Glen Gross** (B.Env.S. 1993; M.Arch 1998; MAA Architect 2005; SAA 2015); **Travis Cooke** (B.Env.D. 1995; M.Arch 2002; MAA Architect 2009; SAA 2015), **Markian Yereniuk** (B.Env.D. 1996; M.Arch 1999; MAA Architect 2008; SAA 2015); **Jason Kun** (B.Env.S. 1994; M.Arch 2004; MAA Architect 2010), **Jordan Pauls** (B.Env.D. 2011; M.Arch 2013; MAA Intern –*exams successfully completed, pending submission of final experience hours*); **Kailey Kroeker** (B.Env.D 2012; M.Arch 2015; MAA Intern –*registered to write exams Nov 2017*), **Mike Karakas** (Senior Architectural Technologist, Red River College), **Jason Wall** (B.Env.D. 2017; current M1 student).

2016 – Canadian Architect Emerging Talent: **Work/Shop** —> est. 2013, Winnipeg – with 3 members having graduated between 2006 and 2017: Left to Right:
Michael Butterworth (B.Env.D. 2013; M.Arch 2017);
Liane Veness (B.Env.D. 2001; M.Arch 2006; MAA Architect 2008),
Kyle Wires-Munro (B.Env.D. 2010; M.Arch 2014, MAA Intern - *taking exams within the year*); http://news.umanitoba.ca/emerging-talents/ ;
https://www.canadianarchitect.com/features/work-shop/

2016 – Canadian Architect Emerging Talent: **Marianne Amodio** (M.Arch 2000) **Architecture Studio**, est.2010, Vancouver
https://www.canadianarchitect.com/features/marianne-amodio-architecture-studio/

2016 – Canadian Architect Emerging Talent: **2Architecture**, est. 2013, Winnipeg – with 5 members having graduated with M.Arch degrees between 2008 and 2017.

2Architecture – Left to Right: **Chris Burke** (B.Env.D. 2012; M.Arch 2014; MAA Intern), **Julie Kusyk** (B.Env.D. 2012; M.Arch 2014; MAA Intern), **Evan Schellenberg** (B.Env.D. 2014; M.Arch 2017), **Tiffany Leong** (B.Env.D. 2011; M.Arch 2013; MAA Intern), **Chris Gilmour** (B.Env.D. 2008; M.Arch 2010; MAA Architect 2013), **Andre Silva** (B.Env.D. 2008; M.Arch 2010; MAA Architect 2017). Photo by **Jacqueline Young** (B.Env.D.-Arch Option, 2012). https://www.canadianarchitect.com/features/2-architecture/

D. Architecture Education and the Profession

> *The program must demonstrate how it prepares students to practice and assume new roles within a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base. Given its particular mission, the APR may cover such issues as: the program's engagement of the professional community in the life of the school; how students are encouraged to advance their knowledge of the art and science of architecture through a lifetime of practice and research; how students develop an appreciation of the diverse and collaborative roles assumed by architects in practice; how students develop an understanding of and respect for the roles and responsibilities of the associated disciplines; how students learn to reconcile the conflicts between architects' obligations to their clients, the public, and the demands of the creative enterprise; and how students acquire the ethics for upholding the integrity of the profession.*

An important tenet of the Department of Architecture is to advance professional perspectives and expertise by engaging local and international practitioners, community groups and industry partners. Professional knowledge and preparedness are fostered via coursework and study of exemplary architects, as well as through numerous program-supported opportunities for students to meaningfully engage with a variety of individuals having experience and expertise in architectural design and its many related fields. Via their own professional service, practice and research, faculty members foster an ethos of professional integrity and creativity in the school.

Professional roles and responsibilities: The Professional Practice and Legal Aspects courses (ARCH 7040 and 7350) cultivate professional knowledge and build student awareness of their obligations to clients and the public. These M1 courses are taught by professionals and involve several practicing architects via site visits, special lectures, and an interview assignment, for which students go to partner firms. There is a dedicated ethical component to the Legal Aspects course, taught by a professor of philosophy and nationally recognized spokesperson on issues of professional ethics. This part of the course focuses on the ethical implications of architectural decisions concerning the built environment. All courses, both graduate and undergraduate, develop student understanding and ability in the area of professional responsibility. Studios regularly involve complex sites and circumstances requiring students to reconcile their own creative ambitions for specific communities and limitations. Community guests and external professionals are frequently involved as guest critics and discussants. Students also develop professional leadership skills by assuming roles of responsibility on various committees and student societies. There is an elected student representative on the MAA Council and CASA (Canadian Architecture Students Association), and students participate on nearly all Departmental and Faculty committees, some of which involve communications with outside professionals.

Student engagement with the professional community. In 2016-17, over 100 individuals with significant experience and expertise in architectural design and related fields shared their knowledge with students in the context of required coursework as design critics, lecturers and consultants. These professionals engaging with students included over 30 local architects and interns; over 20 architects from elsewhere, some hosting students at their firms or project sites during field trips, including Carol Philips and Dairmund Nash (with Moriyama & Teshima), and Ron Keenberg. Guests also included consulting engineers (including John Wells of Crosier Kilgour); industry professionals (including Jeffrey Dolovich and Keith Gillis, of Gillis Quarries), interdisciplinary researchers and academics (ranging from David Leatherbarrow to Howard Davies), and influential members of Winnipeg's arts, design and planning community, including Brent Bellamy (creative director at NumberTen Architects), Alexander Mickelthwate (Music Director of the Winnipeg Symphony Orchestra), and Angela Mathieson of Centre Venture. (The full list of guests is provided below, 3.6.8d).

Via the Faculty's Cultural Events series, students attend lectures, learn about the diverse and collaborative roles assumed by architects, and engage with visiting guests in questions and conversations. In 2016-17, there were at least 35 visiting speakers, including the distinguished architect Billie Tsien, and accomplished engineer-researcher-scholar John Ochsendorf. Special discussion sessions were held for architecture

graduate students with invited speakers: John Patkau, Brigitte Shim, and David Leatherbarrow. David also availed himself to participate in one-on-one reviews of current thesis student work.

The student-organized MAA Meet & Greet was mentioned above. With support of the Faculty Partners Program, students also participate in the Meet, Mingle and Mentor event. In November 2016, this event was held at the Manitoba Hydro building (designed by KPMB). Each April at the end of term, the Partners Program helps organize an RAIC information session with the RAIC regional representative. Students have many opportunities to mingle with recent alumni, interns and architects at other events in the community, including the Design Festival and the popular 10x20x20 Pecha Kucha event organized by MAA interns. Students frequently gain employment with architecture offices over the summer and/or in gap years between undergraduate and graduate studies. The new Coop Program, currently in development, will further enhance student engagement with the professional community.

Professional partners are also involved in the curriculum. Recent notable partnerships include:

- ***Rainbow Gardens***, M1 Studio Fall 2016 (ARCH 7050/Coar) and related Elective Summer 2017 (Veness). In addition to interdisciplinary academic contributors from Engineering and Landscape Architecture, this studio involved industry support from the Canadian Institute of Steel Construction (CISC), Sperling Industries, Shopost Steel, Westman Steel, Barkman Concrete, the Friends of Engineering, the Centre for Engineering Professional Practice and Engineering Education, the Assiniboine Credit Union, the Home Depot, and FAUM's Partners Program. http://news.umanitoba.ca/rainbow-gardens-supports-immigrant-families/ https://www.winnipegfreepress.com/our-communities/times/Newcomers-enjoy-outdoors-harvest-produce-433176293.html
- Winter 2017 ED3/AMP1 Arch Tech 2 (EVAR 3006/Veness) in conjunction with studio (EVAR 3010/Aquino, Connery, Fuglem, Veness). This design/build project of a Warm Hut Sauna (called ***Carbuncle***) involved collaboration with the International Institute for Sustainable Development (providing resources for the integrated bio fuel burning stove); and the Forks Market, which organized the international design competition for which Carbuncle was built. http://news.umanitoba.ca/carbuncle-warming-hut/ http://www.metronews.ca/news/winnipeg/2016/11/08/designs-for-2017-winnipeg-warming-huts-unveiled.html www.winnipegfreepress.com/local/skating-on-the-edge-241934871.html
- Advanced Technical Topics, ***Hands on Masonry*** (ARCH 7010/T.Landrum). Now in its fourth year, this course works with the Manitoba Masonry Institute, Gilles Quarries, and masons at Red River College. Students build arches and inspect a mock-up rain-screen wall with a building envelope engineer. The work is featured in the MMI publication, *The Troweller* (Summer 2015) > http://bit.ly/2roZeiB
- For studio field trips (at all levels) students often visit architectural firms and building sites to meet professionals in their places of work and creation (see the studio field trip list, section 3.6.5)

Faculty Collaborations: Individual faculty members involve professional partners via research, pedagogy and professional service, including the Canadian Institute of Steel Construction (Coar, with Dr. Dimos Polyzois, Eng); and CISCO Systems Canada (Enns).

Partners Program – http://umanitoba.ca/faculties/architecture/partnersprogram/mission_mandate.html
The Faculty's Partners Program is vitally important to professional outreach and engagement events. The Partners Program mandate is to provide a formal funding and communication vehicle between the Faculty of Architecture and constituents served by the Faculty (industry, design professionals, students and the community at large) so that the direction taken by the Faculty serves the long-term interests of all constituents. The Partners Program communicates the content of the curriculum to professionals; provides assistance with relevant, real community based projects; and develops cooperative education and design competition opportunities. The Partners Program helps find opportunities where faculty resources and activities can be effective in the public and private sectors, and features examples of professional, academic and research work in the press and other media. The annual *Network* Journal is the key communication tool between the Faculty and the professional community. It is available in print and digitally: http://umanitoba.ca/faculties/architecture/publication/2015-2016/index.html

Partners Program, *Network* journal. Online Edition 2016. http://umanitoba.ca/faculties/architecture/publication/2015-2016/index.html

E. Architecture Education and Society

> *The program must demonstrate that it equips students with an informed understanding of social and environmental problems and that it also develops their capacity to help address these problems with sound architecture and urban design decisions. Given its particular mission, the APR may cover such issues as: how students gain an informed understanding of architecture as a social art, including the complex processes carried out by the multiple stakeholders who shape built environments; the emphasis placed on generating the knowledge that can mitigate social and environmental problems; how students gain an understanding of the ethical implications of built environment decisions; and how a climate of civic engagement is nurtured, including a commitment to professional and public service.*

A key tenet of the Department of Architecture is to advance societal well-being by preparing students to take leadership roles in the community. Developing critical understanding of social and environmental conditions, and designing responsibly in relation to complex circumstances are learning objectives of every part of the curriculum – in design studios, as well as in technology, history and theory, and professional practice courses. Students also learn about architecture's multiple stakeholders through direct interactions with professionals and community members at design events and outreach functions. Faculty members reinforce a commitment to professional and public service via the breadth, depth and relevance of their research. Debate sparked in design reviews gives students an opportunity to take a stand on ethical issues. Guest lectures, such as Gregory Henriquez (2014), Teddy Cruz (2015), and Diane Lewis (2016) invigorate the entire faculty on issues of society and architecture.

Integrated Curriculum: Architecture is an inherently comprehensive and multi-faceted discipline. All design studios are framed in ways that aim to synthesize, balance and explore vital tensions between technological constructs, cultural practices, experiential qualities and worldly phenomena. Buildings are studied in relation to their larger social and environmental contexts. Studios encourage students to rethink, reshape and renew social institutions. The goal is to help future architects make responsible design decisions for local situations in a dynamically interconnected world. Although good architecture requires individual leadership, vision and conviction, students are taught to appreciate the profession as a collective endeavor, with multiple contending contributors. Group assignments and teamwork foster this sense of mutual and negotiated understanding. An example is the *Rainbow Garden* M1 studio, which worked in close collaboration with members of the Rainbow Gardens Immigrant Community Farming Coop to design and build small structures for their vital urban garden.

Winnipeg is the site for many design studio projects. The city itself poses profound social challenges and opportunities. Issues range from poverty and racial injustice to fragmentary suburban sprawl and lack of affordable housing. Studio topics often involve issues of spatial justice, urban infrastructure, industrial ruins, riverfront revitalization, infill housing, mixed-use residential, adaptive reuse, responsible development of the downtown core, and community based design – both urban and rural. Environmentally, the region demands attention to soil conditions, flooding, and extreme weather changes.

Field Studies: Students gain an understanding of the complex social and environmental issues related to architecture, in part, by participating in a wide range of local and international field trips integrated into the undergraduate and graduate design studios. Field trip locations for the past three years have included international destinations (Mexico City, Iceland, Copenhagen, Oslo, Stockholm, the Netherlands, Berlin, Athens and other regions of Greece); various urban centers and rural locations in the United States (Los Angeles, New York City, Chicago, Iowa, Illinois, Nebraska, South and North Dakota, New Orleans, Arizona, Utah, and New Mexico); major cities across Canada (Montreal, Ottawa, Toronto, and Vancouver); remote communities in northern Manitoba (Lac Brochet, Tadoule Lake, Gillam); as well as rural and regional sites in southern Manitoba and northern Ontario (Clearwater, the Assiniboine River Basin, Keewatin, and Hay Island in Lake of the Woods). Field trip destinations are selected for their relevance to the specific cultural, geographic and/or socio-political questions orienting design studios. These field studies enlarge the students' awareness of the world. Global lessons are often brought to bear on local conditions. Field trips to regional sites in and around Winnipeg are treated with equal importance. Students are encouraged to appreciate Winnipeg's unique climate, geography and cultural heritage, and to take seriously the considerable challenges and opportunities of the city.

Civic Engagement: Student designs often tackle current social and civic issues. Each year student work, especially thesis work, becomes part of a public conversation about the vision for developing certain buildings and districts of the city. For instance, in 2017 three thesis students undertook projects to redevelop a controversial site in Winnipeg's city centre, adapting a former vacated police station to a more positive public institution and restoring the site to the public domain. Another project received press for adapting the Hudson Bay Company store, a complicated symbol of both colonialism and civic pride. The student Aaron Pollock participated in a FRONTlines event, hosted by StorefrontMB, to debate the future of this huge edifice. Other panellists included Lloyd Axworthy, Angela Mathieson, Doug Corbett (Corbett Architecture), and Dudley Thompson (Prairie Architects). The public discussion was featured in the Winnipeg Free Press and CJOB radio. All thesis projects are featured on the Department website.
http://www.winnipegfreepress.com/local/shopping-for-a-new-day-at-downtown-bay-428938303.html
http://umanitoba.ca/faculties/architecture/programs/architecture/2016-2017designthesissummarypage.html

Civic engagement is also fostered through participation in Winnipeg's design events, many of which have been created and sustained by entrepreneurial graduates, students, sessionals and faculty. Events facilitating critical discussions about the built environment and architecture as a social art include:

- **10x20x20** – a Pecha Kucha style presentation of ten presenters, having 20 slides and 20 seconds for each slide to elucidate their creative work. This popular event has thrived since its inauguration in 2008. It is held twice a year, and is organized by the MAA student rep. & interns. http://10x20x20.blogspot.ca/
- **RAW/Almond** – an architecture gallery founded by alumnus Joe Kalturnyk (M.Arch 2009) in Winnipeg's Exchange District, now an ephemeral winter dining pavilion in collaboration with chef Mandel Hitzer. http://www.raw-almond.com/ ; featured on Travel Manitoba https://www.travelmanitoba.com/
- **Warming Hut** – a now famous international design competition for skating shelters on the frozen Red River, launched by Peter Hargraves (B.Env.D.-Arch Option 1996). http://www.warminghuts.com/; featured in the New York Times https://www.nytimes.com/2014/12/21/travel/in-winnipeg-a-skating-rink-that-doubles-as-a-sculpture-park.html?_r=0
- **Storefront Manitoba** – dedicated to advancing public understanding of design and the built environment via public discourse, exhibitions and special events – founded by alumnus and award-winning architect David Penner (M.Arch 1985), with many graduates contributing to its success http://storefrontmb.ca/
- **FrontLines** – pubic debates organized by StorefrontMB, regularly involving students and faculty as presenters, panelists, sometimes co-organizers, and audience participants.
- **Winnipeg Design Festival** – this annual week-long event is typically organized by alumni of our Faculty. It involves public presentations, exhibitions, installations, debates, and community projects like *Chair your Idea* (2015), led by graduate Caroline Inglis (M.Arch 2015) http://www.winnipegdesignfestival.net/

- **Architecture + Design Film Festival** – now in its seventh year, this event features about 30 films from a dozen countries – co-curated by sessional instructor T.Landrum, together with Susan Algie of the Winnipeg Architecture Foundation http://adff.ca/ | http://www.winnipegarchitecture.ca/
- **Archi-Shorts Film Contest** – Led by T.Landrum, this contests attracts submissions from all over the world, including our students, some of whom have been award winners. http://adff.ca/archishorts/

Civic engagement is further cultivated with the arts communities through faculty participation in local organizations, including the Winnipeg Art Gallery; the New Music Festival; Thin Air – Winnipeg's International Literary Festival; Send + Receive Festival of Sound; the Manitoba Writers' Guild; Speaking Crow Plug In Institute of Contemporary Art; and the Canadian Museum for Human Rights. Relations are also fostered via faculty members and sessionals earning arts funding from the Canada Council of the Arts (Aquino; Bird; Minuk); the Manitoba Arts Council (Aquino; Bird); and the Winnipeg Arts Council (Bird).

Faculty members are active as editors, reviewers, advisors and board members with organizations dedicated to social arts (see Faculty resumes for full details):

- **arts and humanities associations** – Border Crossings (Aquino/Minuk); SITE Magazine (Aquino); RAW Gallery (Minuk); Architectural Humanities Research Association (L.Landrum), Society of Architectural Historians (L.Landrum), Classical Association of Canada (L.Landrum), International Society for the Philosophy of Architecture (L.Landrum), Architecture Research Quarterly Journal (L.Landrum), Journal of Architectural Education (L.Landrum); Architecture Fringe Festival (Epp); Winnipeg Art Gallery Building Committee and Board of Directors (Enns); Groundswell (Enns); Festival of Moving Image WNDX (Enns); MOSAIC (Aquino/Enns); Plug In Institute of Contemporary Art (Aquino, Coar); Art City (Coar); and Mentoring Artists for Women's Art (Fuglem);
- **social and cultural collectives** – Aboriginal Curatorial Collective (Aquino); Association for non-profit architectural fieldwork (Aquino); Harvest Moon (Coar); Interdisciplinary Indigenous Design Centre (Stern); and the Council for Aboriginal Educators of Manitoba (Stern).
- **urban and environmental design forums** – Urban Design Advisory Committee, City of Winnipeg (Stern); Places Journal (Stern); Public Interest Design (Coar); Social Economic Environmental Design (SEED); and Residents of the Exchange District (Landrum).
- **technologies, materials and industry partners** – Intelligent Communities (Enns); CISCO Systems Canada (Enns); Thematic Network in Digital and Media Arts (Enns); International Association of Shell and Spatial Structures (Coar); Building Material Reuse Association (Coar); and the Canadian Institute of Steel Construction (Coar).

3.2 Program Self-Assessment

The program must provide an assessment of the degree to which it is fulfilling its mission and achieving its strategic plan. The CACB encourages absolute candor in conducting and reporting the self-assessment so that, if well done, it will largely anticipate the VTR.

The APR must include:

- *A description of the program's self-assessment process;*
- *Faculty, student, and alumni assessments of the program's overall curriculum and learning context, as outlined in the CACB Perspectives. Feedback may be obtained through such techniques as surveys and focus groups, but individual course evaluations are not deemed sufficient to provide insight into the program's substantive focus and pedagogy.*

3.2.1 Faculty Assessment

a) Description of the Program's Self-Assessment Process

The architecture program has several internal mechanisms of self-assessment at the Department, Faculty, and University levels.

Within the **Department of Architecture**, the main forum for critical reflection and strategic action is Department of Architecture Council. Department Council is open to all academic staff and student representatives within the Department and is governed by Bylaws. Department Council meets at least once a term (typically twice), and is supplemented by focused meetings. Department Council involves regular reporting from the Department Head, plus individuals and committee representatives having responsibilities for various curricular, research, and administrative matters. Student representatives also provide reports. Each report and business item is accompanied by fulsome discussion oriented toward improving program effectiveness and fostering teaching and research excellence according to the Department's mission, tenets and strategic goals. Regular Departmental committees (such as the Thesis Committee) and ad-hoc committees (such as the Comprehensive Design and Sustainability Committees, formed in Spring 2015) meet separately to assess program areas in detail and then advise Department Council on curricular enhancements.

In addition to meetings of Department Council and committees, all full-time academic staff members convene for a retreat each spring. During these day-long meetings, often held in an off-campus setting, colleagues reflect on accomplishments and concerns of the past academic year and brainstorm on ways to strengthen the program and/or launch new initiatives in the year to come. Action items arising from such discussions are brought forward to a subsequent Department Council meeting for minuted business.

The recent Departmental retreat on May 18, 2017 was almost entirely devoted to discussing CACB matters, especially: 1.1 Program Identity; 1.2 Program Action Plan; and 3.1 Program Responses to the CACB Perspectives; and 3.2 Self-Assessment. A report summarizing the agreed upon points was prepared and submitted to Department Council on May 23, 2017. The Faculty Self-Assessment (below) is based on this May 23rd report and the May 18th retreat.

Another mechanism of self-assessment within the Department of Architecture involves the studio portfolio grading sessions. During these sessions studio instructors for each level (ED3, ED4, and M1), together with the Head, collectively review each student's portfolio and agree on a grade based on the instructor's recommendation. The sessions help ensure equitable grade assignments across different studio sections. These collegial meetings are also opportunities to reflect on different pedagogical approaches, to recognize varying degrees of effectiveness, and to consider pedagogical improvements. Additionally, the Department has an open culture of design studio reviews. Instructors serve as critics for each other's studios and offer encouragement and suggestions on design work and methods. Engaging guest critics and external examiners from other architecture schools provide further opportunities to assess the program in relation to observations and expectations of outside professionals and academics.

On a more individual level, self-assessment occurs through annual reporting and performance evaluations, governed by Article 35 of the UMFA Collective Agreement. In the Faculty of Architecture, each full-time academic staff member is required to submit a detailed annual activity report to their Department Head (in February or March), itemizing teaching, research and service duties and accomplishments for that year. These reports serve as the basis for a one-on-one meeting, during which research goals, teaching loads, administrative assignments, and any related concerns may be confidentially discussed.

Faculty of Architecture Council is the venue for self-assessment of the Faculty. Faculty Council meets at least six times a year. At each meeting the Dean, the Chair of each Standing Committee, and other individuals, including student representatives, give reports and invite questions and feedback. Items of business are circulated in advance, discussed and voted upon. Faculty Retreats are important mechanisms for collectively reflecting on Faculty identity, strategizing new initiatives, and discussing inter-Departmental concerns, opportunities and goals. Since September 2015, the Faculty has held three all-day retreats, and two special Faculty meetings dedicated to discussion of single items. Recent significant approved business of Faculty Council, arising in part from productive retreats and special meetings, include approval of the 2015-2020 Faculty of Architecture Strategic Plan; agreement to pursue a Faculty Co-op Program; ratification of revised ED Advisory Program Committee membership; reactivation of the Doctoral Program; enhancements to ED1 and ED2 required courses; and improved ED admissions procedures.

Other self-assessment mechanisms at the Faculty level include Tenure and Promotion, for which the Faculty has its own guidelines, policies, procedures and criteria (see below, 3.6.2); and the Senate-approved Students' Evaluation of Educational Quality (SEEQ), which asks students to evaluate instructors on nine teaching dimensions (learning, enthusiasm, organization, group interaction, individual rapport, breadth, examinations, assignments, and assessments), and overall impressions (see below, section 3.5.2).

The University of Manitoba cultivates self-assessment through extensive consultation when developing strategic plans, including the 2015-20 Strategic Plan; the 2015-20 Strategic Research Plan; and the 2016 Visionary (Re)Generation Master Plan. All consultative processes and findings are posted online.

The **Faculty of Graduate Studies** (FGS) has specific mechanisms for evaluating Graduate Programs within the University, including regular Graduate Program Reviews. These program reviews are intended to assess the overall quality of graduate education and to stimulate strategic planning and actions for future enhancements. Both internal and external assessors conduct the review. The last review of the Master of Architecture Program took place on March 25-26, 2015 (3 weeks after the last CACB visit on Feb. 28-March 4, 2015). The assessment was generally positive overall, but the program evaluation required minor revisions to enhance effectiveness. FGS subsequently made specific recommendations for enhancement. These were addressed, and a follow-up report on the actions taken by the program was submitted on May 8th, 2017. A letter from FGS letter, dated May 25, 2017, confirms receipt of the program's report and indicates that issues have been satisfactorily addressed. This letter is provided below.

UNIVERSITY OF MANITOBA | Graduate Studies

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May 25, 2017

To: Dr. Carlos Rueda, Head, Department of Architecture

From: Dr. Xikui Wang, Associate Dean, Faculty of Graduate Studies

Re: Faculty of Graduate Studies Response to the Department of Architecture Cycle #2 Graduate Program Review Follow-up Report

Xc: Dr. David Collins, Vice-Provost (Integrated Planning and Academic Programs)
Dr. Todd Mondor, Vice-Provost (Graduate Education) and Dean (Graduate Studies)
Dr. Jay Doering, Associate Vice President (Partnerships), Office of the Vice President (Research & International)
Dr. Jonathan Beddoes, Dean, Faculty of Architecture
Dr. Lisa Landrum, Associate Head (Graduate Studies), Department of Architecture
Ms. Cassandra Davidson, Academic Programs Specialist, Office of the Provost & Vice-President (Academic)

I am writing to acknowledge receipt of your follow-up report (dated May 8, 2017) and to thank you and Dr. Landrum for your diligent work to address the issues raised in the Faculty of Graduate Studies Response by Dr. Todd Mondor, dated January 26, 2016.

I sincerely congratulate you and your colleagues on making significant progress to address these issues raised in Dr. Mondor's Response.

Reviewer Recommendations and Timeline for Action on Relevant Issues with Progress Noted

	Reviewer Recommendation	*Action Required*	*Update of Progress Made*
1.	Improve the web page.	Changes to be completed by Fall 2016.	A number of important changes have been completed, including (1) the Department Mission and Tenets, (2) updates to the Department publications website and a featured

			item, (3) descriptions of each Graduate Design Studio, (4) updated information and new graphics, with links to Department publications and Design Thesis projects, (5) Accreditation Information and CACB (Canadian Architectural Certification Board) Guide to Student Performance Criteria, (6) dedicated webpages for each Design Thesis student with an abstract and images of original work, as well as review schedules for final public presentations, (7) graduate student winners of research and travel awards, and their public presentations, (8) notable news such as the student and professional meet & greet event, design thesis presentations, new staffing announcements, and architecture student involvement in the warming huts, (9) improved faculty member bio pages, and (10) improved scholarship areas of potential advisors.
2.	Institute changes to the vertical studio model.	New structure to be in place by Fall 2016.	The issue of studio structure was discussed at the Departmental Retreat in May 2015. An ad-hoc group reviewed the matter and recommended to separate the ED4 Studio (last year undergraduate) and M1 Studio (first year graduate) which was approved by the Department Council on June 9, 2015. This level-specific studio was offered as of September 2015. So far the experience has been largely positive. The focused M1 studio

			allows for greater clarity and consistency of learning outcomes and deliverables. The department is also working to foster further mentorship and socializing via other mechanisms, which was a positive feature of the vertical studio structure.
3.	Review, and reorganize if necessary, the Technical course offering.	Review to be completed by Summer 2016.	The department has improved Advanced Technical Topics courses (ARCH 7000/7010), and five such courses were offered in 2016-17. With the now separated studios, the department has developed a unique set of pertinent lectures and site visits coinciding with the comprehensive development of student design projects. To address the concern over the M2 technical coursework, two full-time faculty members led the course, together with a Teaching Assistant. This practice will continue. The course included various pedagogical methods and many improvements. This course is designed to closely support the students' individual Design Thesis projects.

3.2.1b) Faculty Self-Assessment

Aspects of the faculty self-assessment are described above in response to the five perspectives (section 3.1). That section highlights how the program is fulfilling its mission and addressing relevant interests of educators, students, regulators, interns, professionals and the general public. This self-assessment section looks at the same perspectives again, but through a more self-critical lens. With the intention of improving our program and optimizing its value for all constituencies, the following remarks highlight areas in need of support and improvement. Sections 3.1 and 3.2.1b should be read together. Whereas 3.1 demonstrates how our program meets the relevant interests of diverse constituencies, this section demonstrates critical self-analysis, as is necessary for ongoing program development.

A. Architecture Education and the Academic Context

Nearly 50% of respondents to our recent alumni survey felt that interactions between the architecture program and the university need strengthening (see below, section 3.2.3). This survey came on the heels of a university-wide three-week strike by academic members. Issues related to the strike and other academic challenges are described below.

UMFA and the University of Manitoba: The University of Manitoba Faculty Associations (UMFA) is the union for 1200 full-time academic staff and librarians. In November 2016, UMFA went on a three-week legal strike with an 86% strike mandate. This came after 4.5 months of negotiation and three intense days of mediation with University administration over the renewal of the Collective Agreement. Picket lines were active from November 1st to 20th. The event drew regional and national media attention. Specific issues concerned: job security, workload protection, fair assessment (protection from mandatory performance indicators), and salary. The salary issue was complicated by the administration's last minute disclosure of a Provincial Government directive that the Collective Agreement be extended for a year with zero increase in salaries. UMFA has brought an unfair labour practice charge against the University of Manitoba for withholding this information during bargaining. A group representing public sector unions in Manitoba has separately filed an injunction against a new Provincial labour law (Bill 28), which is viewed as undermining collective bargaining rights. As of August 2017, these cases are pending. More information on the strike and its outcomes is available on the UMFA website: http://umfa.ca/issues, and University updates: http://news.umanitoba.ca/labour-board-hears-testimony-in-ongoing-unfair-labour-practice-hearing/

With the issue of salary off the table, the 2016 strike ended with new agreed language in the Collective Agreement on several issues, notably working conditions, with a new provision concerning tenure and promotion stating that "Research metrics shall not be used as a substitute for a more comprehensive assessment of quality and quantity" (19.D.1.8.4); and workload, with a new provision that each Faculty develop teaching guidelines. The Faculty of Architecture has made progress to develop faculty-based teaching guidelines, as article 19.A.1.3 of the Collective Agreement now require. As stipulated, the Dean called a first meeting of faculty UMFA members, which took place on March 28, 2017. Based on that meeting, and further discussions with Deans and Heads, draft guidelines were prepared, distributed on August 22, 2017, and discussed at a dedicated meeting on August 29th, 2017. At that meeting, there was general consensus on how the guidelines are framed. It was agreed that the Dean would consider and incorporate specific suggestions on the language of some sections, and bring the revised guidelines forward to a subsequent meeting.

The next round of bargaining between UMFA and the University of Manitoba began on July 21, 2017. On August 31, 2017 a tentative settlement was reached for a four-year Collective Agreement, beginning April 2017, pending ratification by UMFA members. Details are posted to the UMFA and University websites:
http://umfa.ca/news/77-bargaining-update-tentative-settlement-reached
http://umanitoba.ca/admin/human_resources/staff_relations/bargaining/UMFA-bargaining-updates.html

Suburban Campus: Our generous campus provides safe, open and beautiful grounds for academic pursuits. However, we have heard from some local practitioners that its distance from downtown, combined with rush-hour traffic, makes it difficult for them to attend 6pm lectures and other cultural

events at the school. One suggestion from the professional community has been to move the lectures later in the evening. Yet, this can present difficulties for guests and students: by the time a 6pm lecture ends, following questions and conversations, guests need to be hosted for dinner and often have early morning departures to other time zones. Guests may have also arrived tired, having traveled since early morning. Additionally, many students tend to leave campus in the early evening after class, so moving lectures later would reduce student attendance. An alternative is to hold lectures downtown, and this already happens on occasion. In 2016-17, the architecture program held three distinguished lectures downtown at the Winnipeg Art Gallery. These lectures were very well attended by local professionals and alumni. However, the venue rental costs about $1500, which is prohibitive unless we have external funding to augment our modest budget. For those three particular lectures downtown, we had generous contributions from LM Architectural Group and the Winnipeg Design Festival (for John Patkau), and from the Manitoba Masonry Institute (for John Ochsendorf and Billie Tsien). We would gladly work with sponsors to facilitate more downtown lectures. There are, however, other considerations. The normal cultural events lecture series is supported by the Faculty Endowment Fund, which aggregates student contributions. The lectures are primarily for students and paid for by students. Students often have classes until 5:00 or 5:30pm on the evenings of lectures. Moving the lectures to a location that makes it more difficult for students to attend is arguably unreasonable. It is feasible, even desirable, on occasion to travel to an alternative location, but this can not become the norm. Finally, there are considerable organizational and technical details associated with hosting lectures (microphones, speakers, projections, video recording, receptions, etc.). When lectures are held off-campus, the time invested in ensuring these details are in order increases for staff members who are already very busy. There are also potential booking conflicts to contend with at off-campus locations. Select firms have offered their offices for guest lecturers, and we have at times gladly accepted these offers for appropriate speakers. However, for reasons of acoustics, audience capacity, openness, guest expectations, and convenience for students, we cannot make this normal practice. The Department of Architecture representative on the cultural events committee has suggested simultaneous broadcast of school lectures at a downtown location. This would simply require a downtown partner willing to coordinate and facilitate the technical details and an appropriate venue. For the time being, the program intends to continue its practice of organizing a downtown lecture only where external funding makes it feasible. It should also be noted that architecture students make frequent trips downtown for course-related site visits and local fieldtrips, including organized visits to architecture firms. The program regularly reaches out to firms and welcomes invitations for more such sessions.

Human Resources: full-time faculty: As noted in the program action plan, the Department of Architecture intends to follow-through with one additional full-time assistant-professor position (to be in place by January 2018), to advocate for at least one more full-time position, and to improve its gender balance (presently just 2 of the 9 full-time faculty, or 22%, are female). The Department of Architecture has nine full-time faculty members. However, in 2017-18 one member is 100% reassigned (Stern), another is on a research-study leave (Epp), and two have reduced teaching loads due to administrative duties (Rueda, L.Landrum), leaving six full-time equivalent members for teaching. Experienced and qualified sessionals augment the Department's teaching capacity; however, full-time colleagues are necessary for consistency, long-term strategic planning, research creation, and administrative support. Diverse and highly qualified professors add value to programs and help raise the research capacity and profile of the faculty.

Interdisciplinarity: Undergraduate architecture-option Environmental Design students have 21 credit hours of electives, for which they may choose from a variety of options. Architecture graduate students have 6 credit hours of electives, for which they may take any 3000-level or higher course within the Faculty of Architecture, and many other courses across the University with Department Head approval. Summer electives offered by the Faculty are typically trans-disciplinary. In addition to these opportunities, the architecture program successfully incorporates cross-disciplinary collaborations within its professional curriculum – especially in the 9-credit topical studios and graduate topics courses. (Some of these are noted above in section 3.1). We occasionally hear that more interdisciplinary opportunities should be made available. We do not disagree with this position; however, it must also be acknowledged that the 2-

year M.Arch program is brief and dense, with 48-credit hours plus a Design Thesis. The M.Arch curriculum is heavily weighted with required professional studies having CACB Student Performance Criteria. Students generally find the current course load challenging, but manageable. As noted above in the action plan, the architecture program is intending to enhance interdisciplinary opportunities within the present curriculum via optional trans-disciplinary opportunities within studios and topics courses, and strategic advanced planning for topics courses and summer electives, which may involve field studies, design-builds, and experiential learning options across units. The program also intends to continue its practice of inviting a variety of professionals and experts in related fields as guest critics, lecturers, and consultants, wherever appropriate. There were over 100 diverse guests in 2016-17 (see section 3.6.8d).

B. Architecture Education and the Students

Of the graduates who participated in our alumni survey, 65% considered the program support for students to be either very effective or somewhat effective (see below, section 3.2.3). Faculty members know there is more work to do in this area. Seven of the seventeen goals in our program action plan aim to enhance student experience (section 1.2). The assessment below outlines three areas that the program is currently addressing.

Student Support: Talented and bright students from all over the world enrich the graduate architecture program. Many of these students excel and positively contribute to the vitality and broad knowledge base of the department. As with any individual entering a new situation, international students benefit from structured assistance and opportunities to form new friendships. The Department of Architecture has recognized the need to do more to assist. To help make the transition to the Department and Faculty of Architecture for all incoming M1 students – especially those arriving from other schools – the program is initiating in September 2017 a dedicated orientation session led by the M1 studio coordinator and Associate Head (L.Landrum), the Graduate Student Advisor (Y.Halden), and two M2 students. This session took place on September 6, 2017. Department Head Carlos Rueda and Associate Professor T.Fuglem led an orientation and welcome lunch for AMP students on September 1, 2017. The goal is to help ensure students are aware of the many available resources in the department, faculty, university and city.

Learning Culture in Studio: All architecture program studios are located in the Architecture2 Building. The space is adequate in size and has ample daylight, but it is equipped with sub-standard furniture and partitions that are very difficult to move. The program is optimistic that the recently initiated project to refurbish the studios and replace the furniture by fall 2018 will help resolve some of spatial difficulties and improve the learning culture in studio by allowing greater visibility between studio bays and more flexibility in setting up the space. (For more on the Teaching Laboratory Renewal for the Arch2 Building, see below section 3.7). In 2016-17, the program experimented with a new seating arrangement in which M2 Design Thesis worked together in one large area on the fourth floor, instead of embedded in separate studio bays with their respective advisor. The intention was to cultivate a community amid thesis students, with a mutually supportive and rigorous working atmosphere appropriate to their more independent work. However, not all students liked the arrangement. Some felt it heightened isolation from other students and advisors. Many indicated that they missed interacting with students at different levels and the opportunity to mentor and be mentored by other students. Those familiar with the previous vertical studio structure, felt the seating arrangement further segregated students hierarchically by year. Following discussions with students and faculty, it was agreed that for 2017-18 thesis students would have their workspaces within the studio of their advisor, regardless of studio level (ED3, ED4 or M1) and location (basement, third or fourth floor). This way, all students in the school will have a thesis student working in their midst.

Access to Information: While every effort is made to ensure students have the information they require, we are aware that we need to improve access to information, especially with respect to advanced public notice of elective offerings within our Department and across the Faculty. Since fall 2014 studio offerings have been posted online a couple days in advance of the studio selection process at the beginning of September. Graduate topics offerings are announced internally in September for the fall term, and in

November for the winter term. Summer offerings have tended to arise by word of mouth. As indicated in the action plan, the program intends to improve communications via advanced web announcements and posters in the school – ideally with all option offerings for the year announced by the last week of August. The program also intends to discuss and coordinate offerings to ensure balanced teaching loads and opportunities for faculty members and students.

C. Architecture Education and Registration

Respondents to our alumni survey were somewhat split on their impression of graduates' preparedness for practice: 42% thought graduates were somewhat prepared or very prepared to enter internship and licensure processes; while just over 50% believed graduates are not so prepared for the transition to professional life (see below, section 3.2.3). As noted above in section 3.1, the program fully supports the registration process. Many graduates pursue the path to licensure soon after earning their degrees. A majority of full-time academics and sessionals are registered, and numerous regional architects and interns participate in our curriculum as guest critics, lecturers and consultants. Students go to the MAA offices and interview with design firms as part of required coursework, and there are multiple cultural events each year cultivating mentorship and social exchange. In short, there are many positive interactions between students, faculty members and members of the Manitoba Association of Architects. However, there have been some communication challenges with the MAA. For instance, during the recent internal search for a new Dean of the Faculty of Architecture (in March 2017), the MAA office distributed to its members inaccurate and misleading information about the hiring process and the University's intentions; and in spring 2017 the MAA did not accept the recommendation of the Dean and Department Head for a new Faculty of Architecture representative on the MAA Council (the current representative has been in place for 6 years, and is now renewed for 2 more years). The faculty representative on MAA Council is appointed by the MAA, not elected by the Department of Architecture. Whereas the student representative on MAA Council "must be elected annually from the enrolled students in the Department of Architecture," according to the MAA general by-laws, there is no comparable provision for the faculty representative. Many members of the Department of Architecture hope the MAA will consider modifying their rule to allow an elected representative from among the Department's MAA-registered members. This topic has recently been discussed among the leadership of the architecture program and the MAA. The MAA has indicated willingness to continue the conversation and to consider having a faculty representative on MAA Council who is elected by the Department of Architecture. MAA rules on Council members are online: https://www.mbarchitects.org/council.php.

The Department of Architecture continues efforts to cultivate trust and productive dialogue with MAA leadership and its members. Over the summer of 2017, the Department launched an effective and mutually informative alumni survey, gaining helpful feedback from over 150 participants. We initiated and led three professional outreach sessions at partner firms, seeking input on our program as part of the CACB self-assessment process. We held a constructive meeting of the Dean, Head and Associate Head with the MAA Council on June 29, 2017 to discuss CACB preparations. (A report on these engagement sessions is provided below, section 3.2.4). Five other meetings with MAA Presidents have occurred since Spring 2016, as recently as September 8, 2017. The MAA and architecture program leadership have agreed to continue such meetings every two months. The Department of Architecture is pleased that the MAA has recently committed to reactivating the MAA-DoA Strategic Committee, which has been dormant since at least 2015. We look forward to working with the MAA representatives on our common project of pursuing a better built environment, and continually educating students, the public and ourselves about the value of architecture.

D. Architecture Education and the Profession

The majority of graduates (74%) believe our program is either very effective or somewhat effective in preparing students to perform responsibly in a diverse and complex world (see the alumni survey results below, section 3.2.3). The program has strong relations with professional communities and fosters professionalism in the curriculum. The architecture program aims to nurture well-rounded graduates and reflective practitioners, with a balance of technical, ethical and aesthetic skills. We have heard from some

professionals that they would like students to have more practice-ready skills upon graduation. The program is currently in the process of implementing a plan to bolster drawing and software skills. The delivery of the ED3 drawing class (EVAR 3014) is being refined for 2017-18, and other initiatives are underway to teach digital programs, and ensure students have access to current technologies. For 2017-18, the CADLab and FABLab are launching a new joint series of software seminars, including Sunday afternoon software instruction sessions (3-hour labs led by Graduate Students for 30 students each session with advanced sign-up); and Tech Tuesdays (open-door problem-solving sessions with technicians). These sessions, offered outside core courses, will provide needed software training while allowing students to spend their time more effectively in design studio on higher level learning objectives.

E. Architecture Education and Society

As our recent alumni survey shows, a strong majority of graduates (78%) believe our architecture program equips students for societal issues very well or fairly well (see below, section 3.2.3). Students and faculty members are engaged in social, urban and environmental issues via both pedagogy and research. Winnipeg's architectural community is active in organizing numerous public design events, which involve students and faculty members as spectators, creative participants, organizers, and leaders. At times there is so much going on to the point of distraction, and occasionally local design opportunities can distract students from academic obligations. Yet, overall the situation is mutually supportive and provocative. One difficulty in engaging a broad spectrum of society in the learning culture is the distance of the University from downtown. The University of Manitoba is itself a socially diverse and culturally vibrant place, with public events and outside visitors animating campus on a regular basis; yet, opportunities for interaction between students and the general public need to be organized and facilitated. Several program-supported events aim to mix the public and students, including the faculty-wide Year End Exhibition**,** when all the studios are transformed into galleries; public debates at the Winnipeg Free Press Café, organized by StorefrontMB and often involving architecture faculty and students as panellists; the Winnipeg Design Festival, which is often curated by recent alumni and involves displays of recent student work; as well as other public presentations of student work at public downtown locations, including the Forks Marketplace. Funding for social programing can also be challenge, especially for participation in field studies. Out-of-country travel can be prohibitive for some students. The program would welcome external support for need-based funding for this purpose. The program also strives to procure financial resources for field studies in other ways.

3.2.2 Student Assessment

Description of the Student Self-Assessment Process

The Student Assessment was conducted through two student-led focused group meetings in the spring of 2017. All students in the architecture program were invited to attend. (See email invitation below). The meetings were initiated by Associate Head Lisa Landrum, but facilitated and led by elected student representatives. These student leaders included the UMAAS President, representing the University of Manitoba Association of Architecture Students; a student representative for each of the M2 and M1 graduate levels; and a student representative from each of the AMP and ED-Arch undergraduate streams. The group discussions were oriented around the five CACB Perspectives, which were circulated in advance and projected during the meetings. Feedback was recorded in notes, then compiled and synthesized by Emily Bews, the M2 student representative and CACB APR student assistant. The meetings were held on Thursday, April 6 and Thursday, April 13, 2017, each from 12pm to 1:30pm. A total of 50 students participated in these sessions. All students were encouraged to forward additional comments by email.

Student Self-Assessment

A. Architecture Education and Academic Context

Students believed that a strong understanding of the academic and professional standard is gained through the studio setting. Within this environment, students are able to learn the level of care, diligence, and skill needed by the profession. This understanding is cultivated by close interaction with the instructor and other students, as well as through the discursive method of evaluation, which involves weekly discussions as well as periodic written assessments.

Students within the undergraduate ED and AMP studios feel as though this interaction is extremely beneficial, as they are able to learn from the distinct skills that other students possess. The AMP1 students, those having previous degrees in subjects other than architecture, especially appreciate working amongst the ED3 undergraduate students, who are in their third year of design. These interactions allow architecture and other disciplines to easily merge. Many thesis students voiced disappointment with the segregation of the thesis students into a separate studio space with students of only their level. They had found tremendous value in the vertical studios of the past, which consisted of ED4, M1, and M2 students together in one studio space. These M2 students felt the vertical studios benefitted both the older and younger students. The older students acted as mentors for the younger, and in return the less experienced students offered inspiration and a refreshing energy towards the older students.

Within the Faculty, students recognize only a small level of interaction between the various Departments. Open reviews within Architecture, Interior Design, and Landscape Architecture are appreciated by students and felt to offer exposure to each level and discipline. Participation is always encouraged during reviews, providing the opportunity to further engage with other students. Students agree, however, that most do not take advantage of these opportunities due to lack of knowledge of the review schedule of other streams, and unfamiliarity with the presentation topics. Interdisciplinary courses exist between the three undergraduate streams, including one design studio per year, as well as available summer courses that combine the undergraduate Architecture, Interior Environments, and Landscape + Urbanism students. Some students are aware that courses within other Departments can be taken to satisfy the architecture elective requirements, provided the student has the required prerequisites. The consensus from students is that these courses are not overly accessible. They require too much administrative work and depend on the initiative of the student to seek help determining, on a case-by-case bases, if the course satisfies the requirements of their degree. There is a belief that physical and figurative barriers still exist between Departments, due to the separation of architecture into its own building, as well as the unadvertised ability to take elective courses within the other streams.

Students are excited about recent endeavours to increase interactions between the Faculty of Architecture and other disciplines throughout the university. Recent exchanges have ranged from collaborating on design-build projects with students and professors in the Department of Landscape Architecture and the Faculty of Engineering, along with manufacturers, suppliers and local community members. The students were extremely hopeful that under the new Dean the Faculty of Architecture and Faculty of Engineering would strengthen cross-disciplinary exchange. Already, students are extremely excited about their input and involvement in the new employment of an Indigenous Scholar who will share time between Architecture and Engineering.

It was expressed that the students in the Faculty were well represented within the institution through the undergraduate Students' Architectural Society (SAS) and the graduate University of Manitoba Association of Architecture Students (UMAAS). Multiple members within each of these student groups attend Faculty Council meetings, Department meetings, and University wide student committees.

The quality and quantity of personal resources within the Faculty were viewed as invaluable assets. The FABlab, CADlab, and Workshop all contain physical and intellectual resources, including equipment and knowledgeable technicians readily available to aid in experimentation or assist with questions. More recently, the C.A.S.T building and the resources within have become available to faculty and students for either individual projects or collective course work. Additionally, the Partners Program was seen as extremely beneficial in creating events that allowed exposure to the professional world. The Architecture and Fine Arts Library is exceptionally well stocked with resources and helpful librarians. Staff and faculty are very committed, recognizing the hard work of students and providing support to students seeking grants and bursaries, which helps to ease financial burdens and allows full-scale projects to be realized.

Within the Faculty, the undergraduate SAS committee is composed of cross-disciplinary members, allowing social events to represent the needs and wants of all undergraduate streams. The ED2 and ED3 mixer held each year in the fall term is found to be a positive and highly beneficial event for younger students to learn about the three different undergraduate streams. Graduate level students felt as though the social life of the institution could be improved by implementing educational opportunities that are multilevel, such as vertical studios combining ED4, M1, and M2 students. It was concluded that the Department does exceptionally well at exhibiting student work within the Faculty through the ARCH II Gallery, the student created Warehouse Journal, the Network Journal, as well as the new initiative for an annual ArchFolio publication. Students believe that more could be done to bridge the gap between the Faculty and the rest of the University as they feel there is a current misunderstanding between the outside perception of the Faculty and the actuality of work produced within.

B. Architecture Education and the Students

Students collectively stressed that the current experience of educational freedom was a huge asset of our school. Within the Faculty, choice remains a key component of the architectural program, allowing students to participate in establishing their individual learning agendas. At the beginning of each school year, the design studio course begins with the advantageous interview process, where students have the opportunity to meet with different professors, discuss their previous projects and current interests, and receive critical feedback. The ability to choose a studio professor was extremely appreciated as it enables students to align their personal interests or working styles with that of an instructor. Within the curriculum of each studio, students have the relative freedom to determine their own project and site. Younger students appreciated the diversity of professors within the Faculty, each with his or her own background, methods of teaching, and approach/manifesto. This includes a balance of gender, diversity of culture and educational background, and different durations of practice in the profession. Older students regretted the loss of faculty members and lack of replacement over the last few years. Additionally, graduate students appreciated the range of topics courses offered and the freedom involved in choosing their own areas of study.

Students found extreme value in the studio setting, realizing its potential to foster beneficial interactions between students in the Department. The studio spaces themselves were kept small, comfortably holding 15-20 students, a size that is conducive to discussion and dialogue. Students noted that the diverse range of projects within each studio leads to a reduction of competition amongst students, which in turn fosters a high level of communication and student-led critiques. Students were also strongly encouraged to attend, participate in, and provide feedback at other students' reviews. Group work was experienced in some design studios, as well as within the undergraduate technology courses.

Students noted that a successful component of the Faculty was the diversity and richness of lectures provided. The undergraduate students praised the History and Theory courses for the use of guest lecturers, allowing for a range of topics to be explored in a dynamic manor different than what would be gained through reading a chronological account of architectural history in a textbook. Students appreciated the Food for Thought lecture series as it provided insight into the research and work of various local and international practitioners, as well as students and staff within the Faculty. The Atmosphere Symposium was another highlight that joined the four Departments within the Faculty of Architecture, and offered a wide variety of perspectives. Students expressed gratitude towards the studio field trips, which travelled provincially, nationally, and internationally, and provided tours of various architectural and design related buildings and offices. The undergraduate technology course exposed students to buildings under construction, which was beneficial to understanding the design process.

Students at all levels felt as though there was a deficiency in the technology portion of their education, agreeing that lectures on specific aspects such as the building code, etc., would be beneficial. Lectures had been viewed as general and non-specific as well as containing an overlap of information from year to year. Students noted that although they often felt the technology courses were lacking, they were heavily encouraged within each studio project to conduct research into areas of the building technology that directly related to their specific project or condition. Undergraduate students noted that the school advertises the possibility of working in an architectural firm, yet provides minimal hands-on opportunities to understand other employment options, such as set design, product design, etc. Graduate students acknowledged some exploration of these venues through individual topics courses.

C. Architecture Education and Registration

Each year the graduate student body elects one MAA student representative to attend meetings held by the Manitoba Association of Architects (MAA). The student acts as the connection between the students and the professional field. UMASS and the MAA work collectively to organize an annual Meet and Greet, an event where students intermingle with professionals, ask questions about the profession, and form connections. Within the Professional Practice course, M1 students valued the information night held at the MAA office, which outlines the Intern process, rules of licensure and other relevant information in regards to registration. Undergraduate students voiced a desire to have similar information conveyed to them before entering the masters program.

Students voiced an appreciation and excitement towards the initial stages of an internship program, including the placement of one undergraduate student in a work position in Nunavut. They hope more opportunities will be offered in the future.

Through the graduate level Professional Practice and Legal Aspects/Ethics courses students felt they were able to gain an understanding of the responsibilities of professional conduct. Students praised the opportunity to participate in mock interviews at local firms arranged through the Professional Practice course, allowing students to understand the requirements and professional process involved in applying for a job. Undergraduate and graduate students were exposed to a high number of professionals who visited the school as invited guests at reviews.

Through word of mouth, students believed that graduates tended to become registered as soon as possible. Additionally, students were aware that the Province of Manitoba has a high rate of licensure.

D. Architecture Education and the Profession

Students were aware of the program's engagement with the professional community on multiple levels. The first involves courses taught by practicing professionals, including studios, technology, and graduate level topics courses. Students view this as very beneficial, especially for the technology course, where practicing and retired architects, engineers, and project managers are available for one-on-one weekly consultations with students to assist and advise in the creation of construction documents. The thesis students appreciated the benefit of multiple opportunities to discuss their thesis projects with various visiting practicing professionals and academics, including David Leatherbarrow and Brigitte Shim. The Partners Program is invaluable in fostering relationships between the school and the architectural profession, creating situations that allow students to understand the role and responsibility of the profession, as well as its ethical dilemmas. Students reflected on the success of the interdisciplinary Meet, Mingle, and Mentor event held by the Partners Program, where students had the opportunity to converse with practicing professionals to understand the actuality of the profession.

The program provided many encouraging situations for students to understand the importance and outcome of advancing their knowledge of architecture through continual research. Due to the close collaboration with instructors, it was agreed that the studio setting and the individual briefs allowed students an understanding and appreciation of their instructor's research and current studies. Additionally, opportunities existed for students to aid in the research of a professor. Visiting academics have been instrumental in the rejuvenation of the C.A.S.T building. Students noted the value of knowledge gained through open workshops offered by the C.A.S.T visiting researcher.

E. Architecture Education and Society

Students felt that this category was well embraced and promoted by the program. Studio projects and course work within the History and Theory classes as well as the technology course emphasize civic engagement, social responsibility, and building technology. The full year studio projects provide students the time needed to delve in greater depth into site analysis and later to study the implications of their proposed building. Studios often emphasize local projects, allowing students to visit the site repeatedly throughout the year, providing the opportunity to witness ever-changing dynamics and converse with local communities. Each year, specific studios deal in extreme detail with local topics such as natural disasters, flood architecture, low income communities, and Indigenous architecture.

Through community built projects, students could work alongside multiple clients and communities, within a concrete budget and timeline. This included studio and extracurricular group projects such as the Warming Huts. Other projects served more specific communities, such as the creation of artist pods within the area of Sioux Narrows by an ED3 studio, or the graduate level project consisting of structures to support Winnipeg's Rainbow Community Gardens. The physicality of these projects allowed students the opportunity to witness both the positive and negative implications of their design within an actual site and community.

The Partners Program creates a level of civic engagement for students and faculty within the Department of Architecture through the promotion of various lecture series occurring within the broader design community of Winnipeg, such as the 10x20x20, and StorefrontMB events. These lectures usually occur in downtown Winnipeg, and begin to expose questions about key architecture in the city. Given the location and the broadness of the content, these engagements are a method for reducing the gap between the architectural students, the profession and the general public.

From: **Donna Mamott** Donna.Mamott@umanitoba.ca
Subject: **CACB Student Self-Assessment - Student Meeting ED3/4Arch; AMP1/2; MArch1/2**
Date: April 3, 2017 at 2:15 PM
To: [Arch-option students]
Cc: Emily Bews bewse@myumanitoba.ca, Lisa Landrum Lisa.Landrum@umanitoba.ca

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Forwarded on behalf of Lisa Landrum, Associate Head, Department of Architecture

Greetings Architecture Students (ED-Architecture-Option, AMP and M.Arch Students),

As you may know, our professional architecture program is preparing for its 2018 Accreditation review by the Canadian Architectural Certification Board (CACB). CACB helps ensure that a professional program meets established professional qualifications and educational standards through periodic evaluations. A degree from an accredited program attests to a high quality education and allows graduates to seek professional membership. It is in the best interest of students that our program maintains accredited status.

As part of the preparations, we are writing an Architecture Program Report (APR). This is a voluminous document with many parts, including a Self-Assessment, which explicitly requests student input on 5 CACB “Perspectives":

Architecture Education and the Academic Context
Architecture Education and the Students
Architecture Education and Registration
Architecture Education and the Profession
Architecture Education and Society

To generate an accurate and broad student assessment of these important issues, we propose a student-led focused group meeting open to students in the professional Architecture program: that is, students in ED3 and ED4 Architecture Option; AMP 1 and AMP2; M.Arch1 and M.Arch2.

These focused meetings will be led by elected student representatives:

Emily Bews, M2 Rep.
Michael Butterworth, UMAAS President
Tom Crossman, M1 Rep.
Alexandre Ross-Gautron, AMP (representing both AMP1 and AMP2)
Collin Lamoureux, ED-Arch Option (representing both ED3 and ED4)

During these meetings the 5 CACB Perspectives will be discussed, and your feedback will be invited and recorded with notes. Further time may be allocated to discuss any aspects of the program not included in the 5 Perspectives. Student feedback will then be amalgamated, organized and summarized in writing by student representatives, and finally submitted as a formal report for review and inclusion in the APR.

To ensure as many students as possible participate in the focused discussion, 2 dates are set:

Thursday, April 6, 2017 from 12:00pm-1:00pm (rm. **116, Arch 2**)
Thursday, April 13, 2017 from 12:00pm-1:00pm (rm. **225, Arch 2**)

Note the different locations. If there is sufficient demand for a third session, it will be announced via email.

It is important that you attend at least one of these sessions to have your voices heard.

If it is impossible for you to attend, student responses to the 5 Perspectives may be forwarded by email to Emily Bews at bewse@myumanitoba.ca

To help ensure you arrive to the meeting prepared with constructive thoughts on the program, please review the more detailed outline of the **5 CACB Perspectives** (attached). This is will be the focus of the meeting.

Further information on the CACB Accreditation process, including Conditions and Procedures can be found here http://cacb.ca/en/cacb-accreditation/ A direct link to the Student Performance Criteria is here http://cacb.ca/wp-content/uploads/pdf/guideforstudent.pdf

If you have any questions, please contact M2 student rep. Emily Bews, or Prof. Lisa Landrum.

Thanks in advance for your input, and see you soon!

Emily Bews,
M2 Rep. and CACB-APR Student Assistant

<CACB_FivePerspectives.pdf>

CACB Conditions and Terms for Accreditation (excerpts from 2012 Edition):
The APR must include: Faculty, student, and alumni assessments of the program's overall curriculum and learning context, as outlined in the CACB Perspectives. Feedback may be obtained through such techniques as surveys and focus groups.

CACB Perspectives:

A. Architecture Education and the Academic Context

The program must demonstrate that it both benefits from and contributes to its institutional context.

Provide feedback on:

- the program's academic and professional standards for both faculty and students;
- interaction between the program and other programs in the institution;
- contributions of the students, faculty and administrators to a) the governance of the institution; b) the intellectual life of the institution; and c) the social life of the institution;
- contributions of the institution to the program in terms of intellectual and personal resources.

B. Architecture Education and the Students

The program must demonstrate that it provides support and encouragement for students to achieve their full potential during their school years and later in the profession, and that it provides an interpersonal milieu that embraces cultural differences.

Provide feedback on:

- how students participate in establishing their individual and collective learning agendas;
- how students are encouraged to cooperate with, assist, share decision-making with, and respect students who may be different from themselves;
- students access to the critical information needed to shape their futures;
- student exposure to the national & international context of practice and the work of allied design disciplines;
- how students' diversity, distinctiveness, self-worth, and dignity are nurtured in the academic environment.

C. Architecture Education and Registration

The program must demonstrate that it provides students with a sound preparation for the transition to professional life, including internship and licensure.

Provide feedback on:

- the program's relationship with the provincial architectural licensing association or institute;
- the exposure of students to internship requirements and continuing education beyond graduation;
- students' understanding of their responsibility for professional conduct; and,
- the proportion of alumni who have sought and achieved licensure since the previous visit.

D. Architecture Education and the Profession

The program must demonstrate how it prepares students to practice and assume new roles within a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base.

Provide feedback on:

- the program's engagement of the professional community in the life of the school;
- how students are encouraged to advance their knowledge of the art and science of architecture through a lifetime of practice and research;
- how students develop an appreciation of the diverse & collaborative roles assumed by architects in practice;
- how students develop an understanding of & respect for the roles & responsibilities of associated disciplines;
- how students learn to reconcile the conflicts between architects' obligations to their clients, the public, and the demands of the creative enterprise; and,
- how students acquire the ethics for upholding the integrity of the profession.

E. Architecture Education and Society

The program must demonstrate that it equips students with an informed understanding of social and environmental problems and that it also develops their capacity to help address these problems with sound architecture and urban design decisions.

Provide feedback on:

- how students gain an informed understanding of architecture as a social art, including the complex processes carried out by the multiple stakeholders who shape built environments;
- the emphasis placed on generating the knowledge that can mitigate social and environmental problems;
- how students gain an understanding of the ethical implications of built environment decisions; and,
- how a climate of civic engagement is nurtured, including a commitment to professional and public service.

3.2.3 Alumni Assessment

Description of the Alumni Self-Assessment Process

An Alumni Questionnaire was designed using SurveyMonkey and launched May 5, 2017 during the Faculty Year End Exhibition, attended by hundreds of students, alumni, and professionals. Colourful leaflets (depicted above) were posted and distributed. A link to the survey was made available on the homepages of the Department and Faculty of Architecture. The Faculty of Architecture and Alumni Relations Office notified graduates about the survey via email on May 26, 2017. Other announcements were forwarded by local affiliates, including the Winnipeg Women in Architecture group; the Winnipeg Architecture Foundation; the Manitoba Association of Architects; and StorefrontMB. The UMToday notice read:

http://news.umanitoba.ca/doaalumni_survey/

Your Feedback Matters!

MAY 4, 2017—The Department of Architecture is reviewed periodically by the Canadian Architectural Certification Board (CACB). As part of our preparations for the next CACB Accrediting Team Visit we have launched an Alumni Self-Assessment questionnaire.

Please participate in this short survey and enter to win a $75 gift certificate from Deer + Almond Restaurant.

This questionnaire is intended only for graduates of the Architecture Program (M.Arch and/or ED-Architecture Option) in the Faculty of Architecture at the University of Manitoba. You may only complete the survey once. It will take about 15 – 20 minutes.

Click Here to access the survey.

If you have any questions about this questionnaire, please feel free to contact Lisa.Landrum@umanitoba.ca or brandy.oreilly@umanitoba.ca.

Survey Closing Date: June 20, 2017

Nine preliminary questions concerned the respondent: their degree, graduation date, professional position, notable accomplishments, and how they stay informed about the program.

- **151 alumni participated in the survey; graduation dates ranged from 1964 to 2017;**
- 71% graduated with an M.Arch degree; 49% graduated with both a B.Env.D. and M.Arch;
- 89% of respondents are currently working in a design field. Of these: 48% are registered architects; 25% are interns; 10% are intending to become interns; 17% are working in related fields;
- 72% of respondents found work in the field within 3 months of graduating;
- Most alumni stay informed of activities in the program by following social media; talking to current faculty and recent graduates; reading the student Warehouse Journal; and attending the Faculty's Year End Exhibition, Faculty supported Cultural Events, and local design events.

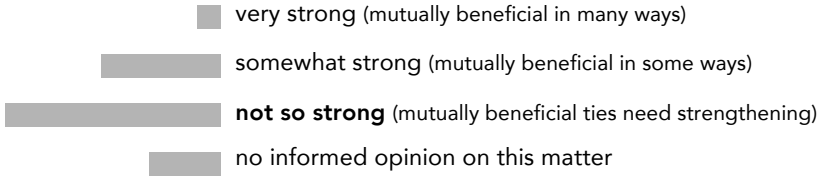
Five three-part questions concerned the overall curriculum and learning context of the program, framed by the CACB Perspectives. For each "Perspective" there was a multiple choice question about the program's effectiveness in that area; a question inviting commentary on what the program is doing well in that area; and a question inviting suggestions on how the program could improve in that area. A general results announcement was posted in July 2017. http://news.umanitoba.ca/department-of-architecture-alumni-survey-draw-winners-announced/ A detailed summary of responses is provided below.

ALUMNI SELF-ASSESSMENT RESPONSES:

A. Architecture Education and the Academic Context

[CACB 3.1a]: *The program must demonstrate that it both benefits from and contributes to its institutional context.*

To the best of your knowledge, would you say the relationship between the architecture program and the University of Manitoba is:



Alumni generally appreciate the University of Manitoba context of open diversity, which easily allows for cross-pollination of ideas and interdisciplinary research. The campus itself is viewed as a community-building and architecturally stimulating environment. Many appreciate the Faculty resources, especially the Library, Workshop, CADLab, FABLab, and C.A.S.T. Others value the social events organized with institutional support: Ditch Ball, the Buddy Barbeque, Year End Exhibition, Alumni events, lectures, and symposia. The Faculty Partners Program is recognized as playing a key role in facilitating these cultural events. Individuals value the availability of University grants and bursaries, and access to the many student support services. Others note the University's own valuation of architecture through the recent Visionary ReGeneration campus design competition and the promotion of architecture in its Trailblazer billboard campaign. However, although most alumni see potential for collaboration with diverse units (namely art, fine arts, theatre, psychology, environmental science, engineering, mathematics, the Campus Planning Office, and Physical Plant), few feel that such collaborations are happening as often as they could. Some Alumni believe that relations between units *within* the Faculty of Architecture need strengthening. Several feel the University does not sufficiently appreciate the architecture program and what it could offer the institution and the city. Some suggest the Faculty should leave the peripheral campus context in the suburbs and move downtown. A selection of representative survey responses follows.

What are the beneficial interactions between the architecture program and the University of Manitoba?

> *Diversity.*
>
> *Architecture, as a discipline and a faculty, has much vitality and creativity to offer the world and campus.*
>
> *The unique campus site and style contributes to students' education, as we were often asked to evaluate social and architectural situations and respond to them. The "small town" feel of the campus assists in creating a sense of community… The reputation of the architecture program attracts people to the UofM and the city. (It's why I applied and decided to study at the UofM).*

In what ways could interactions between the architecture program and the University be improved?

> *There is so much potential to be realized by simply putting students from different faculties in the same room. In an occupation that depends so heavily on communication and collaboration between professionals, it puzzles me as to why we appear to be so isolated from the other professional and creative faculties. Cross-disciplinary workshops with other faculties would be great.*
>
> *Have more student work directly and physically infiltrate the campus. For example, do installations and design-builds to make the campus in its entirety aware of the program.*
>
> *The University of Manitoba needs to respect Architecture as an independent, self-governing profession, on the same level as Medicine, and provide funding, staff and support as such…*
>
> *I would like to see increased opportunities for students of the Department of Architecture to take courses outside of the Department, and vice-versa. It is currently possible, but requires an incredibly motivated student to jump through all the hoops to make this happen. The University could help foster an environment of open learning and help empower students to gain an education that aligns with their passions.*

B. Architecture Education and the Students

[CACB 3.1b]: *The program must demonstrate that it provides support and encouragement for students to achieve their full potential during their school years and later in the profession, and that it provides an interpersonal milieu that embraces cultural differences.*

To the best of your knowledge, would you say the support provided to students in the program is:

19% very effective (providing many opportunities for individual and academic enrichment)

46% somewhat effective (providing some opportunities for individual and academic enrichment)

25% not so effective (opportunities for individual and academic enrichment need improvement)

10% no informed opinion on this matter

Alumni appreciate having had the freedom to explore ideas and to choose studio and research topics in the program. Such freedom implicates students in their course of study, motivating them to develop and pursue their interests. Many feel the program is supportive of student-led initiatives and offers many unique opportunities to become involved in decision-making. Having access to research assistant positions is appreciated. Several respondents noted the wide variety of invited speakers and guest professionals, who encourage interactions between students and the world of practice. Many feel they developed critical and creative thinking skills in the program; however, some are concerned technical skills are lacking. Some feel the program lacks a strong direction and experienced practitioners teaching in studio. Several advocated for more interaction with industry partners and for the development of a co-op program as a way to better support students' transition to practice. A selection of representative responses follows:

How does the program best support and challenge students to pursue personal, academic & career goals?

It is a program that allows everyone to find their own place.

Individual teachers are extremely helpful when discussing personal goals for careers, and the studio environment promotes peer feedback.

Instructors are very encouraging and genuinely want to help students be better designers and do exceptional work. Students are given opportunities to be part of faculty events, faculty committees, and research work. This experience is valuable during our education as well as after graduation.

During my years as a student, we were encouraged to develop conceptual ideas more than technical abilities. It allowed us to discover our passions within the extensive scope of the design field.

I found it extremely beneficial to be given freedom within my work... The offering for student research assistant positions also provided me with fantastic opportunities and took me down avenues I would have not otherwise gone down.

The program encourages students to dream and not be limited to what today's technology can provide.

How could the program improve its educational support for students?

A coop program would be very helpful and reduce stress in students entering the profession.

Encourage communication with local professionals and participate with more international competitions.

The faculty and the MAA seem to be at odds, not really helping each other out. It makes no sense.

Exposing the students to the building code and implementing technical skills in relationship to the design of the project can help improve the education for future architecture grads.

There needs to be greater ties to the Manitoba building design and construction industry.

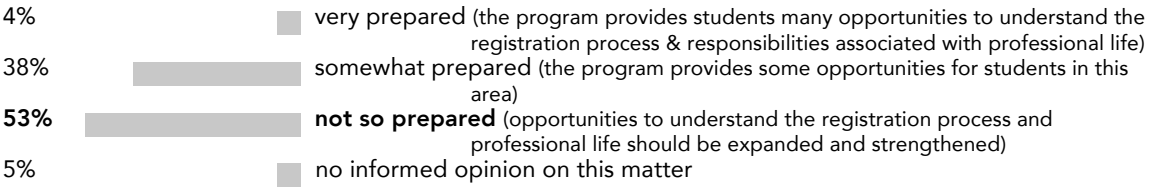
Reach beyond the local architectural scene. Pursue travel study, exchanges and relationships with other schools.

Engage the more practical side of practice without losing the more speculative and theoretical side of academia.

C. Architecture Education and Registration

[CACB 3.1c]: *The program must demonstrate that it provides students with a sound preparation for the transition to professional life, including internship and licensure.*

To the best of your knowledge, how well prepared are graduates for professional life:



Several respondents believe the program prepared them for registration by developing critical thinking skills, enabling them to meet new challenges and tackle difficult problems. They also feel they learned time management and developed a strong work ethic. Many valued the Professional Practice and Legal Aspects courses for introducing key aspects of practice and licensure. It was also noted that many design studios involve professional critics and consultants who become important resources to students when looking for work. Some, however, felt the school was disengaged from the profession and should involve more practitioners in the curriculum. Some thought there should be more emphasis on teamwork, more mentoring opportunities to connect with professionals and recent grads, and more assistance for students in preparing for licensing exams and seeking work. Several respondents advocated for a coop program. A selection of representative responses follows:

What are the best ways in which the program prepares students for professional life, internship & licensure?

The program teaches us how to learn, how to think outside of regulations, to challenge standards by putting design first. This means that graduates come out with fresh perspectives, and an urge to make design better.

Professional Practice and Legal Aspects provides all students with an understanding of the profession. There are many practicing professionals that often come to teach, critique, meet with students, etc. These relationships are a great resource when starting to apply for work. There are many ongoing events that students can attend to connect with the architectural community…

The most valuable thing I got from my education was the ability to problem solve and figure things out on my own. The school was generating thinkers, not just people who knew the ins and outs of CAD software. In a university setting, its important not to fall into a trap of producing students who are only task-based workers.

Skills developed through the program: Work ethic, critical thinking, design acumen, and individual design manners (very important - the program does not produce "cookie cutter" designers/architects). During the masters program there are required classes discussing professional design practice and legal aspects of the industry. The only thing I ever felt unprepared for was knowing who and what was involved during each design phase (permits, sub contractor coordination, etc). However, once in the field, I learned all of that very quickly. If there was more of an emphasis on it during school, I'm sure my design education would have suffered.

How could the program better prepare students for transitioning to professional life?

By improving the teaching of the basic skills needed for working in an office environment including space programming, local building construction methods, building construction detailing, and relevant software including BIM. In general the program is weighted too heavily on the theoretical, whereas it needs to be evenly balanced with the practical to better prepare students for the field.

Provide students with opportunities to learn about the business of architecture.

Although the program develops a sense of hard work in the students, it could better prepare graduates for professional working life…

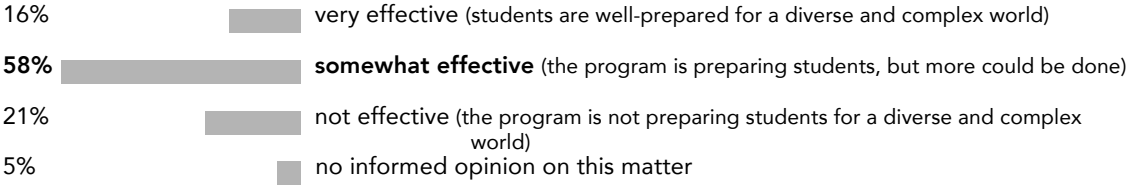
More needs to be done to ground student projects in the real world.

I think all graduates from the program are hard workers and this work ethic translates to the office. However, I felt very under qualified leaving school. I am now a registered architect, but I feel I have learnt almost everything through working in the field.

D. Architecture Education and the Profession

[CACB 3.1d]: *The program must demonstrate how it prepares students to practice and assume new roles within a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base.*

To the best of your knowledge, how effective is the program in preparing graduates to perform responsibly in a diverse and complex world?



The most recurring positive comment in this area had to do with the program's embrace of diversity. Graduates are introduced to diverse career paths and to a variety of ways of performing architectural work. Respondents recalled exposure to many different studio topics, and to faculty who encouraged open-minded approaches to design problems. Alumni feel the program prepared them for professional life by honing their critical thinking and presentation skills, and by encouraging a dedicated work ethic. Some feel the program could do more to prepare students for the profession by teaching industry software (such as Revit), and by focusing more on technology and building code. Others deemed legal and interpersonal skills to need more attention, such as dispute resolution, contractor negotiation, collaboration, listening and public speaking. Several Alumni voiced support for a coop program as a way to introduce students to the demands of practice. A selection of representative responses follows:

How does the program best prepare students for practice in an increasingly diverse and complex world?

Exposure to a variety of studios.

The program helps prepare students to think critically about design and to consider ethical questions pertaining to the evolving world and industry we dwell in.

A great strength of the program is that it provides a broad range of approaches to architectural questions, showing students that there are many potential career paths.

I think one of the best elements of the program is that it was not narrow-minded. It made very obvious to us the huge range of possibilities within the architectural profession. Further to this, the program demanded a work ethic and open-mindedness that is not seen from other schools.

Keeping young professionals in a state of receptiveness to alternative ideas and fighting the dogmas of a singular perspective are areas in which the program excels.

By encouraging exploration, inclusivity, research and questioning during design stages.

The worst thing the program could become is a technical training facility that generates grads who have lost the ability to critically think about what they are doing.

How could the program better prepare students to practice in a diverse and complex world?

By introducing them to more real world projects with real world clients so that the students understand that architecture is not a self-serving endeavour but rather a way of serving others and understanding their needs.

Impart knowledge of 'real world' considerations - zoning, regulations, by-laws, as well as exposure to related tradespeople.

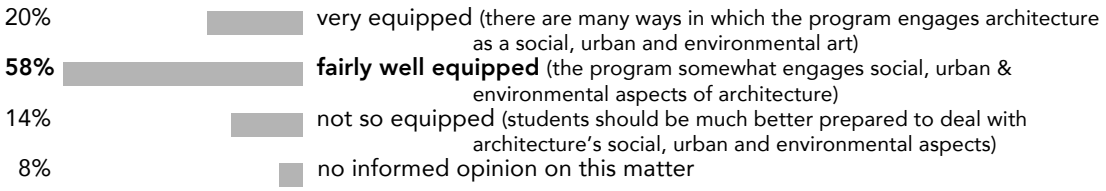
Connecting with other faculties and disciplines to explore deep collaboration and understand the strengths these disciplines can bring to design, and design can bring to these other disciplines

Talk to employers in Manitoba and other provinces to find out what they are looking for in a portfolio of a new graduate, and how the work and experience level they see in applicants from the U of M compares to other schools. Or perhaps implement a coop program?

E. Architecture Education and Society

[CACB 3.1e]: *The program must demonstrate that it equips students with an informed understanding of social and environmental problems and that it also develops their capacity to help address these problems with sound architecture and urban design decisions.*

To the best of your knowledge, how well equipped are architecture graduates to design in relation to social, urban and environmental issues:



Many respondents agree that there are several program areas successfully introducing students to the complexities of social and urban environments, including field trips (local and global), urban-based studio projects, and community-oriented design-build projects. Individuals also value the graduate Topics courses, the undergraduate History/Theory courses, and the Cultural Events lecture series as good forums for learning about architecture as a social art. Many recalled having a culturally suggestive program as the point of departure for a design studio, and exploring such topics further as part of their thesis. Some Alumni, however, remembered studio projects as being detached from "real" urban issues, and perceived the school to be "cloistered." Several respondents noted that any discussion of cultural significance was dependent on the individual studio instructor. Some suggested that the program could do more to encourage students to become involved with current issues by attending city council meetings and planning sessions, volunteering with local organizations, and working directly with clients. Others advocated for study abroad programs, more foreign travel and professional work experience. While social and urban issues may be adequately covered in the program, some suggested that environmental topics need more attention. A selection of representative responses follows:

What are the best ways in which the program prepares students for engaging social, urban and environmental conditions?

I think everyone in society would benefit from more liberal arts training, including design students.

Many of the studio groups focus their study on social issues and students are often encouraged to pursue projects that tackle social or environmental issues.

The program has a healthy focus on the idea that the built world has direct consequences for the social realms that inhabit it.

The lunchtime/evening lectures and Arch 2 gallery exhibitions allow students to see more of what is outside of our classes, city, country, etc. Subject matters are diverse and touch on social, urban and environmental matters and how they relate to architecture and design practice.

When it comes to engaging social and urban, I think the students are fairly prepared. But the environmental conditions, such as new technologies, energy code and sustainable building designs are not as emphasized.

How could the program better prepare students to address social, urban and environmental conditions?

Have more of a relationship to the city and the issues that are embedded in the fabric of Winnipeg.

Broaden the focus of design from new building to promoting and encouraging the adaptive reuse of existing buildings and heritage stock. Balance global issues with local - dig deeper into local history & geography to better understand and appreciate our place in the world.

Get into the city more. Encourage and make space for a life outside of school.

More technical studies of site conditions, including geology and ecology (and other areas outside the profession of architecture), might assist students in better recognizing the realities of context and environmental conditions.

3.2.4 Architectural Community Assessment

Description of the Architectural Community Self-Assessment Process

To ensure the broad architectural community had opportunity to share views on the program's overall curriculum and learning context, and to complement the digital Alumni survey with a more personal forum for conversation, three public engagement sessions were organized with the support of the Faculty of Architecture Partners Program Office. Partner firms hosted the sessions. Individuals wanting to participate could choose the most convenient of the three sessions. The notice below was sent to Faculty of Architecture Alumni and Partner firms, via the Partners Program, and to all professional members, via the Manitoba Association of Architects.

From: **Brandy O'Reilly** Brandy.OReilly@umanitoba.ca
Subject: **Architecture Partners Engagement Meeting**
Date: June 12, 2017 at 2:27:18 PM
To: [Architecture Alumni; Faculty Partners; MAA Executive Director]
Cc: Lisa Landrum Lisa.Landrum@umanitoba.ca, Carlos Rueda Carlos.Rueda@umanitoba.ca

Sent on behalf of the Department of Architecture, Faculty of Architecture, University of Manitoba:

The Department of Architecture at the University of Manitoba has scheduled three outreach sessions to solicit feedback from the architectural community on the program's overall curriculum and learning context. Discussion will be framed by five Perspectives, considering architectural education in relation to: a) the Academic Context; b) Students; c) Registration; d) the Profession; and e) Society. For more information on these Perspectives, see here.

As you may know, the Department of Architecture is currently conducting an alumni survey (closing June 20th), also framed by these Perspectives. Discussion at the upcoming meetings will supplement the survey. Feedback will be synthesized and incorporated into the Architecture Program Report (APR), currently being prepared for the next Accrediting Team Visit by the CACB (Canadian Architectural Certification Board).

We hope you will be able to attend one of the following sessions:

Thursday, June 22, noon-1:30pm, at Architecture49, 1600 Buffalo Place
Monday, June 26, noon-1:30pm at Number TEN Architectural Group, 310-115 Bannatyne Avenue
Wednesday, June 28, 5:00-6:30pm – at Stantec 500-311 Portage Avenue

Thank you to our Partner firms for hosting these important meetings!

Interns and architects, alumni and non-alumni are invited to participate. Light snacks will be provided.

Discussion will be led by Lisa Landrum and Carlos Rueda, Associate Head and Head of the Department of Architecture.

Please RSVP to Brandy.OReilly@umanitoba.ca by June 20th indicating which session you will attend.

—
Brandy O'Reilly
Communications and Special Projects
Faculty of Architecture & Faculty of Engineering

Rm 212, John A. Russell Building
Faculty of Architecture
University of Manitoba
204-474-7938
brandy.oreilly@umanitoba.ca

In total, the sessions involved **about 40 participants**, including senior architect partners, retired MAA members, interns and architects (both alumni and non-alumni), and representatives from the construction industry. Following a brief introduction about the program and the accreditation process, discussion ensued framed by the five Perspectives, which were distributed in advance and provided on a hand out. The APR student assistant helped with note taking. A summary of the feedback from all three meetings follows. Emphasis is given to suggestions not previously raised in the Student and Alumni self-assessments.

ARCHITECTURAL COMMUNITY RESPONSES:

A. Architecture Education and Academic Context

Collaboration: Working with other specialists is increasingly important for practicing architects. The program should continue to cultivate interdisciplinary opportunities within the University to help prepare students for collaborative teamwork. Beyond the obvious disciplines (Engineering and Art), electives and shared coursework in other areas could be considered, such as literature, history, business, economics, politics, and technical specialties like acoustics and lighting. Environmental sciences are also important, as architects are having more conversations with clients about energy efficiency, global warming, and achieving Net Zero. New research methodologies as well as outcomes should be explored. Well-rounded practitioners collaborate with various entities – bankers and politicians, as much as builders and clients. Strategic and enlightened interactions with non-architects are essential.

Regional Context: The academic context extends beyond the University of Manitoba. In Winnipeg, other institutions, including Red River College, as well as industries and professions also pursue research and continuing education. The architecture program could consider becoming more involved with regional technical advisory boards, such as the BETAC Industry Advisory group (Building Envelope Technology Access Centre). Participation may provide program enhancement and engagement with market trends.

Software Skills: Competence in industry software (such as Revit) is important to employers and grads. While teaching software may not merit dedicated graduate-level courses in the University context, the architecture program should find ways to expose students to software and integrate them in design work.

B. Architecture Education and the Students

Learning Path: Students benefit from seeing a clear path of their curriculum so they can understand expectations, set goals, plot their journey, anticipate options, and measure progress. Such a path could be more clearly presented on the program website. Together with this, students should be able to easily navigate elective options – including interdisciplinary electives.

Studio Setting: The physical environment of an architecture school plays a significant role in educational practices. Architecture studios have transformed in recent decades – they are no longer an array of individual drafting tables. The UM architecture program should consider transforming / updating its studio environment to better enable flexibility and collaborative design; for instance, by limiting personal space; introducing group work areas; creating permanent break-out areas for industry stakeholders or visiting critics to participate and connect with students. Defining spatial needs and designing the studios is an architectural project that itself merits consideration in studio.

Diversity: Studying amid diverse student peers is valuable both during and after school, as classmates relocate after graduation and become potential collaborators across the country and around the world. It's important that the program continue to draw students from all Canadian provinces and diverse countries. This adds richness to the school and the city. It is also stimulating to have grad students serve as critics to undergraduates (and vice versa). Similarly, it is important to learn from diverse instructors, including outside design consultants and different studio advisors.

International Opportunities: Students presently take field trips to regional and global destinations in the context of individual courses, but there are few organized international initiatives. Other schools, like Laval, have robust international programs cultivating cultural exchange, and language skills in addition to architectural education. Programs facilitating workshops at the University of Manitoba with international visiting professors could also be developed with proper funding.

C. Architecture Education and Registration

Curriculum: Students currently take the Professional Practice and Legal Aspects courses in their M1 year. By the time they graduate in M2 many need a refresher on how to commence the internship process and prepare for registration. Would the program consider moving these courses to the second year? Or, could

a refresher workshop be organized for students upon completion of their thesis? On the flip side, introducing the registration process to students earlier—in the undergraduate option years—may help students with summer employment and with decisions about pursuing a professional field.

Look beyond Manitoba: Not all graduates will become registered in Manitoba, or in this province alone. Students should be introduced to registration processes in other Canadian and international jurisdictions, including NCARB in the United States. Representatives from other provinces, especially Ontario and B.C., could be invited to share pictures of practice elsewhere.

Professional Mentors: Students and professionals benefit from interacting during their studies. Could we establish a professional mentor program that aligns a registered architect with an architecture student? This would build on the success of other initiatives, including the interdisciplinary Meet Mentor and Mingle (organized by the Faculty's Partners Program), and the MAA Meet and Greet (organized by UMAAS).

Professional Reciprocity: International architects seeking licensure in Manitoba sometimes have educational requirements to fulfill in order to practice locally. Perhaps the architecture program and the provincial licensing authority could collaborate in helping new Canadians on the path to registration.

D. Architecture Education and the Profession

Work Placements/Co-op: Summer work opportunities at architectural firms or in allied disciplines are great ways for students to learn about the field. Working hands-on with contractors or in the building trades are also valuable experiences for designers. The Faculty of Architecture recently committed to pursing a Co-op/Work Integrated Learning Program – details will be developed in the coming year. The architectural community enthusiastically welcomes this initiative.

Case Studies: Case study teaching is a good way for students to learn about practice, whereby experienced architects discuss particular projects, together with all the contradictory challenges and opportunities encountered during the design and construction process. The program should continue this method, which is already incorporated in technology courses and comprehensive design studios.

Communication: It is important for architects to develop the "soft skills" necessary to effectively communicate and negotiate with a wide variety of individuals involved in projects. Inviting diverse players to speak about architectural projects from their point of view would help impart a lively picture of the profession. Such consultants may include City of Winnipeg officials, planners, code writers, technical consultants, clients, contractors, legal experts, etc. Architects must be able to work within jurisdictional limitations, but also know how and when to creatively and prudently "bend the rule" (or advocate for a law to be rewritten for the better of society). For architects, conflict resolution is as important as marketing an idea. Architects are developers as much as designers. It is important to cultivate confidence in all areas of communication in school.

Decision-Making: In practice, architects make numerous decisions, many requiring urgency. Architectural education should help students develop the broad knowledge base and theoretical understanding that help ground and direct practical decision-making.

E. Architecture Education and Society

Program Strength: The architectural community is generally impressed with the social consciousness, worldly interests, motivation and creativity of the program's graduates. While some wish graduates were more technically adept and better versed in realities of construction and business, many appreciate the vitality UM graduates bring to an architectural office and find the intern process mutually enriching.

Indigenous Support: The Faculty should take strides to help correct the paucity of Indigenous architects in Canada. University initiatives already underway should be expanded. The RAIC's recent Indigenous Symposium (May 2017) is one example of how the profession is taking action to address the issue.

Advocacy: The MAA is a regulatory association. Its mandate does not extend to public advocacy. Individual professionals and StorefrontMB do a lot to engage the public and school children in programs geared toward educating society about what architects do and the value architecture adds to cities and social well-being. The University can play a bigger role in reaching out to potential students (before they enter University) and to the general public to deepen the appreciation of the profession. The Faculty of Architecture, StorefrontMB, and MAA members – perhaps with the support of the RAIC – could find more ways to collaborate in this shared initiative.

Learning to Learn: Creating the complete graduate – one who is knowledgeable and capable in all technical, cultural and creative areas – is a challenge. Perhaps the best goal is to produce graduates who love learning. Professional architects are life-long learners. They must be open-minded and always willing to think differently in new situations. Architects must be "functional polyglots": capable of many languages and many skills, able to speak with and listen to many people with different perspectives. Although architects are designers of worlds, they are also participants in worlds larger than themselves. Teaching insatiable curiosity is a priority.

Each engagement session ended with a mutual commitment to continue such forums of communication between the program and the architectural community.

Self-Assessment Meeting with MAA Council

The Program's self-assessment process with the architectural community culminated with a 2.5-hour lunch meeting at the MAA offices on June 29th, 2017. The Program Head, Associate Head and Faculty Dean met with the Executive Director and thirteen members of the MAA Executive Council, including the current and two immediate past MAA Presidents. The purpose of the meeting was to update the MAA on program preparations for the next CACB Team Visit and to discuss shared interests and concerns.

Dean Beddoes described some new initiatives and provided details on how the 2015 Visiting Team's "Causes of Concern" are being addressed. The presentation emphasized the following points:

- There is no plan to merge the Faculty of Architecture with any other University entity. The Faculty of Architecture and Department of Architecture will continue to operate as a Faculty and Department.
- The University is dedicated to the architecture program and is investing to ensure its success.
- The Architecture 2 Building will undergo major studio upgrades, supported by a University of Manitoba Teaching Laboratory Renewal Fund. The work, including over $1 million budgeted for infrastructure improvement and furnishings, is underway. The project will be completed over summer 2018.
- The Faculty has committed to developing a Cooperative Education/Work Placement program. One student is already working in Iqaluit as a Facility Planner for the Government of Nunavut. The Faculty will hire a Co-op Assistant this summer. The goal is to have about 12 placements by summer 2018.
- Concerning Human Resources – since the last accreditation the Department of Architecture has hired a full-time Head (Rueda); a full-time Assistant Professor in Building Technology (Minuk), and initiated a search for a full-time Assistant Professor in Building Systems, with a target start date of January 2018. Additionally, a CAST Coordinator has been hired (Veness), appointed half-time in CAST and half in the Department of Architecture. The program will benefit from other Faculty academic appointments, including a new full-time Instructor in ED/Landscape (starting July 2017), and current searches for an Indigenous Scholar and an Assistant Professor in Landscape. New support staff appointments since the last accreditation include a new part-time Financial Assistant, and a full-time Coop/Awards Assistant.
- Concerning Governance – since the last accreditation, a new Dean, new Department Head, and new ED Program Chair have been appointed. Systems of leadership and accountability have been improved, in part, by reconstituting the membership of EDPAC, the committee that advises Faculty Council on the undergraduate Environmental Design Program. With Department Heads now serving as members of EDPAC, there is greater collaboration on the governance of ED foundation and option years, and improved communication and clarity regarding undergraduate and graduate governance.

- Concerning Morale – since the last accreditation there have been three Faculty Retreats and two special Faculty Council meetings, each well attended by academic, administrative and support staff, as well as student representatives. These open discussions helped to collectively define priorities and are renewing a sense of trust. In the last 2 years, no faculty member has resigned.

Carlos Rueda and Lisa Landrum provided further information on improvements to the program curriculum, and summarized feedback received from the recent Alumni Survey and public engagement sessions.

Discussion points included the following:

- The MAA is interested in having a strong school of architecture in the province; is concerned about the 2015 VTR; and is hoping the program will receive a full 6-year accreditation after the next 2018 visit.
- The MAA President requested an advance copy of the APR in progress.
  - > It was explained that the APR is proceeding well; many parts are in progress; important sections have been drafted; a competent team is preparing it; and many faculty members and support staff are involved in contributing elements of the report. Due to the complex nature of its preparation, the APR will remain an internal document until after its submission to the CACB on September 15th, 2017. The Head, Associate Head and Dean would be pleased to provide future updates on its progress over the summer and to make the completed document available at an appropriate time.
- The MAA and DoA are committed to reactivating the MAA-DoA Strategic Committee, to help ensure good communication between the academic and professional community, and to establish a forum for on-going self-evaluation of the program. The Department of Architecture has indicated that Carlos Rueda and Lisa Landrum are its representatives; the MAA will decide on its representatives soon.
- Some MAA council members expressed concern that foundation courses at the ED1/U1 and ED2 levels are not counted as satisfying CACB Student Performance Criteria (SPC).
  - > It was emphasized that the foundation courses are very important, providing valuable introductions to the different design and planning disciplines in the Faculty. These ED1 and ED2 courses provide a broad knowledge base to help students choose a disciplinary-specific stream, beginning in ED3. Consistent with the other professional programs in the Faculty of Architecture, with other architecture programs in Canada, and with the recommendations of the 2015 VTR, the multidisciplinary foundation courses in ED1/U1 and ED2 will not be shown as satisfying SPC's.
  - > It was pointed out that the 2014 APR was not clear in representing how SPC's are distributed in the ED program. The 2015 VTR noted this inconsistency. It was this inconsistency in representing the curriculum – *not* the curriculum itself – that led to confusion. The architecture program Head, Associate Head and Dean are confident the 2017 APR is addressing this concern and are working together to ensure the document will be as clear and consistent as possible.
- Some MAA council members expressed concern that the Architecture Master Preparation program (AMP), which allows students with non-design and non-architecture degrees to enter the program at the ED3 or ED4 levels, may be unduly restricting the professional curriculum to the ED3 and ED4 levels.
  - > It was noted that this Faculty-wide decision about curriculum distribution was not a restriction. The AMP program positively enables a number of strong applicants with diverse degrees (in Arts, Science, Business, Philosophy, Geography; etc.) to pursue a professional architecture degree in a reasonable amount of time (3 or 4 years, depending on their first degree). This program of study is consistent with other professional Master of Architecture programs. It was also emphasized that students with alternative degrees already have a broad academic foundation, comparable to what ED1/U1 and ED2 students would have. All issues related to transfer credits and advance standing in courses are reviewed carefully as part of the normal M.Arch and AMP admissions process, as is consistent with other professional programs at the University of Manitoba and across Canada.
- The MAA expressed support for strong foundational education, and view the ED program as unique and valuable.
  - > The Department of Architecture supports the ED program. It was noted that the Faculty intends to continue delivering ED courses that are relevant to the professional program, and are in the midst of implementing curricular improvements to ED1 & ED2 courses to strengthen students' preparation.
- Everyone agreed the session was valuable, and committed to continuing such conversation.

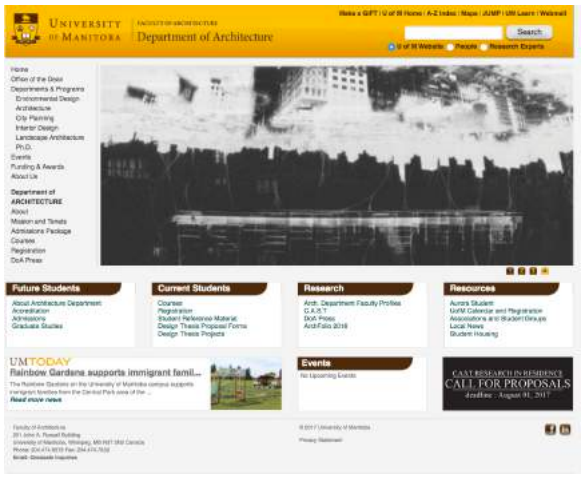
3.3 Public Information

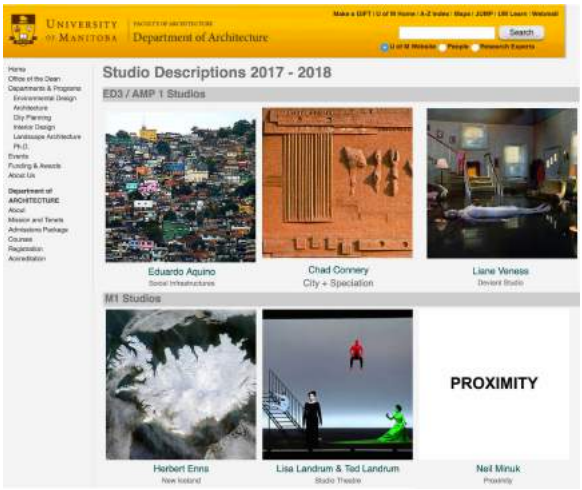
The program must provide clear, complete, and accurate information to the public by including in its academic calendar and promotional literature the exact language found in Appendix A-1, which explains the parameters of an accredited professional degree program. Candidate programs must include, as well, the exact language found in this appendix on the parameters of candidacy status.

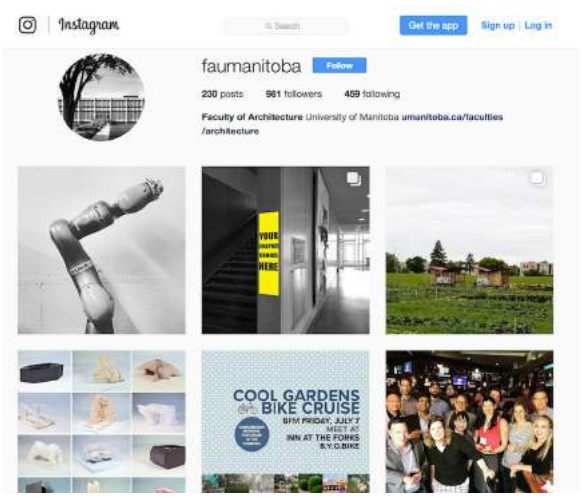
The APR must include:

- *The program description as it appears in the university's academic calendar or any other institutionally-authorized printed or digital materials;*
- *Evidence that all faculty and incoming students have been provided with a printed or digital copy of the Guide to Student Performance Criteria.(In the event of a change in these criteria, the revised inventory must be re- issued to all faculty and students).*

The website of the Department and Faculty of Architecture provide information and links to all relevant program literature. The Head, Associate Head and others work with Student Services, the Dean's office, and the Faculty Partners Program/Communications office to ensure information is accurate, consistent, clear and up to date. The website is the official face of the program to prospective students and the public. It is an important tool for recruitment, alumni relations and communication with stakeholders, including academic, professional and research partners. The website is also a key interface for current students and faculty, who look to it for current schedules, event notices, forms, policies, procedures, and enrichment opportunities. The Faculty of Architecture also maintains a popular Facebook and Instagram account for announcing events and opportunities, and staying in touch with students, alumni and friends.







The Faculty of Architecture homepage features links to each Department and Program (Environmental Design, Architecture, City Planning, Interior Design, Landscape Architecture, and the Ph.D. in Design and Planning), together with Events, Funding and Awards, the Partners Program, as well as links to current media in the UMToday newsletter, Facebook and Instagram. The following links are also provided:

Students	Faculty & Staff	Facilities	Faculty Highlights
Who do I contact?	Deans & Heads	CADLab	UPCOMING EVENTS
Aurora Student	Academic Staff List	FABLab	NETWORK 2016
Tech Fee Fund	Administrative Staff List	C.A.S.T.	Student Ambassadors
Imp. Dates & Deadlines	Academic Handbook	Workshop	Ditchball
Employment Opportunities	Research	Product Catalogue Coll.	Atmosphere 9
Warehouse Journal	Faculty Council	Architecture Library	

The Department of Architecture homepage features links to an introduction *About Architecture*, the Department Mission and Tenets, Program Admissions, Courses, Registration and Accreditation, as well as links to upcoming events and current media in the UMToday newsletter, Facebook and Instagram. The following links are also provided:

Future Students	Current Students	Research	Resources
About Architecture	Courses	Faculty Profiles	Aurora Student
Accreditation	Registration	C.A.S.T.	UM Calendar
Admissions	Reference Material	DoA Press	Student Groups
Graduate Studies	Design Thesis Forms	ArchFolio 2017	Local News
	Design Thesis Projects		Student Housing

About Architecture | http://umanitoba.ca/faculties/architecture/programs/architecture/about.html

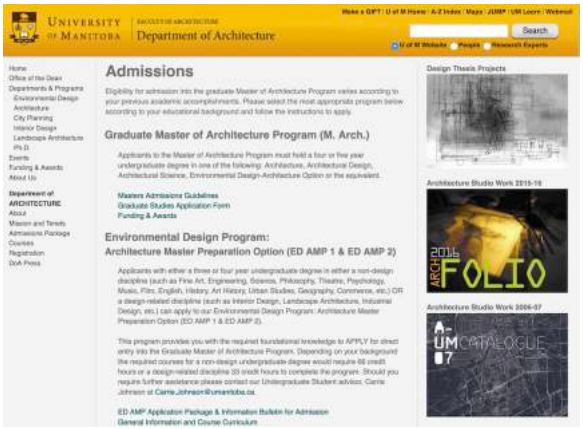
The Department of Architecture offers a program of studies directed towards a fully accredited professional Master of Architecture degree.

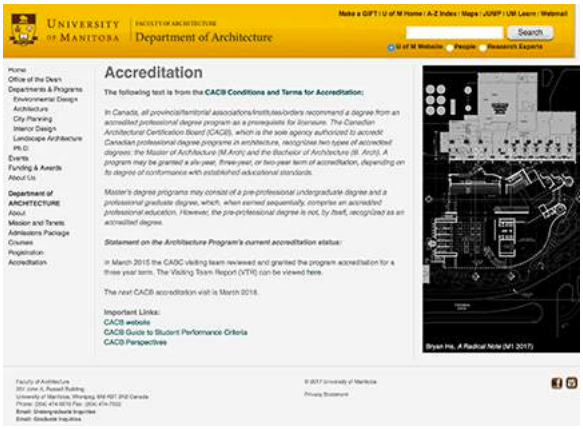
People, place and passion make our architectural program unique, imaginative and real. Our urban-prairie setting is Canada's central crucible of creativity and cultural complexity, offering fertile grounds for work that is as artistically ambitious as it is socially and environmentally responsible. Our faculty and students are dedicated to advancing the discipline, and everyone shares a passion for hands-on making and research. We explore, discover and learn through making.

The core of our curriculum is the design studio. This is the place where thinking and doing converge in heuristic acts of making and world-making. In studio, students work through a variety of challenging questions, media and scales to explore vital tensions between technical and natural processes, cultural and artistic practices, experiential qualities and worldly phenomena. Design studio enables individuals to experiment widely, while ultimately making responsible design decisions for local situations in a dynamically interconnected world.

Studios are augmented by a growing array of making and thinking facilities: a FABLab, CADLab, Workshop, Architecture/Fine Arts Library, and Centre for Architectural Structures and Technology (C.A.S.T.). Architecture students benefit from interactions with colleagues in our Faculty's kindred disciplines (Environmental Design, Interior Design, Landscape Architecture and City Planning) and across the University. Students design everything from adaptable furniture to sustainable cities, from enduring buildings to transformative events. In the process we learn how the built environment not only supports and enhances lived experience, but is also meaningfully shaped by personal and collective imagination.

Architecture students in our program are fueled by their own expanding curiosities and convictions, guided and challenged by professors engaged in diverse research, and invigorated by conversations and collaborations with professionals, industry partners, community members, and international leaders in architecture and design. Most graduates gain employment in the field, and pursue a path toward professional registration and careers as practicing architects. Other graduates continue with more advanced academic studies and research, and/or thrive in the arts, public service, the construction industry, and related design fields. The program produces graduates capable and eager to contribute to improving the built environment and the public good.





Admissions | http://umanitoba.ca/faculties/architecture/programs/architecture/admissions_package.html
The Department of Architecture provides two admissions brochures on its admissions webpage:

- Graduate Master of Architecture Program (M.Arch)
  - with detailed guidelines; admission requirements and deadlines; portfolio guidelines; a link to the Faculty of Graduate Studies application form; and link to Faculty funding and awards;

- Undergraduate ED Program – Architecture Master Preparation Option (AMP1 and AMP2)
  - with guidelines in the Applicant Information Bulletin; admission requirements and deadlines; portfolio guidelines; links to undergraduate application forms and to course information.

The Faculty of Architecture, Environmental Design Program provides an admissions page with information on applying to the undergraduate ED program, including a detailed Applicant Information Bulletin, deadlines, portfolio guidelines, etc. http://umanitoba.ca/faculties/architecture/programs/edesign/ED_admissions.html

Accreditation | http://umanitoba.ca/faculties/architecture/programs/architecture/architectureaccreditation.html
The Department of Architecture's Accreditation webpage provides links to the CACB Guide to Student Performance Criteria, the CACB Perspectives, the CACB Accreditation homepage, and the Visiting Team Report from our last 2015 accreditation, together with this information:

The following text is from the CACB Conditions and Terms for Accreditation:
In Canada, all provincial/territorial associations/institutes/orders recommend a degree from an accredited professional degree program as a prerequisite for licensure. The Canadian Architectural Certification Board (CACB), which is the sole agency authorized to accredit Canadian professional degree programs in architecture, recognizes two types of accredited degrees: the Master of Architecture (M.Arch) and the Bachelor of Architecture (B. Arch). A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Statement on the current accreditation status:
In March 2015 the CABC visiting team reviewed and granted the program accreditation for a three year term. The Visiting Team Report (VTR) can be viewed here.

The next CACB accreditation visit is March 2018.

Important Links:
CACB website
CACB Guide to Student Performance Criteria
CACB Perspectives

ACADEMIC CALENDARS | http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx

GRADUATE CALENDAR (excerpts):

http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=320&chapterid=3851&loaduseredits=False

Architecture Graduate Program Information (M.Arch)

Application Deadline
January 15 for all Canadian/US and International applicants.
September admissions only.

Introduction
Architecture deals with a complex intertwining of artistic, social, cultural and practical concerns. The Master of Architecture Program provides students with the opportunity to learn the tools to synthesize these issues and develop the conceptual, practical and formal skills to take command of the subject. Much of the study is research based with an emphasis on structured learning through finding out, rather than prescriptive instruction. The Program offers a diverse range of research areas and offers a choice of studios and seminars for Master of Architecture students. All of our highly motivated professors are engaged in active research and/or practice. Rather than having an emphasis on either the conceptual or practical side of architecture, our program concentrates on the relationship between the two, with many studios undertaking various forms of critical making as part of their teaching. Many of the studios run study trips abroad.

The department offers a lively environment to study the subject with diverse studios, history and theory seminars as well as innovative and engaging technology courses. An international array of lecturers augments the internal lecture program. The series combines world famous architects, artists and designers with emerging young talents. The Faculty of Architecture also runs an exceptional exhibition program.

Program Information
There are different ways to become eligible to apply for the Master of Architecture Program.
1. Direct Entry
All applicants must meet the general admission and entrance requirements of the Faculty of Graduate Studies. The entry level into the program will be determined by the Department of Architecture Admission Committee's evaluation of the individual's application and supporting documents. Direct admissions to the M.Arch Program requires that applicants have a minimum of an honours four-year undergraduate degree in one of the following: Architecture, Architectural Design, Architectural Science, Environmental Design/Architecture option, or the equivalent, from a recognized college or university, with minimum GPA of 3.0 or equivalent B in the last two full years (60 credit hours) of study.

For those applying with a University of Manitoba Bachelor of Environmental Design degree a minimum of "C+" in courses EVAR 4002, EVAR 4004, EVAR 4008, EVAR 4010 with a minimum GPA of 3.0 in the last two full years (60 credit hours) of study is required.

Please refer to the following web page for more information:
http://umanitoba.ca/faculties/graduate studies/admissions/programs/architecture.html

2.Architecture Master's Preparation (AMP 1 & AMP 2) Undergraduate Program
For applicants who have a recognized three or four year undergraduate degree in either a non-design discipline (such as Fine Art, Engineering, Science, Philosophy, Theatre, Psychology, Music, Film, English, History, Art History, Urban Studies, Geography, Commerce, etc)

OR

a design-related discipline (such as Interior Design, Landscape Architecture, Industrial Design, etc.) and wish to eventually apply to the Master of Architecture Program.

General Eligibility: All applicants must meet the general admission and entrance requirements set by Environmental Design: Architecture. The entry level into the program will be determined by the Department of Architecture Admissions Committee's evaluation of the individual's application and supporting documents. http://umanitoba.ca/faculties/architecture/programs/edesign/ED_admissions.html#amp

NOTE: Upon successful completion of the AMP Program students wishing to continue into the M.Arch Program must officially apply for graduate admission. Evaluation is based on the student's progress in the AMP Program, as evidenced in a portfolio submission, GPA and a Faculty of Graduate Studies application.

Research Facility
The Centre for Architectural Structures and Technology is an architectural research laboratory that embraces both the poetic and technical dimensions of architectural design. The work of C.A.S.T. seeks new boundaries for creative thought, design, and building technology. We do this work through physical explorations of materials, tools and building methods, the study of natural law, and the free play of imagination. http://umanitoba.ca/faculties/architecture/cast/

Ph.D.
A Ph.D. in Design and Planning is offered.
http://umanitoba.ca/faculties/architecture/programs/Phd/index.html

Accreditation
Our graduate program received a three-year accreditation effective January 1, 2015.

In Canada, all provincial/territorial associations/institutes/orders recommend a degree from an accredited professional degree program as a prerequisite for licensure. The Canadian Architectural Certification Board (CACB), which is the sole agency authorized to accredit Canadian professional degree programs in architecture, recognizes two types of accredited degrees: the Master of Architecture (M.Arch) and the Bachelor of Architecture (B. Arch). A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Program Requirements
Minimum program requirements of the Faculty of Graduate Studies are found in the Graduate Studies Regulations Section of this calendar.

Degree Requirements: 48 credit hours

Second language reading requirement: none

Expected time to graduation: 2 years full-time study

For M.Arch course sequence and course descriptions, see below Section 3.11 and 4.3.

UNDERGRADUATE CALENDAR (excerpts):

http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=320&chapterid=3913&topicgroupid=21037&loaduseredits=True

FACULTY OF ARCHITECTURE

1. Degree Programs Offered

Program/Degree	Years to Complete	Total Credit Hours
Bachelor of Environmental Design	4	129
Bachelor of Environmental Design: Architecture Masters Preparation Option (requires completion of previous degree)	1 or 2	33 or 66

Available Options

The Bachelor of Environmental Design Degree Program requires students to declare a specific Program Option after the second year of studies (ED2). […] The selection of students into these Options will be based on the GPA, a Portfolio and Statement of Intent. Students entering the Program should be aware that entry into the Options will be assigned on a competitive basis, and that not all students may be successfully placed in their first choice. […]

Architecture Option

The Architecture Option offers a program of studies that focuses on transforming the lessons of history, technology, culture, the environment, and regional and social aspirations into a program for architecture. Students have the academic freedom, one of the program's highlights, to experiment with ideas and methods as they develop their own personal and critical approaches to architectural design. The sequential design studios and supporting courses cover a wide spectrum of investigations ranging in scale from urban design to individual buildings to their construction details, examining the impact of all of these on the environment.

Interior Environments Option

The Interior Environments Option provides an opportunity to study the design of interior spaces within the context of architecture and to investigate the design of objects within the contexts of the human body and interior spaces. Students enrol in a series of design studios and courses to explore the impact of interior environments on human beings and vice versa. The impact of technology – especially sustainable strategies – on buildings and their inhabitants is also studied.

Landscape + Urbanism Option

The departments of Landscape Architecture and City Planning offer a joint option in Landscape + Urbanism for students who have a broad interest in understanding and shaping human settlement and habitat. Design studios and supporting courses recognize that we live in an increasingly globalized world where issues of natural resource depletion, climate change and the demand for sustainable development are paramount. Design and planning issues are addressed within the social, economic, and political contexts that drive development and of the cultural and ecological forces that create the built environment.

[…]

2: Admission Requirements

2.1 Bachelor of Environmental Design (B.Env.D)

To be considered for admission into the Bachelor of Environmental Design Program an applicant must have completed 30 credit hours of university-level coursework with an overall minimum adjusted grade point average of 2.50. For a detailed outline of the admission requirements please see our web site.

2.2 Bachelor of Environmental Design - Architecture Master Preparation Option (ED/AMP)

Enrolment in the Environmental Design Master Preparation Option is competitive and limited. Students will be admitted on the basis of an annual selection process. Applicants satisfying the minimum academic requirements are eligible for consideration at the discretion of the Department of Architecture Admissions Selection Committee. For a detailed list of the admission requirements please see our web site.

[…]

For B.Env.D. course sequence and course descriptions, see below Section 3.11 and 4.3.

UNDERGRADUATE CALENDAR (excerpts/con't):

FACULTY OF ARCHITECTURE
1. Degree Programs Offered

4.2 Bachelor of Environmental Design - Architecture Master Preparation Option (AMP 1 and AMP 2)
The Faculty of Architecture offers a Bachelor of Environmental Design Architecture Master Preparation Option (ED AMP) for students who have a recognized first degree in either a non-design or a design-related field of study and who have an interest in pursuing the graduate degree in Architecture. These students may apply and be admitted through the Environmental Design Program where they will be enrolled in the Environmental Design Program: Architecture Master Preparation Option. There are two different streams available:

Stream One: ED Architecture Master Preparation Option 1 (ED AMP 1 - two years of study). For those who have no formal design education and have a recognized undergraduate first degree (or are currently enrolled in the final year of a degree program). In order to graduate, students must complete the ED3 and ED4 Architecture Master Preparation Option (total of 66 credit hours). Upon successful completion of all the requirements for this two-year program, students will be eligible to receive a Bachelor of Environmental Design degree.

Stream Two: ED Architecture Master Preparation Option 2 (ED AMP 2 - one year of study). For those who already have an undergraduate design degree (or are currently enrolled in the final year of a design degree program) in an allied design field such as Interior Design or Landscape Architecture, and wish to pursue studies in a graduate degree in Architecture. These students will be considered on a case-by-case basis for placement into the fourth year of Environmental Design Architecture Option, but will be ineligible to receive the Bachelor of Environmental Design degree.

NOTE: Upon successful completion of the undergraduate ED Architecture Master Preparation Option (ED AMP 1 and ED AMP 2), students who wish to continue into the Master of Architecture Program must officially apply for graduate admission. Evaluation is based on the student's progress in either the one or two-year ED Architecture Master Preparation Option, as evidenced in a portfolio submission, GPA and a Faculty of Graduate Studies application.

Students seeking admission into Year 3 of the Program on the basis of work completed elsewhere must have the equivalent coursework and scholastic achievement levels to be admitted. A portfolio review will be part of the admission process along with a statement of intent (300 word maximum). Equivalencies to ED course requirements will be determined by individual instructors of relevant courses and approved by the Environmental Design Program Chair.

For further information on the ED AMP Option, please refer to the following website:
http://www.umanitoba.ca/student/admissions/media/ampp_bulletin.pdf

[…]

Supplies and Expenses
The Faculty of Architecture has an Information Technology Program fee for all enrolling students. A portion of those fees contributes to a Technology Endowment Fund managed by a student-run committee. Remaining funds will be expended on current technology items of direct benefit to students. Further details regarding fees may be found at: http://umanitoba.ca/student/records/fees/986.html#Arch

The Faculty of Architecture offers Field Studies in Years 3 and 4 either as stand alone courses or in conjunction with a design studio offering. These may be regional, national or international. All related costs are to be borne by the students. A valid passport is required. Visas may also be required.

Please refer to the Faculty of Architecture website to note laptop computer and software specifications.

In addition to tuition, student fees, and related expenses, the estimated cost of materials, equipment, and textbooks for students in Environmental Design After Degree is approximately $7,000 per year.

RECOMMENDED ANNUAL CHECKLIST

- Know the degree requirements and university regulations that apply to your program
- Meet with an academic advisor to ensure your academic plan meets degree requirements
- Check in with a career consultant to review progress on your career plan
- Engage in an experiential learning opportunity
- Update your resumé and LinkedIn profile with applicable experiences
- Get involved outside of the classroom and get recognized on your Co-Curricular Record

STUDENT SPOTLIGHT

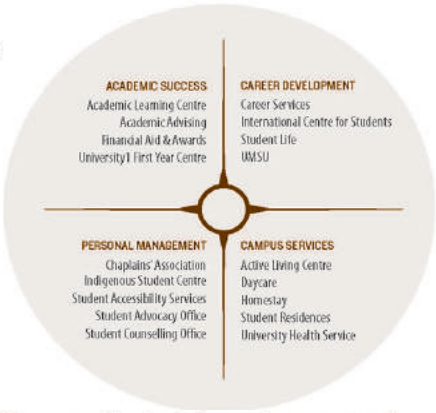
"Every skill or concept you learn, whether it be from Architecture, Landscape Architecture, Interior Design, or City Planning, will help in your future career. To disregard any knowledge because it is seemingly irrelevant to your end goal would be missing an opportunity to learn."

Samantha Blatz, environmental design student

Read stories of alumni and senior students who mapped their own academic and career plan to fit with their skills, abilities and interests: **umanitoba.ca/careercompass**

WE ARE HERE TO HELP

The university wants you to succeed in all areas of your life! Visit these resources and help centres:



This circular model is rooted in Indigenous culture and shows the interconnectedness of development and success.

July 2017

This tool will provide you with the information you need for academic planning and connect you with experiences to develop the knowledge, skills and attitudes that employers are seeking.

ENVIRONMENTAL DESIGN AT THE UNIVERSITY OF MANITOBA

As an environmental design student in the Faculty of Architecture, you will explore the basic knowledge, language and foundational material shared by all environmental design disciplines in year one and two. In years three and four you will focus on discipline-specific design theories and practices. The options below prepare you for graduate studies and eventual professional designation:

1. **Architecture Option:** focuses on transforming the lessons of history, technology, culture, the environment and regional and social aspirations into a program for architecture.
2. **Interior Environments Option:** emphasizes the design of interior spaces within the context of architecture and the design of objects that respond to the human body and to interior spaces.
3. **Landscape + Urbanism:** is suited to students with a broad interest in understanding and shaping human settlement and habitat.

Students with a pre-existing degree can apply to the environmental design Architecture Masters Preparation (AMP) option.

SKILLS YOU WILL GAIN BY STUDYING ENVIRONMENTAL DESIGN

- The ability to interpret, analyze and design the built environment
- The ability to critically examine the impact of cultural, environmental and natural processes and systems
- A knowledge of the principles and applications associated with construction materials and assemblies with an emphasis on resource impact
- The ability to share information using a range of communication methods

FACULTY OF ARCHITECTURE
201 John A. Russell Building
84 Curry Place
(204) 474-6578
env.design@umanitoba.ca
umanitoba.ca/environmentaldesign

CAREER SERVICES
474 University Centre
65 Chancellors Circle
(204) 945-9456
cs.receptionist@umanitoba.ca
umanitoba.ca/student/careerservices

ENVIRONMENTAL DESIGN COMPASS

MAP OUT YOUR CAREER PATHWAY FROM THE START OF YOUR ACADEMIC JOURNEY!

PROGRAM OPTIONS
B.ENV.D: 4 YEARS
B.ENV.D (2ND DEGREE): 2 YEARS

UNIVERSITY OF MANITOBA

WHAT DO EMPLOYERS WANT?

Industries such as construction, design, film and theater, government, retail and service would value an environmental design degree in combination with the employability skills that are highly sought after by employers. These include:*

- Critical thinking
- Teamwork
- Adaptability
- Oral, written and visual communication
- Personal management
- Digital technology
- Industry specific knowledge
- Continuous learning

Attain skills through your classroom education and take advantage of experiential education opportunities.

**Information has been taken directly from Employability Skills 2000 and Workplace Education Manitoba – Essential Skills.*

WHAT IS EXPERIENTIAL EDUCATION?

Experiential education will enhance your classroom education by giving you hands-on experience that will resonate with employers. The University of Manitoba offers a wide variety of programs designed to facilitate your personal growth, create a network and ignite your active engagement in the local and global community.

EXPERIENTIAL EDUCATION OPPORTUNITIES:

- Work experience opportunities
- International student exchanges, international internships and travel study
- Local and international service-learning opportunities
- Undergraduate research and entrepreneurship
- Leadership and volunteer opportunities

The Environmental Design Compass provides you with suggestions of how and when to use opportunities to make the most of your university experience. You may follow these guidelines or map out your own route.

In 2017, the UM Student Affairs office featured the Environmental Design Program in its *Career Pathway* recruitment initiative. This flier/poster was distributed during an open house and uploaded to the website: http://umanitoba.ca/student/careerservices/careercompass/environmental-design.html

UNIVERSITY OF MANITOBA

ENVIRONMENTAL DES

	ACADEMIC SUCCESS	CAREER TIPS
YEAR 1 30 CREDITS	**Course requirements:** EVDS 1600, 1602, 1660 & 1670* and additional courses from the Faculties of Arts and Science. **To do this year:** 1. Meet with an academic advisor in the First Year Centre to ensure you meet admission requirements for the environmental design program. 2. Visit the Academic Learning Centre for workshops or to meet with a learning skills instructor. 3. Apply to the environmental design program by the admissions deadline.	**Start planning your career:** 1. Meet with a career consultant to generate career ideas based on your interests, values, personality and skills. 2. Gather information about occupations that match your skills and interests. 3. Set up a careerCONNECT profile for job and career information. 4. Register for the Co-Curricular Record (CCR), an official record of university-approved activities.
YEAR 2 63 CREDITS	**Course requirements:** Refer to the environmental design website for course availability and the Academic Calendar for requirements. **To do this year:** 1. Meet with an academic advisor and career consultant to map out your options; 2. Be available for the mandatory pre-term orientation and Urban Media Lab (EVDS 2100) two weeks prior to regular session and plan to assist with the preparations for the Year End Exhibition at the end of second term. 3. Upon completion of environmental design 2, submit your ranked options, portfolio and statement of intent.	**Make professional connections:** 1. Join the Career Mentor Program to learn from professionals. 2. Attend career fairs to connect with employers. 3. Join the faculty's Facebook page for event and competition promotions and employment opportunities. **Market yourself:** Attend Juries and Presentations and join the Student Ambassador program. Develop your resumé and cover letter and refine your interview skills.
YEAR 3 96 CREDITS	**Course requirements:** Refer to the Academic Calendar and environmental design website for course requirements and annual availability within your option. ED AMP 1 option: EVAR 3012 (pre-term requirement) **To do this year:** 1. Prepare for EVLU 3006 Landscape + Urbanism pre-term field trip. 2. Contact the Undergraduate Student Advisor to ensure that you have met all the third year requirements. 3. Review the Faculty of Architecture Awards Database.	**Investigate your career options:** 1. Look at sample job postings to ensure you have the qualifications upon graduation. 2. Develop employability and essential skills sought by employers. 3. Create a LinkedIn profile to network with professionals. 4. Join professional associations as a student member in your area of focus. **Consider continuing your studies:** Check out the Faculty of Graduate Studies, Extended Education or other academic institutions.
YEAR 4 129 CREDITS	**Course requirements:** Refer to the Academic Calendar and environmental design website for course requirements and annual availability within your option. **To do this year:** 1. Confirm eligibility to graduate with an academic advisor and declare intent to graduate in Aurora in January. 2. Plan to apply to professional programs by end of the first term.	**Start job search 9 months in advance:** Contact Career Services to refine your job search and self-marketing strategies. You can visit the office up to 6 months after graduation. **If you are continuing on to graduate school:** Finalize your application materials and take required tests. Use the awards database to search for funding and awards to help finance your continuing education. Review the Faculty of Architecture Awards Database for financial opportunities and application deadlines.

Note: *This resource is meant as a guide to provide suggestions throughout your time at university. Develop a plan and timeline that suits you*

SIGN COMPASS

B. Env. D: 4 Years
B. Env. D (2nd Degree)**:** 2 Years

VOLUNTEER & WORK EXPERIENCE

Link experiences to your career interests. Options include:

1. The University of Manitoba volunteer program, Green Team, City of Winnipeg Parks, or use the Manitoba Contact Guide.
2. Student work opportunities including Work-Study, STEP Service or Federal Student Work Experience Program.
3. Experiential education opportunities such as Alternative Reading Week Winnipeg and the Student Leadership Development Program.

Explore student involvement opportunities:

1. Student groups including the Students' Architectural Society and UMSU.
2. Volunteer opportunities such as Habitat for Humanity and the Architecture + Design Film Festival.

Gain relevant experience: Get involved in design events such as the Winnipeg Design Festival and Storefront Manitoba activities and submit work to the Warehouse Journal.

Build your portfolio: Participate in the Warming Huts and other design competitions throughout your degree.

Check out volunteer opportunities: Seek opportunities to volunteer within professional design organizations and companies.

Search for student job opportunities: Search design related businesses and firms. Go to the faculty's volunteer and employment opportunities website for an up-to-date listing.

Use your networks and connections: Inquire about unadvertised job openings (the "hidden job market").

Ensure you have references in place: Ask your professor for a reference or a letter of recommendation if you're applying for graduate school.

Assess your portfolio: "Grow you portfolio" with additional technical courses. Identify any gaps in experience and fill them through volunteering, work placements or internships.

CULTURAL OPPORTUNITIES

Considering international opportunities? Attend International Week in February for information about opportunities around the world.

Explore communities and cultures you want to work with: Visit Migizii Agamik, the Canadian Museum for Human Rights and the Winnipeg Architecture Foundation Inc. Walk through the historical Exchange District and the Forks. Join online communities in your area of interest.

Develop global career skills and expand intercultural learning: Consider an international student exchange or Travel Study program, an international internship or service-learning program, My World Abroad or SWAP for a "working holiday" and inquire into Architects without Borders.

Staying local? Check out one of the local service-learning programs. Attend cultural events and the Atmosphere Conference within the faculty. Seek additional opportunities through the Winnipeg Architecture Foundation, 10x10x20 events, Plug In and the Winnipeg Art Gallery.

Did you travel abroad? Become an exchange mentor for the International Student Mentorship Program, join the exchange student community at the University of Manitoba or write an article about your experience.

Participate in the multicultural opportunities on campus: Participate in the Faculty of Architecture Partners Program and Cultural Events. Participate in the Intercultural Development and Leadership Program, take part in the Graduation Pow Wow. Consider learning a new language and culture through the Volunteer Language Exchange Program.

Prepare to work in a multicultural environment: Visit Canada's National Research Centre for Truth and Reconciliation on campus. Get access to Lynda.com through the Winnipeg Public Library and take courses to develop your cross-cultural intelligence.

SAMPLE CAREERS WITH AN UNDERGRADUATE DEGREE AND RELATED EXPERIENCE

Architecture Technician
Artist
Design/Build
Entrepreneur
Clothing Designer
Communication Coordinator
Event Manager
Furniture Designer
Landscape Technician
Marketing Director
Photographer
Project Manager
Set Designer
Design Assistant
Draftsperson
Merchandiser
Transportation Planner
Videographer

OPTIONS REQUIRING OTHER EDUCATION

Animator
Architect
City Planner
Environmental Planner
Filmmaker
Graphic Designer
Industrial Designer
Interior Designer
Landscape Architect
Software Designer
Real Estate Broker
University Professor

'ou best. Make intentional choices for your courses and work experiences.

Distribution of CACB Guide to Student Performance Criteria
All faculty and students were provided with digital copies of the CACB Guide to Student Performance Criteria. The guidelines were distributed via email on **September 2, 2016** and **January 12, 2017**. Each instructor was required to review Student Performance Criteria with their classes, and to include the following information in their course outline:

The Canadian Architectural Certification Board (CACB)
The Architecture Program in the Faculty of Architecture at the University of Manitoba is accredited by the CACB. This organization accredits all professional degree programs in architecture offered by Canadian Universities. The CACB helps ensure that a professional program meets established professional qualifications and educational standards through periodic evaluations.

In 2015 our Architecture Program earned a 3-year Accreditation. The next Accrediting Team Visit will occur in February or March of 2018, with the report due by September 2017. Student work from the 2016-17 academic year will be collected, displayed and evaluated under this visit. Everyone's good work and cooperation are required for a successful Accreditation.

For more information on the CACB and the Accreditation process see the following web sites:

Guide to Student Performance Criteria (2010 Edition):
http://cacb.ca/wp-content/uploads/pdf/guideforstudent.pdf
—instructors and students are required to review this criteria.

Accreditation Process
http://cacb.ca/en/cacb-accreditation/

CACB Conditions and Terms for Accreditation (2012 Edition):
http://cacb.ca/wp-content/uploads/pdf/conditions_and_terms_for_accreditation.pdf

CACB Procedures for Accreditation (2012 Edition):
http://cacb.ca/wp-content/uploads/pdf/procedures_for_accreditation.pdf

Our 2014 Architecture Program Report and 2015 Visiting Team Report:
http://cacb.ca/en/university-of-manitoba-en/

On **April 4, 2017**, all architecture students were again provided with a digital copy of the CACB Guide to Student Performance Criteria, as well as the CACB Perspectives, in preparation for focused discussions as part of the Student Self-Assessment. (For the email to students, see above, Section 3.2.2).

On **September 6, 2017**, all incoming architecture students were provided with a digital copy of the CACB Guide to Student Performance Criteria, as well general information pertaining to student work collection and the upcoming visit of the accrediting team. The Sept. 6, 2017 email is copied below.

From: **Donna Mamott** Donna.Mamott@umanitoba.ca
Subject: **CACB Student Performance Criteria**
Date: **September 6, 2017 at 3:44 PM**
To: [Arch-option students]
Cc: Lisa.Landrum@umanitoba.ca; Carlos.Rueda@umanitoba.ca; [all Department of Architecture teaching staff, including sessionals];

Forwarded on behalf of Lisa Landrum, Associate Head, Department of Architecture, Associate Dean (Research)

To all Architecture Students (ED3/4-Arch Option, AMP1/2, M1/2)

Welcome – and welcome back – to the Department of Architecture. It's going to be a great year!

This email contains important information you should be aware of.
Please read this email and the attachment, and let us know if you have any questions.

As you may be aware, the Canadian Architectural Certification Board (CACB) will be reviewing our architecture program this year. This is a normal accreditation process that helps ensure our program meets all established professional qualifications and educational standards. Graduating from an accredited architecture program is prerequisite for pursuing professional internship and architectural registration. Our 2-year Master of Architecture program is the professionally accredited degree. The AMP1/2 and ED3/4 architecture option years are equally important. Our accredited program consists of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree [B.Env.D.] is not, by itself, recognized as an accredited degree.

Why are we reminding you of this?

Because the work you do in ED3/4, AMP1/2 and M1/2 must meet the Student Performance Criteria (SPC) established by the CACB. Your instructors are aware of this, and our curriculum is designed to help ensure you meet these standards. This email is simply to provide you with the specific scope of the 31 performance criteria, which range from critical thinking to comprehensive design.

Please find attached the "**Guide to Student Performance Criteria**" issued by the Canadian Architectural Certification Board. As it states, "This guide is written expressly for the faculty and students of professional degree programs in architecture. It begins with a brief summary on accreditation and on the Canadian Architectural Certification Board mission and mandate as well as a brief overview of the parameters for accrediting professional degree programs, including a list of the twelve conditions that your program must address to get and/or maintain its accreditation. However, the guide's primary purpose is to inform you about one of these conditions, namely the "Student Performance Criteria". These are areas where every student, who graduates from an accredited architecture program, must demonstrate the required level of accomplishment. The criteria define the minimum requirements for your professional education in architecture."

The attached pdf may also be found on the CACB website:
http://cacb.ca/wp-content/uploads/pdf/guideforstudent.pdf

Further CACB Accreditation information may be found here: http://cacb.ca/en/cacb-accreditation/

Your instructor should review with you the specific Student Performance Criteria that are satisfied by their course. The relevant SPCs should also be listed on your course outline.

OK. So, what's next?

Our completed Architecture Program Report will be delivered to the CACB offices in Ottawa next week. We have already gathered student work as part of our preparations for an exhibition that will be set up during the CACB accreditation visit, expected in March 2018. More student work – including yours – may be reviewed as part of this visit. When the visiting team arrives they will pass through the studios and meet with students.

How can you help?

Do good work and contribute to cultivating a culture of architectural excellence! Every year is important to the success of our program. This year is especially significant. The coming months will be busy and, at times, stressful - but, this is also an exciting time to celebrate our students' good work and our program's many successes.

Thanks for your participation and cooperation in this process.

If you have any questions, do not hesitate to contact me, or Department Head Carlos Rueda.

Sincerely,
Associate Head, Department of Architecture, Associate Dean (Research)
Lisa.Landrum@umanitoba.ca I 204-480-1037

<CACB_SPC_StudentGuide.pdf>

3.4 Social Equity

The accredited degree program must provide a summary of provincial and institutional policies that augment and clarify the provisions of the Charter of Rights and Freedoms as they apply to social equity. Where policies in place are specific to the School or professional program, these should be clearly stated, as well as the means by which they are communicated to current and prospective faculty, students and staff.

The APR must include:

- *Procedures in place used to achieve equity and diversity in School operations and activities.*

SUMMARY OF POLICIES REGARDING THE CHARTER OF RIGHTS AND FREEDOMS

The architecture program upholds academic freedom; cultivates a teaching and learning environment that respects the dignity, relative autonomy and creative aspirations of each individual; aims to ensure equity and diversity through balanced teaching assignments and studio groups; and provides transparent access to information via public posting of admissions and grading policies, meeting minutes and reports; as well as respectful open discussion.

The Faculty of Architecture's Vision Statement and four of its ten tenets directly address issues of social equity, including respect, collegiality, autonomy, freedom of expression, and equitable workloads:

Faculty Vision: The Faculty of Architecture aspires to offer widely recognised and highly valued design and planning undergraduate and graduate programs that promote a respectful, collegial, interdisciplinary culture of teaching, scholarship and service within the University and beyond.

Faculty Tenets concerning Equity:

1. The Faculty believes the disciplines and programs represented in the Faculty of Architecture are autonomous, complementary, equal and specific.
4. The Faculty promotes collegiality, creativity, and interdisciplinarity in advancing the planning, design and management of the built and natural environments.
7. The Faculty promotes freedom of expression, open discourse and accountability among its members.
8. The Faculty affirms an equitable assignment of teaching, scholarship and service that respects individual skills, interests and collective needs. –

– http://umanitoba.ca/faculties/architecture/facstaff/academic_handbook/vision.html

Concerning social equity, the architecture program benefits from the following:

- being in the province of Manitoba, with an impressive history of commitment to human rights, and labour rights – beginning with the 1919 Winnipeg general strike, which contributed to the birth of labour unions in Canada, and exemplified recently by the founding in Winnipeg of the Canadian Museum for Human Rights;
- being part of a strong union – the University of Manitoba Faculty Association (UMFA) – representing 1200 full-time academic staff, committed to advocating for Members' rights and the continual improvement of their working conditions at the University. UMFA belongs to the Canadian Association of University Teachers (CAUT) and the National Union of CAUT (NUCAUT), through membership is maintained in the Canadian Labour Congress (CLC) and the Manitoba Federation of Labour (MFL). UMFA is also a member of the Manitoba Organization of Faculty Associations (MOFA); and
- being part of a University with a strong track-record of excellence in the areas of Human Rights, as well as inclusivity and diversity in the Workplace. The University of Manitoba's leadership in these areas has been acknowledged recently by receiving the 2017 Canada's Best Diversity Employers Award http://news.umanitoba.ca/university-of-manitoba-receives-the-2017-canadas-best-diversity-employers-award/ and by its role in creating the National Centre for Truth and Reconciliation (NCTR), mandated to preserve the memory of Canada's Residential School system and legacy. Not just for a few years, but forever. http://umanitoba.ca/centres/nctr/mandate.html.

Message from the President – To All Academic and Support Staff (on equity):
April 15, 2013 | David T. Barnard, Ph.D., President and Vice Chancellor

The University of Manitoba believes in the inherent dignity of all people. All who have the potential to succeed at our University should have access to it. We respect our differences, celebrate our commonalities, and are united in our mutual focus on intellectual achievement. We promote workplace diversity in access to our programs and employment and in the conduct of the University's affairs.

Being an outstanding workplace is one of the four priorities in the University of Manitoba's Strategic Planning Framework. The Outstanding Workplace Initiative was established to recognize and celebrate our strengths and achievements while also identifying areas in need of improvement.

One of the priorities within our Strategic Planning Framework is a commitment to being an outstanding employer, "offering and expecting respect for all staff and faculty, providing opportunities for leadership, growth and development, and recognizing the contributions made at all levels of the organization." To remain vital and productive, we must recruit, retain and develop committed and engaged faculty and staff. They are our most valuable assets. We want people to enjoy coming to work, to appreciate their colleagues, to achieve success, to contribute in a meaningful way, and to know that those contributions are valued.

People flourish when they feel safe, are able to be authentic, and feel included, respected and treated fairly. Many in our workplace community are working to enhance these aspects of our individual experience and organizational culture, yet we are committed to doing more. We believe an inclusive work environment includes recognition, respect, reconciliation, diversity, justice, numerical representation, accommodation, accountability, responsibility and healthy work environments, free from mistreatment, harassment and discrimination.

Enhancing diversity in our environment means giving more attention to interpersonal interactions, universal design principles, and to organizational norms, goals, policies and practices, on their own and the system dynamics they create. We will more clearly define and communicate our expectations regarding civil, respectful, professional behaviour and a welcoming environment, and increase our opportunities and capacity for productive conversations.

We will continue to strengthen alliances that are working to increase mutual understanding, respect and support. We will increase our workplace representation and/or enhance participation of all, including Indigenous peoples, people of colour, persons with disabilities, women, and people of all gender identities, sexual orientations, ethnicities and religions, while respecting provisions of The Human Rights Code. We will enhance our current initiatives to include staff in all employment groups.

In order to achieve these objectives, we must work together in a spirit of collegiality and mutual respect. If we proceed in the spirit, we can build an even more inclusive workplace where we are valued for our talents and we share in our successes.

http://umanitoba.ca/admin/human_resources/equity/MessagefromthePresident.html

POLICIES ON RIGHTS AND FREEDOMS:

Manitoba Human Rights Code C.C.S.M. c. H175
WHEREAS Manitobans recognize the individual worth and dignity of every member of the human family, and this principle underlies the *Universal Declaration of Human Rights*, the *Canadian Charter of Rights and Freedoms*, and other solemn undertakings, international and domestic, that Canadians honour;

AND WHEREAS Manitobans recognize that
(a) implicit in the above principle is the right of all individuals to be treated in all matters solely on the basis of their personal merits, and to be accorded equality of opportunity with all other individuals;

(b) to protect this right it is necessary to restrict unreasonable discrimination against individuals, including discrimination based on stereotypes or generalizations about groups with whom they are or are thought to be associated, and to ensure that reasonable accommodation is made for those with special needs;
(c) in view of the fact that past discrimination against certain groups has resulted in serious disadvantage to members of those groups, and therefore it is important to provide for affirmative action programs and other special programs designed to overcome this historic disadvantage;
(d) much discrimination is rooted in ignorance and education is essential to its eradication, and therefore it is important that human rights educational programs assist Manitobans to understand all their fundamental rights and freedoms, as well as their corresponding duties and responsibilities to others; and
(e) these various protections for the human rights of Manitobans are of such fundamental importance that they merit paramount status over all other laws of the province;

– The full Code is available on the province of Manitoba website: http://web2.gov.mb.ca/laws/statutes/ccsm/h175e.php

Accessibility for Manitobans Act
Manitoba is committed to becoming an inclusive society. *The Accessibility for Manitobans Act* (AMA) outlines a clear and proactive process to identify, remove and prevent barriers in key areas of daily living. *The Accessibility for Manitobans Act* (AMA) became law in December 2013. This landmark legislation provides a proactive process to remove barriers affecting persons with disabilities and many other citizens. The Government of Manitoba is committed to achieve significant progress by 2023, making Manitoba more inclusive for everyone. The Act outlines Standards, Planning, Compliance, Enforcement and more.

– http://www.accessibilitymb.ca/

UNIVERSITY OF MANITOBA POLICIES:

Respectful Work and Learning Environment (RWLE) http://umanitoba.ca/human_rights/rwle/index.html
Vision for the University Community
The University wishes to promote and support a community which embraces diversity and inclusion, provides for equality of opportunity, and recognizes the dignity of all people. Members of the University Community, including every student and employee, are entitled to a respectful work and learning environment that is:

- Free from Discrimination and provides for Reasonable Accommodation;
- Free from Harassment; and
- Collegial and conducive to early resolution of conflict between members of the University Community.

The University recognizes that we live in a richly diverse society in Manitoba, as well as beyond, and that we have a duty to act in a manner consistent with existing legislation regarding human rights and workplace health and safety. We have a commitment to academic freedom and freedom of thought, inquiry, and expression among its members which may result in respectful disagreements regarding beliefs or principles.

Each individual has the right to participate, learn, and work in an environment that promotes equal opportunities and prohibits harassment and discriminatory practices.

The University of Manitoba does not condone behaviour that is likely to undermine the dignity, self-esteem or productivity of any of its members and prohibits any form of discrimination or harassment whether it occurs on University property or in conjunction with University-related activities. Therefore, the University of Manitoba is committed to an inclusive and respectful work and learning environment. The following policies and procedures establish the University's approach to maintaining a climate of respect and safety within this community and to address any situations in which respect is lacking or safety is compromised:

Respectful Work and Learning Environment Policy

This policy took effect Jan. 27, 2009, and was revised Sept. 1, 2016. The purpose for this policy is to:

a) promote and support a respectful work and learning environment at the University; and
b) ensure compliance with relevant legislation, including *The Human Rights Code* (Manitoba), and *The Workplace Health and Safety Regulation* (Manitoba).

This Policy outlines details for implementing the University's Vision via awareness-building and policies on responsibilities and accountability, reporting, the formation of a Human Rights Advisory Committee, and roles for the University's Human Rights and Conflict Management Officer. This RWLE Policy should be cross-referenced to the following relevant Governing Documents, legislation and/or forms:

RWLE and Sexual Assault Procedure;
Sexual Assault Policy;
Academic Freedom and Responsibilities Policy;
Access and Privacy Policy and Procedure;
Definitions of Academic Units Policy;
Records Management Policy and Procedure;
Responsible Conduct of Research Policy;
Student Discipline Bylaw;
Student Non-Academic Misconduct and Concerning Behaviour Procedure;
Student Discipline Appeal Procedure;
Violent or Threatening Behaviour Policy & Procedure;
Use of Computer Facilities Policy and Procedure;
Criminal Code, RSC 1985, c C-46;
The Human Rights Code, C.C.S.M. c. H175;
Workplace Safety and Health Regulation, 217/2006.

– Full Policy: http://umanitoba.ca/admin/governance/media/Respectful_Work_and_Learning_Environment_RWLE_Policy_-_2016_09_01.pdf

Sexual Assault http://umanitoba.ca/admin/vp_admin/ofp/ohrcm/rwle/6094.html

The University recognizes that Sexual Assault can occur between individuals regardless of sexual orientation, gender, gender identity and/or relationship status. The University also recognizes that individuals who have experienced Sexual Assault may experience mental, physical, academic and/or other difficulties. The University is committed to:

- Supporting those who have experienced sexual assault by providing information, referral to counselling and medical care and appropriate accommodations;
- Ensuring that those who disclose that they have experienced Sexual Assault are supported and treated with compassion, dignity and respect throughout the process of disclosure and institutional response;
- Respecting the privacy of individuals who disclose Sexual Assault and recognize that those individuals are the final decision-makers about their own best interests subject to the limits of confidentiality (as per section 2.16 of the Sexual Assault policy);
- Coordinating and communicating among the various departments who are most likely to be involved in the response to Sexual Assault affecting the University Community and implementing interim measures, while ensuring that fairness and due process are respected;
- Engaging in education, awareness and prevention activities;
- Providing information to the University Community about Sexual Assault on campus;
  Providing appropriate education and training to the University Community about responding to the disclosure of Sexual Assault.

UM Sexual Assault Policy

The reason for this policy is to:

a) Provide guidance, assistance and support to members of the University Community who have experienced sexual assault or who have received a disclosure of sexual assault;
b) Set out a consistent process for responding to sexual assault;
c) Ensure compliance with the relevant legislation, including The Human Rights Code (Manitoba), and The Workplace Health and Safety Regulation (Manitoba).

– Full Policy: http://umanitoba.ca/admin/governance/media/Sexual_Assault_Policy_-_2016_09_01.pdf

UM Sexual Assault Procedure

The reason for this Procedure is to:

a) Promote and support a respectful work and learning environment at the University;

b) Provide specific guidance for the University Community regarding expectations for respectful conduct;
c) Provide a mechanism for the consideration of complaints of Harassment, Discrimination, Sexual Assault, or Reprisal, for Informal Resolution of concerns regarding the work and learning environment, and for the Investigation of an alleged Breach; and
d) Ensure compliance with relevant legislation, including The Human Rights Code (Manitoba), and The Work place Health and Safety Regulation (Manitoba). – Full Policy: http://umanitoba.ca/admin/governance/media/Respectful_Work_and_Learning_Environment_RWLE_and_Sexual_Assault_Procedures_-_2016_09_01.pdf

UM Responsibilities of Academic Staff with Regard to Students (ROASS)
The University of Manitoba ROASS Policy first took effect on July 4, 1979. Revised policies and procedures were approved September 1, 2016. The Policy and related Procedures cover: Individual and Collective Responsibilities of Academic Staff; Accountability; Course Outline Requirements; Regulations concerning Interactions with Students; Resources; and more.

– http://intranet.umanitoba.ca/academic_support/catl/roass.htm

UM Environmental Health and Safety Policy
In 2011 the University adopted a revised Health and Safety Policy. The revision retains the University's commitment to provide a safe and health workplace for staff, students and visitors but clarifies that the responsibility and accountability for health and safety is an integral part of the duties of supervisory staff at all levels, including the senior executive. The EHS office provides: Health and Safety Procedures; General Orientation; Committees; Seminars and Workshops; and a Working Alone Procedure.

– http://umanitoba.ca/admin/vp_admin/risk_management/ehso/geninfo/index.html

UM Freedom of Information and Protection of Privacy Act (FIPPA)
FIPPA outlines principles of access to information and the protection of privacy. FIPPA applies to all records in the custody or under the control of the University of Manitoba and its Colleges, including records containing general information, personal information and personal health information. It does not apply to teaching or research materials, or a question that is to be used on an examination or test.

– http://umanitoba.ca/access_and_privacy/FIPPA.html

UM Policy on Academic Appointments (Effective July 1977, Revised March 1994) (Provisions pertaining to equity):

1. The primary objective in appointing academic staff is to provide the best possible educational programs for a diverse student body and to ensure the highest standards of achievement in research, scholarship, and creativity.
2. Except when it is clearly to the disadvantage of the University and its programs, those defined as Canadian at the time of application for a University position shall be hired in preference to those defined as non-Canadian. For the purpose of this policy, a Canadian is a person who: a) holds Canadian citizenship, or b) holds permanent resident status, or c) is in possession of a valid immigration document indicating that the holder is an applicant for permanent status (landing) from within Canada. A non-Canadian is a person who is not a Canadian.
3. In furtherance of the University's commitment to Employment Equity, where an under-representation of women, men, members of visible minorities, aboriginal peoples or persons with disabilities (the determination of the under-representation of these designated groups shall not be inconsistent with the University's Employment Equity Program as approved on 13 February 1990) exists in the composition of a department or School, or Faculty where there are no departments, the unit shall, subject to the primary objective in 1. above, undertake to hire a member of an under-represented group. In cases where a department has at least ten academic staff members of one gender and none of the other holding probationary appointments or appointments with tenure, the next available probationary or tenured position in the department as approved by the Vice-President (Academic) and Provost shall, if possible, be filled by hiring a qualified applicant of the gender not represented in the department.

Full policy available at: http://umanitoba.ca/admin/governance/governing_documents/staff/297.html

UM Policy on Academic Freedom and Responsibilities (Effective Oct. 1972, Revised Sept. 1988)

Academic Freedom:

The common good of society depends upon the search for truth and its free exposition. Academic freedom in the University in teaching, research and dissemination of knowledge is essential to these purposes. Persons engaged in teaching, research and dissemination of knowledge are, therefore, entitled to freedom in carrying out teaching and in discussing their subjects, and freedom from institutional censorship. Academic freedom carries with it the responsibility to use that freedom in a manner consistent with the scholarly obligation to base research, teaching and the dissemination of knowledge in a search for truth.

Academic Responsibilities:

Persons engaged in teaching, research and dissemination of knowledge are members of the community, members of a learned profession, and members of an educational institution. These circumstances impose a high order of responsibility. They require continuing effort by all such persons in scholarship and teaching, and at all times, fairness and a due regard for the evidence in making statements. Such persons have the obligation to exercise academic freedom responsibly. They should not state or imply that they speak for the University or any of its units unless duly authorized.

Further Defining Rights and Responsibilities:

The foregoing general rights and responsibilities of persons engaged in teaching, research and dissemination of knowledge may be more specifically defined by resolution of the Board or, where appropriate, by collective agreement approved by the Board.

– http://umanitoba.ca/admin/governance/governing_documents/community/239.html

Cf. UMFA Collective Agreement (2016-17): Article 37. Academic Freedom (excerpts)

37.1 The essential functions of a university are the pursuit, creation, and dissemination of knowledge through research and other scholarly and creative activities, and by teaching. Academic Freedom is essential to these functions and ensures the right of Members to teach, investigate, and speculate, and/or to create or perform works of art, without deference to prescribed doctrine. Furthermore, universities are communities in which the right to criticize all aspects of society is valued and respected. These rights are to be understood as central to the protection of the public interest and the pursuit of truth. […]

37.6 […] Academic Freedom also carries the responsibility to respect the rights and freedoms of others. In particular, Members are expected to recognize the right of other members of the academic community faculty, staff, and students to express their opinions. Academic Freedom does not confer legal immunity or guarantee legal defence by the University in respect of positions taken which do not flow from the Members' responsibilities to the University nor does it diminish the obligation of Members to meet their responsibilities to the University.

– for the full content of 37.2-37.8 see: http://umanitoba.ca/admin/human_resources/staff_relations/academic/UMFA.html

Other UM Policies on Social Equity

The Governing Documents of the University of Manitoba include all Policies, Bylaws, Regulations and Procedures approved by the Board of Governors, Senate and the University Administration. The official versions of all of these documents are maintained on a website, and are updated continuously as changes are approved by the Approving Bodies. Policies pertaining to Social Equity, include:

Employees
Employment Files
Employment Conditions
Academic Freedom and Responsibilities
Conflict of Interest
Employment Equity
Property
Nepotism
Reasonable Accommodation in Employment (Disabilities)
Respectful Work & Learning Environment Academic
Responsibilities of Academic Staff with Regard to Students
Service Courses
Special Convocations
Submission of Course, Curriculum & Program Changes
Teaching Evaluations
Voluntary Withdrawal

Students
Accessibility for Students with Disabilities
Admission Appeals Procedures and Guidelines
Co-Curricular Record
Conflict of Interest between Evaluators and Students due to Close Personal Relationships
Electronic Communication with Students
Final Examinations and Final Grades
Inappropriate or Disruptive Student Behaviour
Respectful Work and Learning Environment
Senate Committee on Appeals
Student Advocacy Office
Student Discipline
Student Organization Fees
University Health Service
Use of Computer Facilities
Violent or Threatening Behaviour

Community
Academic Freedom and Responsibilities
Archives and Preservation and Destruction of Records
Campus Alcohol
Closed Circuit TV (CCTV) Monitoring
Conflict of Interest
FIPPA and PHIA
Intellectual Property
Legal Representation
Safe Disclosure

– http://umanitoba.ca/admin/governance/571.html

PROCEDURES IN PLACE USED TO ACHIEVE EQUITY AND DIVERSITY

Diversity and Inclusion (Equity Office)
The University of Manitoba's Diversity & Inclusion Program promotes diversity and fosters a culture of inclusion where all people feel valued, respected, and included across all of our differences and a place where talented people choose to work. The Mission of Diversity & Inclusion is to assist in creating the initiatives that support the goals of the President's Advisory Committee on Respect and three of the five institutional priorities, Creating Pathways to Indigenous Achievement, Building Community that creates an outstanding learning and working environment and Forging Connections to foster high impact community engagement in the Strategic Plan.

The goal of Diversity and Inclusion is to ensure that all job applicants, faculty and staff have fair and equitable access to employment opportunities in hiring, training and advancement. No person should be denied employment opportunities for reasons unrelated to ability and employment decisions at the University are based on job performance, skills, knowledge and abilities relevant to specific positions.

The Employment Equity Act has identified four designated groups; Members of Racialized Communities, Indigenous Peoples, Persons with Disabilities and Women, as traditionally underrepresented in the workforce. Members of the four designated groups when compared to other segments of the labour force have experienced higher rates of unemployment or underemployment, lower workforce participation rates, earn less income and are segregated in lower or low status occupations. The University of Manitoba complies voluntarily to Employment Equity. […]

– http://umanitoba.ca/admin/human_resources/equity/about_us.html

Office of Human Rights and Conflict Management
The mission of the Office of Human Rights and Conflict Management is to promote a respectful working and learning environment in which individuals are treated equitably and diversity is valued. The Office works to prevent discrimination and harassment at the University of Manitoba by promoting, supporting, and administering the following UM Policies and Procedures: Respectful Work and Learning Environment (RWLE) Policy; Sexual Assault Policy; RWLE and Sexual Assault Procedure.

This office provides informal conflict resolution, supports including one-on-one coaching, mediation, conciliation and facilitated group dialogue, as well as training and instruction for the university community on conflict resolution and communication skills.

– http://umanitoba.ca/human_rights/

Student Advocacy

Student Advocacy office helps ensure students are treated fairly in their dealings with the University. It is dedicated to educating the University community concerning student rights and responsibilities and assisting students in the resolution of conflicts arising from actions or decisions taken by the University. The Student Advocacy Office provides confidential centralized services for receiving student complaints and grievances. This centre serves as a general information source for students regarding their rights and responsibilities. Students are assisted in the resolution of any problems or concerns resulting from academic and/or discipline decisions. Students are advised of policies and procedures to follow, both informally and formally via appeals. Where appropriate, referrals will be made to other campus resources.
Resources available on the Student Advocacy website include: Appeal procedures, Behavioural Policies, Academic Integrity, guidelines for understanding Fairness, Frequently Asked Questions, and more.

– http://umanitoba.ca/student/advocacy/

Student Accessibility Services

SAS provides support and advocacy for students with disabilities, such as: hearing, injury-related, learning, mental health, medical, physical, visual or temporary disabilities. We act as a liaison between students, faculty, staff and service agencies. SAS upholds the Manitoba Human Rights Code, the Accessibility for Manitobans Act and the University of Manitoba's Accessibility Policy.

– http://umanitoba.ca/student/saa/accessibility/

Additional Equity Resources:

U of M Resources
Aboriginal Student Centre
Student Accessibility Services
Employee Assistance Program (EAP)
Environmental Health and Safety Office (EHSO)
Human Rights and Advisory Services
Indigenous Achievement
International Centre For Students
Learning and Organizational Development
Security Services
Student Advocacy and Resource Services
Student Counselling and Career Centre
Womyn's Centre
Rainbow Pride Mosaic
TPAC Elder Protocol

Community Resources
Crisis or Emergency Assistance
Klinic - Sexual Assault Crisis Program 786-8631
Klinic - Suicide Crisis Line 786-8686
Osborne House

Disability
Reaching E-Quality Employment Services

Employment Equity
Manitoba Employment Equity Practitioners Association

Human Rights
Canadian Association for the Prevention of Discrimination & Harassment in Higher Ed.
Manitoba Human Rights Commission
Canadian Human Rights Commission

Anti-Racism
National Anti-Racism Council

LGBTTQ
ALLY Training
Sexuality Education Resource Centre
Canadian AIDS Treatment Information Exchange
Rainbow Resource Centre
Outwords
Parents and Friends of Lesbians and Gays (PFLAG)
Winnipeg Transgender Group
Gay and Lesbian Medical Association
Gay Men's Health Clinic

Women
Fort Garry Women's Resource Centre
Manitoba Women's Advisory Council
Status of Women Canada
Women's Legal Education and Action Fund

– http://umanitoba.ca/admin/human_resources/equity/resources/index.html

UMFA Collective Agreement (2016-17): Article 32. Grievance Procedure and Arbitration

[…] In the event that the University believes that the terms and conditions of this Agreement have been violated, misinterpreted, or improperly applied, the dean/director, or where appropriate, a vice-president, shall present a grievance in writing to the President of the Association, within ten (10) working days of the event giving rise thereto or the date on which the University first knew or reasonably should have known of such event if that date is later. If the matter is not resolved to the satisfaction of the University within twenty (20) working days of the Association having received the grievance, the University may submit the grievance to binding arbitration as provided by this Article. The Association shall be notified in writing of such action. […]

– http://umanitoba.ca/admin/human_resources/staff_relations/academic/UMFA.html

3.5 Human Resources

The program must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient faculty complement, an administrative head devoting not less than fifty percent of his/her time to program administration, administrative and technical support staff, and faculty support staff. Student enrolment in and scheduling of design studios must assure adequate time for an effective tutorial exchange between the faculty member and the student. A maximum student/faculty ratio between 12:1 and 15:1 is considered acceptable. The total teaching load should be such that faculty members have adequate time to pursue research, scholarship, and practice to enhance their professional development.

The APR must include:

- ***Students**: Description of the students' educational backgrounds and the program's selectivity, retention, and time-to-graduation rates since the last accreditation sequence;*
- ***Faculty**: Description of the distribution of effort between teaching and other responsibilities of each faculty member and evidence that students evaluate individual courses and faculty;*
- ***Administration**: Description of the distribution of effort between administration and other responsibilities for each position;*
- ***Staff**: Description of the responsibilities for each position.*

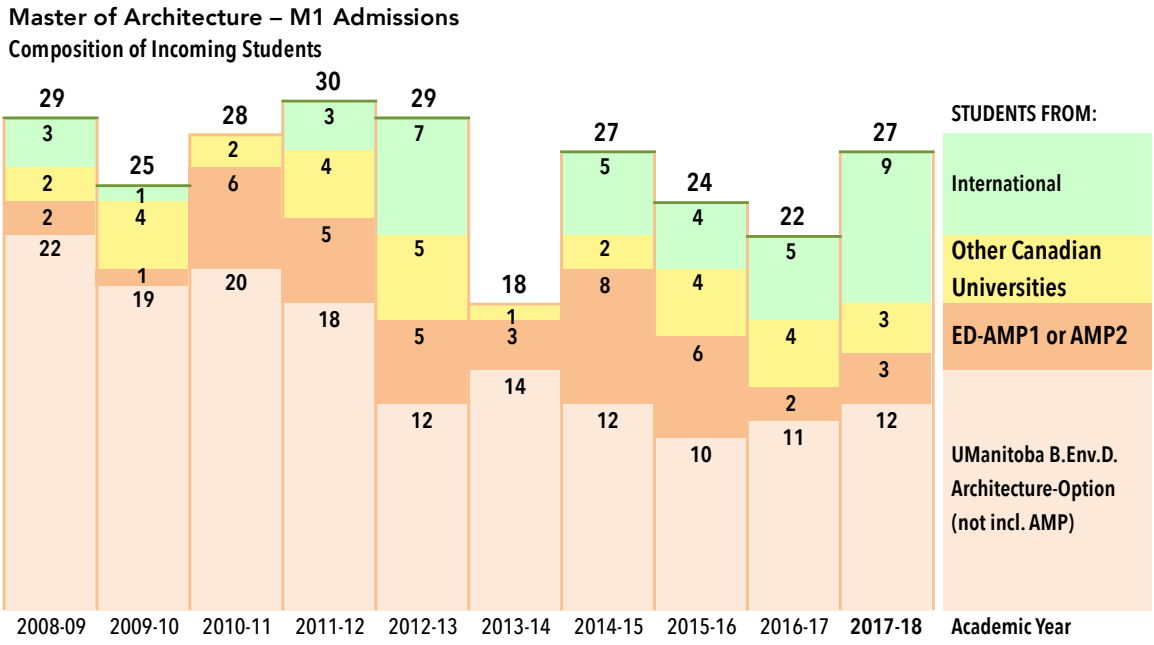
3.5.1 HR: Students

Description of the students' educational backgrounds and the program's selectivity, retention, and time-to-graduation rates since the last accreditation sequence;

MASTER OF ARCHITECTURE PROGRAM

Educational Background

Following an anomalous drop to 18 students in 2013-14, the Master of Architecture program has been rejuvenating its M1 admissions: to 27 in 2014; 24 in 2015; 22 in 2016; and 27 in 2017. The program is restoring the number of high quality students achieved in 2008-12, when an incoming class of 28 to 30 was the norm. As noted in the Program Action Plan, the program goal is to admit 30 qualified students with potential to excel each year. The following visuals and text describe the overall composition and diverse educational backgrounds of the incoming M1 group for the last 10 years.



International Students:
The number of international students in the M1 class varies from year to year. Over the last 10 years, international students have usually accounted for 10-20% of the incoming class. UM's Strategic Enrolment Management Planning Framework (2013-18) provides 20% as a target for graduate programs. The number of international students admitted to the M.Arch program in September 2017 is 15 (45% of the class) – three times the number admitted in 2016 (5). This reflects a corresponding increase in the number of quality international applications received in 2017 (196 total applications, compared to 124 in 2016). The online application process (implemented in 2015) is also making the process easier for those applying from outside Canada. International students in the M.Arch program come from nearly all parts of the world. Almost 60% come from various regions of China, including Xi'an, Chongqinq, Hubei, Zhengzhou, Shanghai and Nanjing. One student came from Hong Kong. Students from Iran, including graduates of notable architecture schools in Tehran, Isfahan, Tabriz, and Yazd, account for about 20% of the international students over the last ten years. Others come from Pakistan and India; Bangladesh and Vietnam, including Ho Chi Minh City; Russia, Belarus and the Ukraine; as well the United States, including Texas and Ohio. These students typically have a B.Arch, B.A.(Arch), B.Eng.(Arch), B.Sc.(Arch), B.Arch.Sc. or B.A.S.

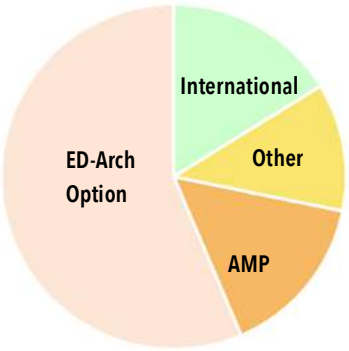
Graduates of Other Pre-Professional Architecture Programs in Canada:
The Master of Architecture program admits students from coast to coast, especially from other professionally accredited programs at Dalhousie and Carleton University, as well as the University of Waterloo, Toronto, and Ryerson; the University of Calgary and British Columbia; plus OCADU and the British Columbia Institute of Technology. These students typically have a B.A.S., B.Sc. (Arch), B.Arch.Sc., B.Arch.Tech., B.Env.Design or B.Design (with an architecture focus).

UM Faculty of Architecture – ED AMP Program:
On average, about 15% of each incoming M1 class is comprised of students who went through the ED-Architecture Masters Preparation program. This group is typically made up of diverse and dedicated individuals, opting to pursue architecture after earning a prior degree. International AMP students are occasionally admitted; however, most students come from across Canada with a Bachelor of Arts or Science degree from a major institution, including – in the last ten years – the University of Winnipeg, Saskatchewan, Alberta, Calgary, Victoria, and British Columbia, as well as Laurentian, Queens, Toronto, Concordia, and the Nova Scotia College of Art and Design.

UM Faculty of Architecture – B.Env.D.-Arch.Option Graduates:
The majority of students admitted into the M.Arch program have successfully completed the Bachelor of Environmental Design – Architecture Option Program, at the University of Manitoba. Roughly half of this group takes time off in between degrees to work and/or travel (averaging 1-3 years). The composition of this ED cohort is described further below.

Trends and Targets in M1 Admissions:
Over the last ten years the proportion of Environmental Design students entering the M.Arch program has decreased. In 2008-09 and 2009-10, ED graduates from UM's Faculty of Architecture comprised 76% of the incoming M1 class. This year (2017-18), ED grads comprise about 44% of the class. For the last four years, the proportion of ED graduates in the M.Arch program has not risen above 50%.

This may suggest the program is losing ED students. However, we know (from our students and from colleagues at other schools) that the program is enabling and empowering graduates to apply elsewhere. An increasing number of Architecture-Option ED graduates from Winnipeg are confidently choosing to expand their horizons. With strong skills and portfolios, these ED graduates are being accepted to professional M.Arch programs elsewhere in Canada and abroad, including ivy-league schools in the United States. The corresponding trend of increased International admissions speaks to our globalized world, to Winnipeg as an appealing city of opportunity, and, arguable, to strengths of the program. The AMP student cohort adds a crucial component of maturity and diversity to the M.Arch program.

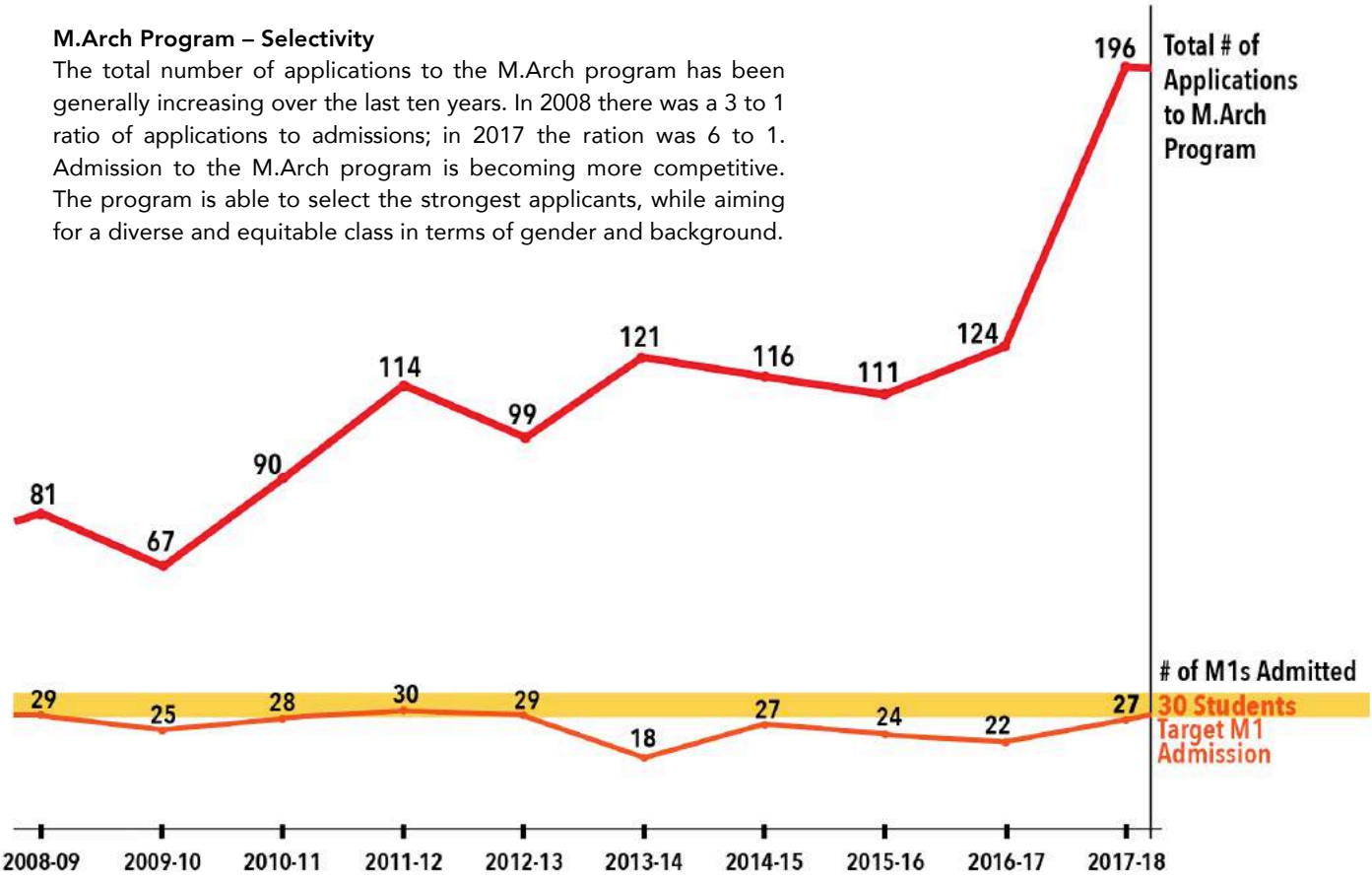


This pie chart shows the educational background of students entering the M.Arch Program for the last ten years. Although the composition of the four source groups varies from year to year, this overall average suggests a balanced program goal:

- **50%** ED-Arch Option graduates (the actual average for the last 10 years is 56%);
- **15%** Architecture Masters Preparation option (the ED-AMP option is an area to be strengthened);
- **15-20%** from other pre-professional architecture programs within Canada (the actual average is 12%)
- **15-20%** International students

M.Arch Program – Selectivity

The total number of applications to the M.Arch program has been generally increasing over the last ten years. In 2008 there was a 3 to 1 ratio of applications to admissions; in 2017 the ration was 6 to 1. Admission to the M.Arch program is becoming more competitive. The program is able to select the strongest applicants, while aiming for a diverse and equitable class in terms of gender and background.



Qualified applicants to the M.Arch program are evaluated based on the following: academic transcripts; a resume; a statement of intent; letters of reference; and a portfolio. All elements are important. The Department of Architecture's Graduate Admissions Committee makes a balanced and holistic assessment of each applicant's capability to successfully undertake architectural studies in the program. The portfolio is expected to demonstrate a range of capabilities: conceptual development, critical and analytical thinking, comprehensive design processes, as well as technical realizations and poetic sensibilities.

The Department makes recommendations for admissions to the University of Manitoba's Faculty of Graduate Studies. An English Language Proficiency Test is also required for applicants holding a degree from non-English speaking countries. Links to the Admissions Guidelines, the Graduate Studies Application Form, and Funding and Awards opportunities are provided on the Department's Admission website. http://umanitoba.ca/faculties/architecture/programs/architecture/admissions_package.html

M.Arch Program – Retention and Time to Completion

The M.Arch Program has a strong retention rate. In the last three years, only two students have withdrawn. The vast majority of students complete the program in the recommended time frame: 2 years. For instance – reading left to right, then up a notch, in the chart below – in 2015-16, of the 24 admitted in Sept. 2015, 23 graduated on schedule in October 2017. In 2014-15, of the 27 admitted in Sept. 2014, 28 graduated in 2016 (picking up an extra student who took longer to complete their degree). Of the 205 graduates since 2010, 20 have taken longer to complete their degrees (averaging an additional one to two years). 90% of the M.Arch students complete their degree on time.

M1

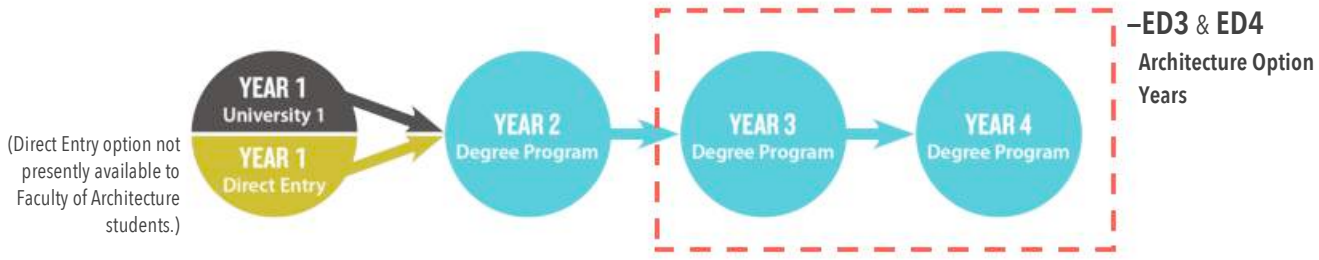
Admission Year	Total # Applications	# Admitted	BREAKDOWN OF ADMITTED STUDENTS: Female	Male	UM ED	AMP	Other/Canada	International	# of Grads	Retention	Grad Year
2017-18	196	**27**	18 (66%)	9	12	3	3	9 (33%)	n.a.	n.a.	**2018**
2016-17	124	**22**	8 (36%)	14	11	2	4	5 (23%)	**23**	96%	**2017**
2015-16	111	**24**	11 (46%)	13	10	6	4	4 (17%)	**28**	104%	**2016**
2014-15	116	**27**	10 (37%)	17	12	8	2	5 (18%)	**15**	83%	**2015**
2013-14	121	**18**	6 (33%)	12	14	3	1	0 (0%)	**31**	107%	**2014**
2012-13	99	**29**	13 (45%)	16	12	5	5	7 (24%)	**31**	103%	**2013**
2011-12	114	**30**	13 (43%)	17	18	5	4	3 (10%)	**26**	93%	**2012**
2010-11	90	**28**	13 (46%)	15	20	6	2	0 (0%)	**24**	96%	**2011**
2009-10	67	**25**	12 (48%)	13	19	1	4	1 (4%)	**27**	93%	**2010**
2008-09	81	**29**	9 (31%)	20	22	2	2	3 (10%)	**205**	**Total Grads** (since 2010)	

M.Arch Program – Gender Ratio

The chart above gathers the data represented in previous graphics, including the ratio of total applications to admissions, and the educational background of each incoming class. This chart also shows gender ratios. For the last 10 years, the ratio of female students has been between 31% to 48%. This year (2017-18) will be the first year on record that female students out-number male students. The M.Arch Admissions Committee aims for a gender-balanced class, while evaluating academic and creative excellence. The program welcomes this healthy equity of genders in the student population.

ENVIRONMENTAL DESIGN – B.Env.D. Program

The architecture program does not currently have a direct entry option. Some other professional UM Faculties, including the Faculty of Engineering, do have direct entry for students applying from high school. Since 1966 admission to the architecture program has been via Environmental Design (previously, Environmental Studies). Since 1998, the Environmental Design program has primarily relied on admissions from the University of Manitoba's "Univesity1" Program.



(Direct Entry option not presently available to Faculty of Architecture students.)

–University of Manitoba, Undergraduate path diagram http://umanitoba.ca/u1/about/about.html

Students typically navigate three levels of application before studying in the ED-Architecture Option:

- **University1 (U1)**
  This is UM's direct entry admission option for high school students. Admitted students can study multiple subject areas and design an individualized schedule that meets the admission and / or first year requirements for one or more target degree programs. U1 students intending to apply to the Faculty of Architecture must take certain 1000-level EVDS courses. The Undergraduate Admissions Office manages high school applications to U1. Transcripts are the sole criteria for admissions. For regular admission, the minimum grade requirement is 70% on three Grade 12 courses. The average entering grade is 86% (based on Fall 2017 intake). Roughly 15% of U1 students are International.

- **Environmental Design Program: ED2 Admissions from U1**
  Any U1 student may enrol in EVDS 1000-level courses, but U1 students wishing to pursue an ED degree must apply to the Faculty of Architecture's ED Program and be accepted to the before enrolling in EVDS 2000 level courses. The Undergraduate Admissions Office manages admissions to ED2, in collaboration with the Environmental Design Program Chair. Admission is based on the following: successful completion of required EVDS 1000 level courses; GPA; an autobiographical sketch; a creative portfolio; and three confidential evaluations. About 10% of incoming ED2s are international; the remaining students come from Winnipeg and other regions of Manitoba; only a small fraction come from outside Manitoba.

  From 2014 to present, there has been a 36% drop in applications to ED2, while the number admitted has remained constant. In 2014, there were 244 applications and 100 admitted. In 2017, there were 157 applications and 100 admitted. The ED Program Chair and EDPAC have developed various recruitment strategies in recent years and are continuing to review and refine recruitment and application processes. In 2017 the Student Affairs office featured the ED Program in its Career Pathway recruitment initiative.

ED2

Admission Year	Total # Applications	# Admitted	Female	Male	International	# of Grads	Retention	Grad Year
2017-18	157	100	59	41	15	n.a.	n.a.	**2018**
2016-17	166	101	68	33	11	99	98%	**2017**
2015-16	175	104	58	47	11	92	88%	**2016**
2014-15	244	100	56	44	12	85	85%	**2015**
2013-14	214	99	44	55	n.a.	99	99%	**2014**
2012-13	268	98	42	56	n.a.	98	102%	**2013**
2011-12	284	100	44	56	n.a.	82	77%	**2012**
2010-11	276	96	40	56	n.a.	83	78%	**2011**
2009-10	242	106	71	35	n.a.	92	n.a	**2010**

In spite of the decline in applications, the ED2 students admitted to the program are strong and committed. Overall, the retention rate is very good. In 2014-15, of the 100 admitted to ED, 99 graduated on-track with a B.Env.D. degree in June 2017.

- **ED3-Architecture Option Admissions from ED2**
  At the end of the interdisciplinary ED2 year, students apply to a disciplinary Option: Architecture; Interior Environments; or Landscape + Urbanism. Placement in the architecture-option is competitive, since half or more of the class typically ranks architecture as their first choice, and availability is limited. Placement is limited due to a Faculty decision to maintain three equitable options; the limited resources in the Department of Architecture; and the Department's desire to have a full portfolio submission as part of the application process. The ED3 admissions process compensates for the relative lack of Departmental involvement in U1 and ED2 admissions.

The Department of Architecture ED Admissions Committee, typically chaired by the Department Head, manages admissions to the ED3-Architecture Option in dialogue with the ED Program Chair. Evaluation is based on: GPA, a statement of intent, and a portfolio, including ED2 design work, and any other creative work or experience the student deems appropriate to include.

Whereas ED2 applications have declined in recent years, applications to the ED3 Architecture-Option have remained strong, trending upward in recent years. Retention rates are good: in 2017, 100% of ED Arch-Option students completed the program on schedule.

ED3 Admission Year	Total # Applications	# Admitted	Female	Male	International	# of Grads	Retention	Grad Year
2017-18	56	38	22	16	4	n.a.	n.a.	**2018**
2016-17	47	33	17	16	4	33	100%	**2017**
2015-16	61	32	18	14	1	29	91%	**2016**
2014-15	44	30	9	21	4	27	90%	**2015**

ED-AMP Program

Educational backgrounds of students entering the Architecture Master Preparation option are described above. Admission is based on a balanced assessment of academic transcripts; a resume; a statement of intent; letters of reference; and a portfolio (the same materials reviewed for M.Arch). The Department of Architecture AMP Admissions Committee reviews applications and, depending on academic backgrounds, recommends entry to either AMP1 (requiring 2 years of study before qualifying for M.Arch application) or AMP2 (requiring 1 year of study). The ED Program Chair manages admissions administration.

AMP Admission Year	Total # Applications	# Admitted AMP1	AMP2	Female	Male	International	(AMP1 only) # of Grads	(AMP1 only) Retention	Grad Year
2017-18	18	3	5	0 | 1	3 | 4	1 | 2	n.a.	n.a.	**2018**
2016-17	34	8	3	6	5	1	6	100%	**2017**
2015-16	20	6	1	2	5	0	8	100%	**2016**
2014-15	38	8	0	4	4	0	8	73%	**2015**
2013-14	38	11	0	4	6	0	6	55%	**2014**
2012-13	32	11	0	4	7	0	7	58%	**2013**
2011-12	32	12	0	4	7	0	7	70%	**2012**
2010-11	51	10	0	4	4	0	4	67%	**2011**
2009-10	42	6	0	3	3	0	5	71%	**2010**
2008-09	56	7	2	3	6	0	n.a.	n.a.	**2009**

ARCHITECTURE PROGRAM - OVERALL ENROLMENT

	2014-15	2015-16	2016-17	2017-18
M.Arch Program (M1+M2)	43	52	46	51
AMP2	0	1	2	5
AMP1	16	14	14	11
ED-Arch.Option (ED3+ED4)	57	61	66	71
TOTALS:	116	128	128	138

Total enrolment has been increasing over the last four years. In 2017-18, there will be 138 students in the program – nearly a 20% increase since 2014.

3.5.2 HR: Faculty

Description of the distribution of effort between teaching and other responsibilities of each faculty member and evidence that students evaluate individual courses and faculty;

The Faculty of Architecture generally expects each full-time academic member to allocate responsibilities as follows: 40% teaching; 40% scholarship; 20% service. This weighting is outlined in the Faculty's Tenure and Promotion Guidelines. It is adopted as the basis on which all faculty members are deemed to be working, unless a written agreement is made with the Department Head, Program Chair, Dean, or Provost.

40% Teaching
A full annual teaching load in the Department of Architecture typically consists of a fall and winter Design Studio (2 x 9-credits); plus one or two additional courses of either 3-credits or 1.5-credits. Some members teach two 3-credit courses (one each term); some teach one 3-credit course and a 1.5-credit course, sometimes combined with other duties or with single lecture contributions to other courses. Some courses are co-taught. It is the responsibility of the Department Head to ensure equitable teaching loads in accordance with the Faculty's *Teaching Assignment Guidelines*. (These guidelines are in the final stages of development. A draft was circulated Aug. 22, 2017. Minor refinements were suggested during a Faculty meeting on August 29, 2017. A subsequent meeting is planned).

In the Department of Architecture, within the range of 3-credit courses, there is a variety of loading. For instance, the undergraduate History/Theory courses (EVAR 3000/02; 4000/06) combine all ED3 and ED4, AMP1 and AMP2 students, since these Pre-modern and Modern lecture series are taught on alternate years. In 2017-18 it is expected that 87 students will be enrolled in the Pre-modern History and Theory lecture class. The undergraduate technology courses (EVAR 3004/06; 4002/08) are level-specific, and thus consist of half the students (43-44). Naturally, course delivery, administration and grading are more labour intensive for significantly larger classes. The Department Head takes this, among other matters, into consideration when allocating teaching assignments each year and over the course of consecutive years.

In addition to core courses, members may also agree to teach independent study courses and/or electives, depending on their availability and the alignment of student interests with a faculty member's expertise and research. Since the Faculty of Architecture has re-launched the Ph.D. in Design and Planning program, advising doctoral students and leading doctoral-level reading courses are another aspect of teaching loads to be equitably balanced.

Within the Department of Architecture, there are further teaching-related duties: a Thesis Coordinator assists in managing all common elements of the Design Thesis, including the Thesis Proposal, Interim and Final Presentations with External Examiners, and book submission; Thesis Committee members serve as Chairs and secondary advisors for Design Thesis Students; studio coordinators for M1, ED4 and ED3 studios lead shared initiatives and ensure consistency in learning outcomes among different studio sections; and curriculum area advisors in Technology and History and Theory provide advice to the Head and Department Council as required.

40% Scholarship
According to the Faculty of Architecture's Tenure and Promotion Guidelines, Scholarship encompasses Applied Scholarship, Creative Work, Professional Practice, and Research. The Guidelines comprehensively outline numerous activities and performance assessments for each area. Generally, members are expected to be pursuing excellence and new knowledge; to be testing, exploring and disseminating that knowledge, particularly in peer-reviewed venues; and to be enriching pedagogical and professional mandates. Most faculty members use non-teaching time in the summer as their primarily scholarship-intensive allocation.

20% Service

According to the Faculty of Architecture's Tenure and Promotion Guidelines, the Faculty recognizes two types of service activities – internal and external. Internal service includes those activities undertaken by Faculty members that are pertinent to the proper management and maintenance of the University of Manitoba, the Faculty of Architecture, its Departments, programs, and outreach events. External service includes those activities undertaken by Faculty members that are pertinent to the proper management and maintenance of community organizations, arts and cultural institutions, and professional bodies outside the purview of the University. Service activities may and often do require a sense of vision and leadership, thoughtful methodological approaches, administrative organization, and refined communication skills.

For internal service, members are required to serve on Department Council and Faculty Council. Individuals may also be elected and/or appointed to serve on various Departmental committees to manage particular areas of program administration: the Thesis Committee; Admissions Committee (Graduate and ED/AMP); and Student Awards. The MAA/DoA Strategic Committee helps foster communication and initiatives with the professional community; the Publications Committee creates and coordinates initiatives to disseminate Departmental research and teaching. Other ad-hoc committees are formed, as necessary, to discuss and strategize improvements to curriculum areas, including Technology, History & Theory, Comprehensive Design, Digital, etc. There are also Faculty and University-level committees, appointments to which require Departmental recommendation and Faculty Council approval.

FULL-TIME ACADEMIC STAFF

There is currently nine full-time academic staff in the Department of Architecture. Six members are professionally registered architects in the province of Manitoba (Enns, Landrum, Minuk, Stern) and/or another country (Rueda in Columbia; Aquino in Brazil; Landrum and Stern in New York State). Three members hold a Ph.D. (Aquino, Landrum, Rueda); two are pursuing a Ph.D. (Coar, Stern). Two of the nine members are female (Fuglem and Landrum). The last five full-time hires have been male. An overview of members, together with primary credentials, administrative duties, and teaching areas are listed at right.

Students' Evaluation of Educational Quality (SEEQs)

The Students' Evaluation of Educational Quality (SEEQ) is the University of Manitoba's Senate approved teaching evaluation tool. The SEEQ asks students to evaluate instructors on nine teaching dimensions (learning, enthusiasm, organization, group interaction, individual rapport, breadth, examinations, assignments, and assessments) and their overall impression of the instructor. The SEEQ form includes core items with numerical rankings, a section to obtain demographic information on student and course characteristics, a section for the addition of supplemental questions and room for open-ended comments.

– http://intranet.umanitoba.ca/academic_support/catl/resources/learning/

The University Governing Document on Teaching Evaluation requires that all courses and sections shall be evaluated each time they are offered. Deans are responsible for developing a method of distribution of evaluation questionnaires, collection of data, and feedback to instructors including suggestions for positive change where it is indicated, and ensuring that mechanisms are in place to measure and record both improvement and change in teaching skills. The full governing document is available online.

– http://umanitoba.ca/admin/governance/governing_documents/academic/365.html

In the Faculty of Architecture, the Student Services Administrator (Donna Mamott) ensures students have the opportunity to evaluate each instructor for each course. About half way through the term, instructors are required to identify a day and time when SEEQs are to be administered, and a student who will be responsible for leading the evaluation. On that day, the student retrieves the evaluation package, together with instructions. The Instructor leaves the classroom during the evaluations. Completed evaluations are submitted to the Students Services Administrator, who then forwards them to Information Services and Technology for analysis. Once returned, the evaluation and comment sheets are forwarded to unit Heads, then to instructors. They are used as the basis for constructive improvements. Copies of the overall evaluation sheet for each course are kept for the record with the Student Services Administrator.

FULL-TIME ARCHITECTURE MEMBER		PRIMARY TEACHING AREAS	
Name	**Dr. Eduardo Aquino**	**Design Studio**	**History & Theory**
Rank	Associate Professor (tenured)	ED3/AMP1 (EVAR 3008/10)	PreModern & Modern
Hired	July 1998 tenure-track	+ M2 Design Thesis	(EVAR 3000/02; 4000/06)
Degrees	Dipl.ID, B.Arch, M.F.A., Ph.D.	**Drawing** (EVAR 3014)	+ Grad Topics (ARCH 7020/30)
Prof.Reg.	CREA / Brazil		
Name	**Lancelot Coar**	**Design Studio**	**Technology**
Rank	Associate Professor (tenured)	ED4/AMP2 (EVAR 4004/10)	ArchTech2 (EVAR 3006)
Hired	Aug. 2008 tenure-track	M1 (ARCH 7050/70)	+ Grad Topics (ARCH 7000/10)
Degrees	B.S. (Civil), B.S.(Arch.Eng.), M.Arch	+ M2 Design Thesis	
Name	**Herbert Enns**	**Design Studio**	**Technology**
Rank	Professor (tenured)	M1 (ARCH 7050/70)	Thesis Tech (ARCH 7080)
Hired	June 1992 (tenured)	+ M2 Design Thesis	+ Grad Topics (ARCH 7000/10)
Degrees	B.Env.S., M.Arch		+ Electives
Prof.Reg.	MAA		
Admin.	Head (1992-97)		
Name	**Ed Epp**	**Design Studio**	**Technology**
Rank	Professor (tenured)	ED4/AMP2 (EVAR 4004/10)	+ Grad Topics (ARCH 7000/10)
Hired	Sept.1993 (sessional, then tenure-tr. 1997)	+ M2 Design Thesis	+ Electives
Degrees	B.Env.S., M.L.A., M.ArchII		
Admin.	ED Program Chair (2006-09); Dir. Campus Planning (2000-03);		
Name	**Terri Fuglem**	**Design Studio**	**History & Theory**
Rank	Associate Professor (tenured)	ED3/AMP1 (EVAR 3008/10)	PreModern & Modern
Hired	July 2001 tenure-track	+ M2 Design Thesis	(EVAR 3000/02; 4000/06)
Degrees	B.Arch, M.ArchII	**Drawing** (EVAR 3014)	+ GradTopics (ARCH 7020/30)
Admin.	Acting Head (2012-15) Thesis Coordinator (2017-pr.)		
Name	**Dr. Lisa Landrum**	**Design Studio**	**History & Theory**
Rank	Associate Professor (tenured)	M1 (ARCH 7050/70)	PreModern & Modern
Hired	July 2008 tenure-track	+ M2 Design Thesis	(EVAR 3000/02; 4000/06)
Degrees	B.Arch, M.ArchII, Ph.D.		+ Grad Topics (ARCH 7020/30)
Prof.Reg.	MAA, NY State		
Admin.	Thesis Coordinator (2010-17) Associate Head (2016-18) Associate Dean Research (2017-21)		
Name	**Neil Minuk**	**Design Studio**	**Technology**
Rank	Assistant Professor (tenure-track)	M1 (ARCH 7050/70)	ArchTech 3 & 4 (EVAR 4004/10)
Hired	July 2016 tenure-track (sessional since 2001)	+ M2 Design Thesis	
Degrees	B.A., M.Arch.		
Prof.Reg.	MAA		
Name	**Dr. Carlos Rueda**	**Design Studio**	**History Theory/Technology**
Rank	Associate Professor (tenured)	ED4/AMP2 (EVAR 4004/10)	Thesis Tech (ARCH 7080)
Hired	Sept. 2015 (tenured)	+ M2 Design Thesis	+ Grad Topics (ARCH 7020/30)
Degrees	B.Arch, M.ArchII, Ph.D		
Prof.Reg.	CPNAA / Colombia		
Admin.	Head		
Name	**Ralph Stern**	**Design Studio**	**History & Theory**
Rank	Professor (tenured)	ED4/AMP2 (EVAR 4004/10)	Electives
Hired	Sept. 2010 (tenured)	+ Interdisciplinary	
Degrees	B.Arch, Dipl.Ing		
Prof.Reg.	MAA, NY State		
Admin.	Dean (2010-15)		

The advertisement for the new tenure-track Assistant Professor position is appended.

Academic Tenure-Track (Vacancy Number: 800-066-17)

Posted: June 29, 2017

Department of Architecture

Position start date: January 1, 2018

Closing date for applications: Applications will be considered beginning September 1, 2017 and will be open until the position is filled.

Position number: 24086

Position: Full-Time/Tenure-Track

Posting Information

Academic - Full-Time, Tenure-Track

The **Faculty of Architecture** invites applications for the position of Assistant Professor in the **Department of Architecture** beginning **January 1, 2018.**

The Opportunity

The Faculty of Architecture seeks a colleague to teach in areas of design and building systems, with specialization in sustainability and/or digital technologies.

Candidates must possess a professional degree in architecture and a post-professional degree in architecture or a related field. Candidates must demonstrate research achievements through scholarship and/or practice, and have a track record in teaching architectural design studio and building systems, integrating sustainability and/or digital technologies. The candidate should demonstrate effective written, verbal and interpersonal communication skills.

Candidates holding a Ph.D. and/or professional architectural registration are preferred. The successful candidate will teach architecture design studio and core technology courses, carry out an independent research agenda, and perform University service.

The Department of Architecture

We are an energetic and diverse group of professors, instructors and practitioners who are committed to integrating design education with active scholarship and practice. The Department advocates "thinking through making" and values diverse approaches to material research, representation and integrated technologies. The successful candidate will have the opportunity to carry out research at the Centre for Architectural Structures and Technology (CAST), the FABLab, our wood shop, and various interdisciplinary labs across campus. Our programs and researchers pursue design excellence; social and environmental sustainability; interdisciplinary explorations; urban design; northern and Indigenous communities; historical contexts and theoretical questions; material and construction innovation; new media; integrated practices; and community engagement. We actively collaborate with the other design disciplines within our Faculty and research units across our university, including the Faculties of Engineering, Medicine, Environment Earth and Resources, Arts, and Fine Arts. We also have established links with other universities and research organizations nationally and internationally. The professional program in Architecture is accredited by the Canadian Architectural Certification Board (CACB).

The Faculty of Architecture and the Community
The Faculty is comprised of an undergraduate Environmental Design Program; four accredited professional programmes in Architecture, City Planning, Interior Design, Landscape Architecture; and a Ph.D. in Planning and Design. The University of Manitoba is a doctoral / research institution with 30,000 students and 9,000 faculty and staff. Winnipeg is a vibrant Prairie city of 700,000 with an entrepreneurial spirit and a rich architectural history. Winnipeg has a remarkable range of arts and cultural institutions. Venues such as Storefront MB, The Winnipeg Architecture Foundation and RAW Gallery actively promote design in the city and beyond.

Application Details
The University of Manitoba is strongly committed to equity and diversity within its community and especially welcomes applications from women, members of racialized communities, Indigenous persons, persons with disabilities, persons of all sexual orientations and genders, and others who may contribute to the further diversification of ideas. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. Additional information on the Faculty and Department is available at http:/www.umanitoba.ca/faculties/architecture.

Applicants are invited to submit a curriculum vitae; a cover letter including a statement of interest, expertise and pedagogical philosophy; a teaching dossier; a portfolio, including samples of scholarly research; and the names of three (3) references.

Applications will be considered beginning September 1, 2017 and will be open until the position is filled.

Interviews of short-listed candidates will commence thereafter. Application materials, including letters of reference, will be handled in accordance with the protection of privacy provisions of "*The Freedom of Information and Protection of Privacy* (Manitoba)". Please note that curriculum vitaes may be provided to participating members of the search process. Please forward complete application to:

Carlos Rueda
Head, Department of Architecture
Faculty of Architecture
201 John A. Russell Building
University of Manitoba
Winnipeg, MB R3T 2N2

E-mail: Carlos.Rueda@umanitoba.ca

SESSIONAL/PART-TIME	TEACHING AREAS		
Name	**Dr. Lawrence Bird**	**Design Studio**	**History & Theory**
Affiliation	Ager Little Architects	Frequent Design Critic	Grad Topics (ARCH 7020)
Degrees	B.Sc.(Arch), B.Arch, M.Sc. Ph.D.	(various levels)	
Prof.Reg.	MAA, MPPI		
Name	**Chad Connery**	**Design Studio**	
Affiliation	Independent Consultant	ED3 (EVAR 3008/10)	
Degrees	B.Env.D, M.Arch	**Drawing** (EVAR 3014)	
Name	**Colin Gibbs**		**Technology**
Affiliation	Independent Consultant		ArchTech Prep (EVAR 3012)
Degrees	Dip.Eng. (Civil/Hons)		
Prof.Reg.	P.Eng., C.Eng., MICE		
Name	**Suchita Ghosh**		**Technology**
Affiliation	Independent Consultant		Grad Topics (ARCH 7000)
Degrees	B.Arch, M.S (Energy Efficient Bldgs), M.S. (Sustainable Design)		
Prof.Reg.	LEED AP		
Name	**Johanna Hurme**	**Design Studio**	**Technology**
Affiliation	5468796 Architecture	ED4/AMP2 (EVAR 4004/10)	Grad Topics (ARCH 7000)
Degrees	B.Env.D, M.Arch	+ M2 Design Thesis	
Prof.Reg.	MAA, OAA, SAA, AAA, AIBC		
Name	**Sotirios Kotoulas**	**Design Studio**	
Affiliation	Sotirios Corp.	ED4/AMP2 (EVAR 4004/10)	
Degrees	B.Arch, M.ArchII		
Name	**Ted Landrum**	**Design Studio**	**Technology**
Affiliation	Author, Independent Consultant	ED4/AMP2 (EVAR 4004/10)	Grad Topics (ARCH 7000/10)
Degrees	B.Env.D, B.Arch, M.ArchII	M1 (ARCH 7050/70)	
Name	**Dean Leith**	**Drawing**	
Affiliation	Stantec Architecture Inc.	ED3 (EVAR 3014)	
Degrees	B.Env.D, M.Arch		
Prof.Reg.	MAA		
Name	**Neil McArthur**		**Legal Aspects**
Affiliation	UManitoba (Dept. of Philosophy).		M1 (ARCH 7350)
Degrees	B.A., M.A., Ph.D.		
Name	**Colin Neufeld**	**Design Studio**	
Affiliation	5468796 Architecture	ED4/AMP2 (EVAR 4004/10)	
Degrees	B.Env.D, M.Arch	+ M2 Design Thesis	
Prof.Reg.	MAA		
Name	**Mark O'Neil**		**Legal Aspects**
Affiliation	UManitoba (Dept. of Philosophy).		M1 (ARCH 7350)
Degrees	B.A., Llb (Law)		
Name	**Sasa Radulovic**	**Design Studio**	
Affiliation	5468796 Architecture	ED4/AMP2 (EVAR 4004/10)	
Degrees	B.Env.D, M.Arch	+ M2 Design Thesis	
Prof.Reg.	MAA, OAA, AIBC		
Name	**Dean Syverson**		**Professional Practice**
Affiliation	Unit 7 Architecture		M1 (ARCH 7040)
Degrees	B.A., M.Arch		
Prof.Reg.	MAA, OAA, SAA		
Name	**Liane Veness**	**Design Studio**	**Technology**
Affiliation	Work/Shop	ED3 (EVAR 3008/10)	ED3 (EVAR 3006)
Degrees	B.Env.D., M.Arch	**Drawing** (EVAR 3014)	Grad Topics (ARCH 7010)
Prof.Reg.	MAA, LEED		
Admin.	C.A.S.T. Coordinator (half-time)		

DESIGN STUDIO: STUDENT – TEACHER RATIOS

2014-15	STUDENTS	
ED3 Studios / Instructor	Thesis	Studio
Fall: Section 1/Veness		13:1
Winter: Section 1/Veness		13:1
Fall: Section 2/Fuglem		15:1
Winter: Section 2/Fuglem		15:1
AMP1 Studios		
Fall: Section 3/Subotincic	(4)	8:1
Winter: Section 3/Subotincic	(4)	8:1
Vertical Studios (ED4 / AMP2 / M1)		
Fall: Section 1/Aquino	(2)	10:1
Winter: Section 1/Aquino	(2)	10:1
Fall: Section 2/Coar	(2)	11:1
Winter: Section 2/Coar	(2)	11:1
Fall: Section 3/Epp	(2)	11:1
Winter: Section 3/Neufeld	(1)	11:1
Fall: Section 4/Harrop	(2)	7:1
Winter: Section 4/Harrop	(2)	7:1
Fall: Section 5/Landrum	(1)	12:1
Winter: Section 5/Landrum	(2)	12:1
Fall: Section 4/Minuk	(3)	11:1
Winter: Section 4/Minuk	(3)	11:1

2015-16	STUDENTS	
ED3 Studios / Instructor	Thesis	Studio
Fall: Section 2/Veness		13:1
Winter: Section 2/Veness		13:1
ED3/AMP1 Studios		
Fall: Section 1/Aquino	(6)	13:1
Winter: Section 1/Aquino	(6)	13:1
Fall: Section 3/Fuglem		13:1
Winter: Section 3/Connery		13:1
ED4/AMP2 Studios		
Fall: Section 1/Coar	(4)	10:1
Winter: Section 1/Coar	(4)	10:1
Fall: Section 2/Epp	(4)	10:1
Winter: Section 2/Epp	(4)	10:1
Fall: Section 3/Kotoulas	(1)	8:1
Winter: Section 3/Kotoulas	(1)	8:1
Fall: Section 4/Minuk	(3)	8:1
Winter: Section 4/Minuk	(3)	10:1
M1 Studios		
Fall: Section 1/Enns		6:1
Winter: Section 1/Enns		5:1
Fall: Section 2/Landrum	(4)	8:1
Winter: Section 2/Landrum	(4)	8:1
Fall: Section 3/Hurme, Neufeld,	(4)	9:3
Winter: Section 3/Hurme, Neufeld,	(4)	9:3
Interdisciplinary Studio		
Fall: Stern/Eaton		10:2

2016-17	STUDENTS	
ED3 Studios / Instructor	Thesis	Studio
Fall: Section 2/Veness		12:1
Winter: Section 2/Veness		12:1
Fall: Section 4/Connery		12:1
Winter: Section 4/Connery		12:1
ED3/AMP1 Studios		
Fall: Section 1/Aquino	(4)	9:1
Winter: Section 1/Aquino	(4)	8:1
Fall: Section 3/Fuglem	(2)	8:1
Winter: Section 3/Fuglem	(2)	7:1
ED4/AMP2 Studios		
Fall: Section 1/T.Landrum&Rueda	(2)	12:2
Winter: Section 1/Stern	(1)	11:1
Fall: Section 2/Epp	(3)	12:1
Winter: Section 2/Epp	(3)	12:1
Fall: Section 3/Kotoulas		10:1
Winter: Section 3/Kotoulas		10:1
Fall: Section 4/Hurme, Neufeld,	(1)	10:3
Winter: Section 4/Hurme, Neufeld,	(1)	10:3
M1 Studios		
Fall: Section 1/Coar	(1)	8:1
Winter: Section 1/Enns	(1)	8:1
Fall: Section 2/Landrum	(5)	7:1
Winter: Section 2/Landrum	(5)	6:1
Fall: Section 3/Minuk	(3)	8:1
Winter: Section 3/Minuk	(3)	7:1

Studio Students +
M2 Thesis Students (# in brackets)

GRADUATE SUPERVISION of M2 DESIGN THESIS STUDENTS

		2014-15		2015-16		2016-17		TOTALS	
	ADVISOR	Advisor	Chair	Advisor	Chair	Advisor	Chair	Advisor	Chair
	Dr. Eduardo Aquino	2		6	5	4	7	12	12
	Lancelot Coar	2		4		leave		6	
	Herbert Enns	leave		0		1		1	
	Eduard Epp	leave		4		3		7	
	Terri Fuglem	0	6	leave		2		2	6
	Dr. Lisa Landrum	2	5	4	9	5	6	11	20
	Neil Minuk	3		3		3		9	
	Dr. Carlos Rueda	(hired Sept.'15)		0	11	2	9	2	20
	Ralph Stern	1		leave		1		2	
SESSIONALS	Johanna Hurme			1		1		2	
SESSIONALS	Colin Neufeld	1		2				3	
SESSIONALS	Sasa Radulovic			1				1	
SESSIONALS	Sotirios Kotoulas			1				1	
Rsgn'd	Patrick Harrop	2	6					2	6
Rsgn'd	Nada Subotincic	4						4	

Primary Advisor for # of students
Chair/Secondary Advisor for # of Students

Full-time Faculty may also serve as secondary advisors for graduate students in other Master Programs within the Faculty and/or as primary advisors and committee members for Doctoral students at the University of Manitoba, or elsewhere. (See individual resumes).

3.5.3 HR: Administration

Description of the distribution of effort between administration and other responsibilities for each position;

TEACHING LOADS and Primary ADMINISTRATIVE ROLES - Department of Architecture
(See individual resumes for full committee work and external service)

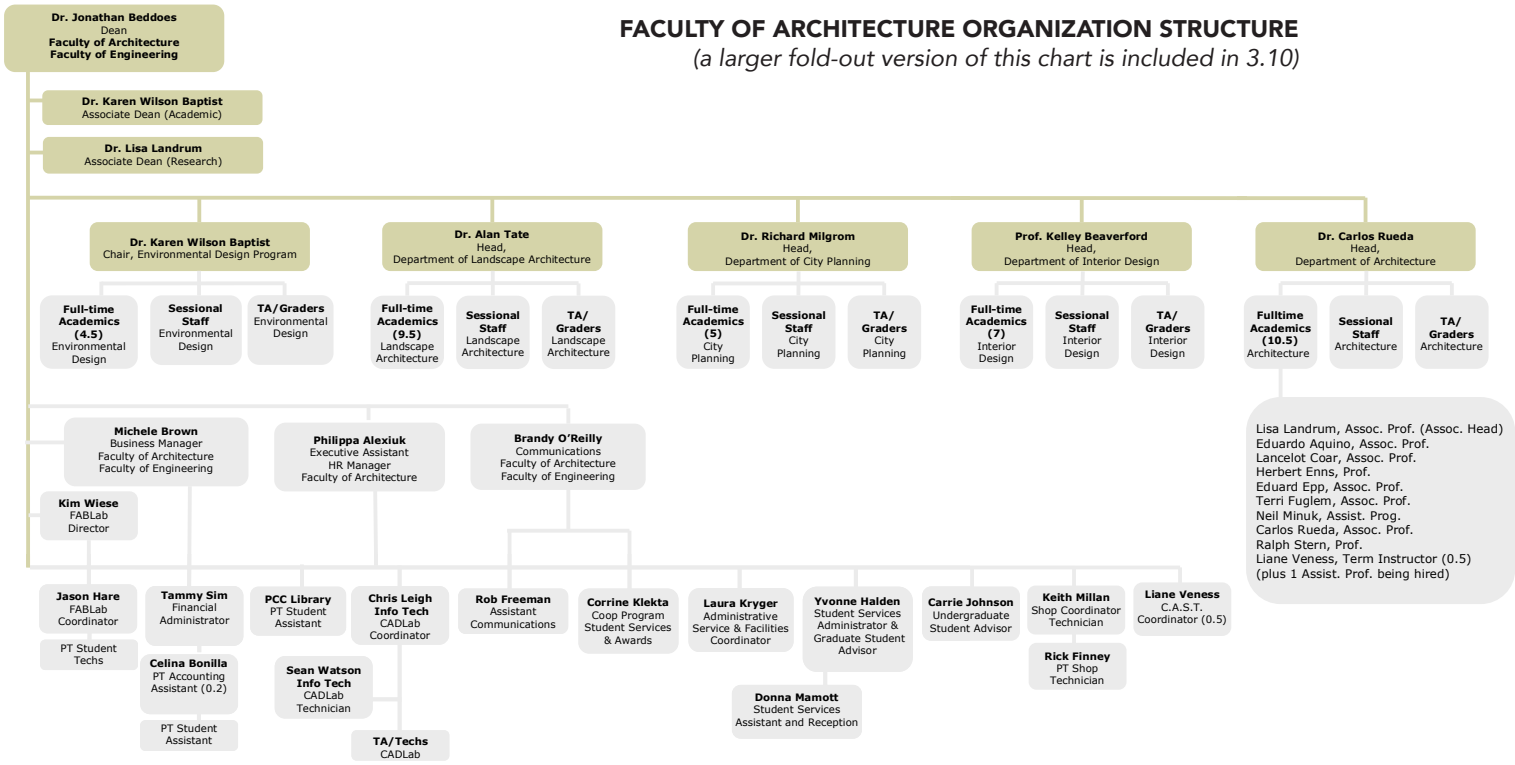
	2014-15			2015-16			2016-17			2017-18		
	Fall	Winter	Admin	Fall	Winter	Admin	Fall	Winter	Admin	Fall	Winter	Admin
Dr. Eduardo Aquino	full	full	–	full	full	–	full	full	–	full	full	–
Lancelot Coar	full	full	–	full	full	–	full	leave	–	full	full	–
Herbert Enns	Other Teaching		–	full	full	–	leave	full	–	full	full	–
Eduard Epp	full	leave	–	full	full	–	full	full	–	research/study leave		
Terri Fuglem	50%	50%	Head	full	leave	–	full	full	–	full	full	Thesis Coordinator
Dr. Lisa Landrum	full	full	Thesis Coordinator	full	full	Thesis Coordinator	full	full	Thesis Coordinator	50%	50%	Associate Dean (R) Associate
Neil Minuk	full	full	(sessional)	full	full	(sessional)	full	full	–	full	full	–
Dr. Carlos Rueda	–	–	(hired Sept. 2015)	50%	50%	Head	50%	50%	Head	50%	50%	Head
Ralph Stern	Dean			full	admin	–	admin	full	–	alternative assignment/special advisor		
Pat Harrop	full	full	–	*Resigned*								
Nada Subotincic	full	full	–	*Retired*								
Mark West	full	full	–	*Resigned*								

COMMITTEE ROLES – Department of Architecture
2017-18

	Thesis Committee	Admissions Committee	MAA - DoA Strategic Committee	Publications	Student Awards	Technology	History/Theory	Comprehensive Design/M1	AMP Program	Senate	Faculty Executive	Cultural Events	Research Committee	Doctoral Studies Committee	Nominating Committee	EDPAC	Gallery	C.A.S.T.
Dr. Eduardo Aquino		■		■					■				■		■			
Lancelot Coar	Research/Study Leave Jan.-July 2017																	■
Herbert Enns		■						■										
Eduard Epp	Research/Study Leave 2017-18																	
Terri Fuglem	■			■	■				■									
Dr. Lisa Landrum	■	■	■	■	■		■	■		■	■	■	■	■				■
Neil Minuk				■		■		■									■	
Dr. Carlos Rueda	■	■	■		■				■							■		■
Ralph Stern	Alternative Assignment 2017-18																	

FACULTY OF ARCHITECTURE ORGANIZATION STRUCTURE

(a larger fold-out version of this chart is included in 3.10)



As indicated in the Organization structure above, the Faculty of Architecutre consists of five academic programs, led by a Faculty Dean, with an Associate Dean Academic and an Associate Dean Research.

The five programs consist of an undergraduate Environmental Design Program, plus four professionally-accredited programs leading to a Master Degree in Architecture, Landscape Architecture, Interior Design, and City Planning. Each professional program is administered by a Department, led by a Department Head. The Environmental Design Program is led by a Program Chair, in collaboration with the Heads.

The Faculty of Architecture is currently comprised of 62.7 full time staff. One aditional staff member is in the hiring process, giving a total complement of 63.7 staff.

Staff can be grouped into three functional areas: 37.5 Academic staff, of which 10.5 are in the Department of Architecture (one currently in the hiring process); 10.2 Administratirve staff; and 5.5 Technical staff. In addition to the positions idenitifed in the organizational chart, the Faculty hires numerous Teaching Assistants and Grader-Markers, plus part-time student assistants to provide additional support in the FABLab and CADLab.

Operational management of the Faculty is through the Deans and Heads Committee, Chaired by the Dean. The Deans and Heads Committee meets once every second week from September through to the end of June. Additional staff are frequently invited to meetings of the Deans and Heads Committee as relevant agenda items arise. Faculty Council, consisting of all full-time academic staff and support staff representatives, is the governing body of the Faculty. Faculty Council meets at least three times a term during the academic year.

Each Department is managed through a Department Council. The Environmental Design Program is managed by EDPAC – the Environmental Design Program Advisory Committee, which reports to Faculty Council.

For a fuller description of the administrative roles and governance structure of the Faculty of Architecture, see below – Section 3.10: Administrative Structure.

3.5.4 HR: Support Staff

Description of the responsibilities for each position.

Since the last CACB Accreditation several of the Support Staff positions and functions have been reviewed with the aim of maximizing the effectiveness and efficiency of the organization. A direct result of this is that the Business Manager and Communications Coordinator positions are now shared with the Faculty of Engineering, with some of the responsibilities of the previous Faculty of Architecture Business Manager now shared amongst the: Business Manager (Michele Brown), the Executive Assistant to the Dean and Associate Deans (Philippa Alexiuk), and the Coordinator-Administrative Services and Facilities (Laura Kryger). This change in organization allowed the re-allocation of budget to support an additional academic faculty position.

Additionally, since the last CACB Accreditation three new support staff positions have been established, including:
1. CAST Coordinator (Centre for Architectural Structures and Technology), half time position;
2. Coop Program and Awards Assistant, full time position;
3. Financial Assistant, 0.2 position (one day per week).

ADMINISTRATIVE STAFF

Office of the Dean:

Michele Brown:	Faculty of Architecture: Business Manager, Faculty Budget and Strategic Planning. Oversees work of Financial Services administrative staff. Faculty of Engineering: Business Manager, Faculty Budget and Strategic Planning and Human Resources.
Philippa Alexiuk:	Executive Assistant to the Dean and Faculty of Architecture Human Resources: Administrative support to the Dean and Associate Deans, Faculty Council, academic leaves, tenure, promotion, headship searches, academic and support staff position management.

Communications

Brandy O'Reilly:	Faculty of Architecture: Coordinator, Communications Specialist, Partners Program. All Faculty communications, promotion, special events, alumni contact, web design and administration and student recruitment; oversees Faculty of Architecture Coop Program and Faculty of Architecture awards. Faculty of Engineering: Communications and Executive Director of the Friends of Engineering.
Robert Freeman:	Assistant, Communications/Partners Program: Assists Faculty of Architecture Coordinator with communications, promotion, special events, web design/administration.
Corrine Klekta:	Assistant, Faculty of Architecture Coop/Work Placement Program, Faculty Awards coordination and Student Services assistance.

Financial Services

Tammy Sim:	Financial Administrator, Department/Program budgets, work with Business Manager/Department Heads/Chair on budget forecasting and planning, work with faculty members and staff and students on matters related to academic travel funds (PDA), field trips, claims for reimbursement, visa purchases, manage hiring process for sessional and teaching assistant part-time appointments and manages payroll for all hourly employees.

Celina Bonilla: Financial Assistant, Support Architecture Financial Administrator part-time and Faculty of Engineering Financial Administrator part-time.

Student Services

Yvonne Halden: Coordinator, Students Services & Graduate Student Advisor for City Planning, Landscape Architecture, Interior Design and Architecture, and the Ph.D. program. Oversee the Student Services area, including graduate student admissions, registration, student exchanges, course scheduling, etc.

Carrie Johnson: Advisor, Undergraduate Students: Student advisor for Environmental Design Program, student registration, special admissions, course loading, scheduling, student appeals and discipline, etc.

Donna Mamott: Assistant, Student Services/Reception: Provides assistance to Student Services, examiners forms, SEEQ, reception, room bookings, telephones, card swipe, keys, courier, mail and supplies.

Administrative Services & Facilities

Laura Kryger: Coordinator, Administrative Services & Facilities: Undergraduate/Graduate Program/Department administration; provides assistance to Chair/Heads, academic searches, Council/bylaws, accreditation, program reviews, travel bookings and claims, etc. On behalf of the Dean's Office oversees Faculty facility management, including health, safety and security.

TECHNICAL STAFF

CADLab

Chris Leigh: Coordinator, CADLab: Technical support, equipment & inventory.

Sean Watson: Technician, CADLab: CADLab print lab, printing credits, equipment booking, general technical assistance.

FABLab

Jason Hare: Coordinator, FABLab: Provide specialized instruction and formalize functional workflows for complex rapid prototyping sequences and systems analysis. Technical support, equipment & inventory.

Wood Workshop

Keith Millan: Coordinator, Workshop: Workshop management; technical support, safety orientation, new student orientation, etc.

Rick Finney: Workshop: Provides technical assistance in Workshop part-time.

C.A.S.T.

Liane Veness: Coordinator, Centre for Architectural Structures and Technology: oversees use of the facility in support of both research and educational objectives. Responsible for health and safety in CAST and special projects. Half time position; the other half of position is as an Instructor in Department of Architecture.

Part-Time Student Support

The Faculty also employs students for various part-time positions including: Ivan Agatep, Financial Services assistance; Jonathan Watts, FABLab assistance; Suzanne Therrien-Richards, Resource Administrator for the Product Catalogue Collection, overseeing collection and providing assistance to students; Ernest Ikwudou, general assistance as needed. There are also many students employed in the CADLab during the summer and academic year.

3.6 Human Resource Development

Programs must have a clear policy outlining both individual and collective opportunities for faculty and student growth within and outside the program.

The APR must include:

- *The program's policy regarding human resource development opportunities;*
- *A description of the policies, procedures and criteria for faculty appointment, promotion and tenure;*
- *A description of faculty development opportunities;*
- *Evidence of how faculty activities encourage currency in the knowledge of changing demands of practice and licensure;*
- *Evidence of the program's facilitation of student opportunities to participate in field trips and other off-campus activities;*
- *Evidence of opportunities to participate in student professional societies, honors societies, and other campus-wide student activities;*
- *Description of student support services, including academic and personal advising, career guidance, evaluation of progress, and internship placement (if applicable);*
- *A list of guest lecturers and visiting critics brought to the program since the previous site visit;*
- *A list of public exhibitions brought to the program since the previous site visit.*

3.6.1 HR Development Policies

- *The program's policy regarding human resource development opportunities;*

The architecture program benefits from development opportunities at the Departmental, Faculty and University level. Relevant policies at each level are noted below.

The Department of Architecture supports academic and professional development in at least three ways:

- enabling academic freedom, in part, by encouraging faculty to enrich the curriculum with individual research inquiries and initiatives;
- supporting professional development, in part, by covering up to $750 of professional memberships dues for each licensed faculty members incurring annual fees; and
- using a portion of Departmental discretionary funds (approximately 20% or $5000) toward supporting faculty research and/or teaching initiatives based on faculty member proposals. The Head of the Department of Architecture may also use discretionary funds toward supporting student development, such as travel to conferences.

The Faculty of Architecture supports faculty development, in part, by facilitating a University required Professional Development Allowance (PDA), which is governed by Article 27 of the UMFA Collective Agreement. The Faculty of Architecture administers these funds to individual members. Values vary according to probationary status and other variables, typically ranging from $1600-$2200 per year for UMFA members. Funds are intended to support academic and/or research travel, as well as books, equipment and/or services related to the performance of academic or research duties. Other opportunities for development within the Faculty of Architecture include:

- a *Studio Enhancement Fund*, introduced as a trial in January 2017, to assist in achieving the pedagogical objectives of select studio courses. Modest funds ($500-$1000) were awarded based on applications with the intention of enabling learning outcomes to be enhanced by providing funding for consumables, books, videos, guest lecturers, field trips or any other activity that fits within the scope of the studio.

- *Deans Office Discretionary Funds* – On a case-by-case basis, the Dean's office may use discretionary funds toward research and/or pedagogical initiatives based on specific proposals. For instance, in 2016-17 the Dean's office provided modest support toward the manifestation of *Carbuncle*, which involved all 40 ED3/AMP1 students in a design-build project as part of an international design competition.

- *Associate Dean (Research)* – The Associate Dean Research has a modest discretionary budget of $5,000 per year to support peer-reviewed research of faculty and students, especially in cases where Faculty support will leverage matching-funds from the Faculty of Graduate Studies, University grants programs, and/or external funding. Support may be used toward launching research projects with the intention of applying for larger grants, and/or disseminating research via peer-reviewed conferences and publications.
- *Partners Program* – The Partners Program provides a formal funding and communication vehicle between the Faculty of Architecture and various constituents to help ensure Faculty initiatives serve the long-term interests of diverse stakeholders, including industry partners, design professionals, students and the community at large. The Partners Program mandate covers: Education; Research; Community and Public Relations. Currently 22 firms are formal partners. In recent years, Partners Program has committed $500 to each Faculty of Architecture student group, which enables the Meet and Greet Events for students and professionals. Partners also host a now annual interdisciplinary Meet Mingle and Mentor evening of conversation. In the 2017-18 academic year, Partners has committed to sponsor 3 Food for Thought Lectures by representatives from partner firms presenting recent work, followed by round-table discussions. Partners have helped support the C.A.S.T. Researcher in Residence Program (formerly the Partner in Residence). The Partners Program Board members also consider proposals for modest funding on a case-by-case basis for special projects.
- *Recognition Program* – the Carl Nelson Jr. Teaching Award recognizes and encourages commitment to teaching excellence within the Faculty.

Research/Study Leaves and Administrative Leaves

The University of Manitoba provides numerous opportunities for professional development. Significantly, the University supports research/study leaves and administrative leaves, which are governed by Article 21 of the UMFA Collective Agreement. Research/study and administrative leaves are provided to enable academic members to engage in research to foster their effectiveness as teachers and scholars. A faculty member earns a half credit towards a Research/Study Leave for every half-year of full-time service with the University. A faculty member/instructor shall be eligible for a full research/study leave after accumulating six (6) or more credits. A faculty member/instructor shall be eligible for a half research/study leave after accumulating three (3) or more credits. Half leaves (ie. 6 months) are taken at 100% of base salary; full (12-month) leaves are at 80% of base salary. Probationary faculty members are entitled to apply for a 6-month 100% pay research/study leave after six full-time terms of employment (typically 3 years).

Architecture Program Research/Study & Administrative Leaves:

FACULTY MEMBER	CURRENT or SCHEDULED LEAVE	LAST LEAVE(S)
Dr. Eduardo Aquino	eligible for term leave (tbc).	July 2013-June 2014
Lancelot Coar	Jan-July 2017;	Jan-July 2012;
Herbert Enns	July 2018-June 2019	July-Dec. 2016
Eduard Epp	July 2017-June 2018	July 2011-June 2012
Terri Fuglem	eligible for term leave 2020 (tbc).	Jan-July 2016; Jan-July 2011.
Dr. Lisa Landrum	eligible for full year July 2018 (tbc).	July-Dec. 2011
Neil Minuk	eligible July-Dec. 2019	n.a.
Dr. Carlos Rueda	eligible July 2020-June 2021 (admin)	n.a.
Ralph Stern	July 2017-June 2018 (special)	Jan-Dec. 2016 (admin)

Further specific development opportunities are listed below in 3.6.3.

3.6.2 Faculty Appointment, Promotion & Tenure

- *A description of the policies, procedures and criteria for faculty appointment, promotion and tenure;*

APPOINTMENT

Article 18 of the UMFA Collective Agreement governs most academic faculty appointments. The policies cover: recruitment, search and advertising procedures, faculty participation, equity and gender, as well as recommendation and appointment procedures. Article 19C further covers appointments with tenure, probationary (tenure-track) appointments, term and contingent appointments, and termination procedure.

– http://www.umfa.ca/member-resources/collective-agreement

The University of Manitoba's Policy on Academic Appointments covers: general provisions (including employment equity); authorization; search procedures; search participation; responsibilities of members of the search committee; advertising; interviews; recommendations for appointment; and appointment.

– http://umanitoba.ca/admin/governance/governing_documents/staff/297.html

Human Resources maintains diversity and inclusion policies on academic recruitment, and runs workshops for Chairs and search committees members to help uphold the University's commitment to the Federal Contractors Program, which seeks to remove artificial barriers to the selection, hiring, promotion and training of designated groups (women, Aboriginal peoples, persons with disabilities, & racialized persons).

– http://umanitoba.ca/admin/human_resources/equity/academic_recruitment/index.html

Human Resources provides guidelines and support for academic appointments. Position descriptions must be advertised on UM Human Resources, UM Today, CAUT and University Affairs. Tenure-track positions within the Department of Architecture are typically also advertised with: the Association of Collegiate Schools of Architecture (ACSA); Canadian Architect; Royal Architectural Institute of Canada; Architecture Blogspot; UniJobs; Archinect Jobs; Academic Keys; Times Higher Education; Jobs.ac.uk; and Engineeroxy.

– http://umanitoba.ca/admin/human_resources/about/index.html

All advertisements must include the following statements concerning diversity, immigration and FIPPA:

The University of Manitoba is strongly committed to equity and diversity within its community and especially welcomes applications from women, members of racialized communities, Indigenous persons, persons with disabilities, persons of all sexual orientations and genders, and others who may contribute to the further diversification of ideas. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

Application materials, including letters of reference, will be handled in accordance with the protection of privacy provisions of "The Freedom of Information and Protection of Privacy (Manitoba)"

Opportunities for sessionals, staff, teaching assistants and graders are advertised through REACH-UM.

– https://umanitoba.hua.hrsmart.com/ats/job_search.php

PROMOTION AND TENURE

Article 19C and 19D of the UMFA Collective Agreement governs tenure and Article 20 covers promotion. Policies concern: committee structure; process guidelines; confidentiality; appeal rights and procedures. The maximum untenured period for probationary appointments is 6 years (not counting research/study leaves). New probationary Assistant Professors in the Faculty of Architecture typically take a 6-month research/study leave after three years, and apply for tenure in July at the end of their sixth year. Supporting materials for tenure applications are due by September 1.

The Collective Agreement has general language concerning research metrics, and provisions for research, scholarly work and other creative activity, plus teaching and service. The Faculty of Architecture, like most faculties at the University of Manitoba, has developed Faculty-specific *Guidelines* and *Policies, Procedures and Criteria* concerning promotion and tenure, which are considerate of disciplinary uniqueness. These documents, which were developed by committee and approved in Faculty Council in 2002, with amendments in 2013, are intended to assist faculty in articulating the value of their work. The *Guidelines* establish a set of principles that encourage the continued pursuit of excellence and new knowledge in teaching, scholarship, and service. A standard weighting of 40% teaching, 40% scholarship and 20% service is presumed unless there is an alternative signed agreement with the Dean or Provost. "Scholarship" in the Faculty of Architecture encompasses applied scholarship, creative work, professional practice, and research. A comprehensive range of activities and assessments are outlined for each area.

The *Policies, Procedures and Criteria* clarify the application of terms and conditions of the current UMFA Collective Agreement as these affect the Faculty of Architecture, provide guidance for promotion and tenure committees, and acts as a guide for individual faculty members in the continuing development of their academic careers. According to these Faculty of Architecture criteria:

Tenure shall be recommended in instances where the Candidate provides material evidence of:
- a successful teaching record sustained over a reasonable period of time;
- significant attainment in scholarship;
- contributions to service and other assigned duties to the Faculty, the University, and/or the professional or academic communities to which the member belongs.

Promotion from Assistant Professor to Associate Professor shall be recommended in instances where the Candidate provides satisfactory material evidence of:
- successful teaching, sustained over a reasonable period of time;
- scholarship that clearly demonstrates sustained commitment and success;
- satisfactory contributions to service and other assigned duties to the Faculty, and the University.

Promotion from Associate Professor to Professor shall be recommended in instances where the Candidate provides satisfactory material evidence of:
- excellent teaching, sustained over a reasonable period of time;
- scholarship that clearly demonstrates sustained commitment and excellence;
- outstanding contributions to service and other assigned duties to the Faculty, the University, and/or the professional or academic communities to which the member belongs.

Tenure and Promotion *Guidelines* and *Policies/Criteria* are posted on the Faculty of Architecture's website
– http://umanitoba.ca/faculties/architecture/facstaff/academic_handbook/tenureandpromotion.html

The website of the University Provost and Vice-President (Academic) posts all policies on Promotion and Tenure, and related application and recommendation forms:
– http://umanitoba.ca/admin/vp_academic/fac_dev_forms.html
– http://umanitoba.ca/admin/vp_academic/faculty_development/prom_tenure_leaves.html

3.6.3 Faculty Development Opportunities

- *A description of faculty development opportunities;*

Teaching Support:

- *Centre for the Advancement of Teaching and Learning* –offering new faculty orientations, the *Teaching Learning Certificate Program*, teaching resources and workshops, including several UM Learn workshops in Summer 2017 – http://intranet.umanitoba.ca/academic_support/catl/ ;
- *HR Learning and Organizational Development* unit, providing leadership enhancement and personal effectiveness programs – http://umanitoba.ca/admin/human_resources/lds/index.html ;
- the UM *Leaders Learning Program*, committed to leadership development, including 10 full-day learning workshops http://umanitoba.ca/admin/human_resources/lds/5828.html ;

Recognition Programs (encouraging research, teaching and service excellence):

- the HR President's Award; Leadership Award; Service Award, Team Award, Diversity & Inclusion Award – http://umanitoba.ca/admin/human_resources/lds/recognition/index.html
- the Faculty of Graduate Studies Award for Excellence in Graduate Student Mentoring;

UM Office of Research Services: Funding & Awards http://umanitoba.ca/research/ors/um_funding.html

- Dr. John M. Bowman Winnipeg Memorial Rh Institute Foundation Award – *The award of $25,000 recognizes outstanding research accomplishments in all fields by established University of Manitoba faculty members.*
- Conference Sponsorship Program and Student Travel Support to Competitions – *Provides funding to help support conferences held at the University of Manitoba.*
- The Terry G. Falconer Memorial Rh Institute Foundation Emerging Researcher Awards – *The awards support academic staff early in their career through research/scholarly/creative works grants valued at $12,000 each.*
- Dr. Paul H.T. Thorlakson Foundation Fund – *$25,000 assist persons and organizations in advancing scientific, medical and surgical knowledge through education and research.*
- Innovation Plaza – *Honours distinguished researchers through commemorative busts.*
- *International Conference Travel Grants Program* (UM/SSHRC TGP) – *provides financial assistance to researchers attending international conference, up to $1,500 every three years;*
- Leave Research Grant – *Designates part of an applicant's salary as grant-in-aid of research while on leave.*
- *Research Grants Program* (UM/SSHRC RGP) – *provides up to $7,000 for small research projects;*
- Samuel Weiner Distinguished Visitor Award – *Provides up to $3,000 to partially support the visit of a prominent scientist or scholar to the University of Manitoba.*
- Self-funded Research Grant Program – *Provides support research through grants in lieu of salary.*
- Small Research Equipment Funding Program (SREF) – *Provides a maximum of $25,000 to researchers who have specific, lower-cost equipment needs required to support their research programs.*
- University Collaborative Research Program (UCRP) – *Supports new collaborative interdisciplinary and multidisciplinary research projects, with a $25,000 maximum level of support per application.*
- University Creative Works Grants Program – *Provides up to $2,500 to support creative works to enhance the overall quality of artistic production at the University of Manitoba.*
- University Indigenous Research Program (UIRP) – *Provides up to $25,000 for research projects across disciplines that fosters the inclusion of Indigenous perspectives and partnership with First Nations, Métis and Inuit communities.*
- University International Programs & Projects Seed Fund (UIPPSF) – *Provides up to $5,000 for faculty members establishing new partnerships with colleagues and institutions situated outside of Canada.*
- University Research Grants Program (URGP) –*up to $7,500 to develop their research to the point where applications for external funding from the Tri-Agencies (SSHRC, NSERC, CIHR) can be made.*

Research Workshops, via UM Office of Research Services & SSHRC & NSERCC Research Facilitators:
http://umanitoba.ca/research/ors/workshops_presentations.html

Upcoming Sessions
- *What's New at SSHRC for 2017/18?* – August 30th, 2017, 12:00 noon – 1:30pm, Room 409 Tier
- *Key Elements of SSHRC Insight & Insight Development Grants* – September 6th, 2017, 12:00 noon 1:30pm, Room 409 Tier
- *Key Elements of Partnership Grants* – September 20th, 12:00noon – 1:30pm, Room 409 Tier

SSHRC Webinars
Partnership Engage Grants, Wednesday, August 23rd, 2017, 12:00 -13:30 ET
Insight Grants, Thursday, September 7th, 2017, 13:30 - 15:30 ET
Partnership Development Grants, Tuesday, October 17th, 2017, 14:00-16:00 ET
Partnership Grants – Stage 1, Wednesday, October 18th, 2017, 12:00-14:00 ET
Connection Grants, Wednesday, November 8th, 2017, 12:30-15:00 ET

As of July 2017, research development and funding opportunities for Faculty of Architecture members are being posted to a Research Opportunities website:
http://umanitoba.ca/faculties/architecture/facstaff/ResearchOpportunities.html

Provost and Vice-President (Academic)
- *Teaching and Leaning Certificate for Faculty Members* – assisting professors early in their career;
- *Teaching and Leaning Enhancement Fund* – supporting projects (ranging from $5,000 - $15,000) that explore new pedagogical approaches and the impact on learning, the scholarship of teaching and learning, the integration of research and teaching in the classroom;
- *3M National Teaching Fellowships* – Distinguished members of faculties/colleges/schools who, because of their original contributions to teaching excellence and educational leadership, can be recommended to the University's advisory committee for consideration.

– http://umanitoba.ca/admin/vp_academic/faculty_development/3728.html

3.6.4 Currency in Practice and Licensure

- *Evidence of how faculty activities encourage currency in the knowledge of changing demands of practice and licensure;*

Six of the nine full-time faculty members in the Department of Architecture are professionally registered architects in the province of Manitoba (Enns, Landrum, Minuk and Stern) and/or another country (Rueda in Columbia; Aquino in Brazil; Landrum and Stern in New York State). Those registered in Manitoba and NY have mandatory continuing education, requiring – for each 2-year cycle – 70 hours of learning, 25 hours of which must be structured. Learning areas may include: Legal Issues and Legislation related to Architectural Practice and the Construction Industry; Building Technology; Planning and Design; Practice of Architecture and Business Management; Project Management; Environment and Energy; and Architectural Culture. Enns, Minuk, Rueda and Aquino are directly active in design practice.

MAA-registered faculty members may also serve as mentors to interns seeking professional licensure. Through mentoring conversations, knowledge about the changing demands of practice is mutually exchanged. Landrum is currently mentor to five interns, Enns to one.

The M.Arch program has a long-standing emphasis on professional practice, offering two 3-credit courses: Legal Aspects of Architectural Practice (ARCH 7350) & Professional Practice (ARCH 7040). A practicing licensed professional teaches each course: a registered architect (7350), and a lawyer specialized in construction litigation (7040). The Professional Practice course involves numerous other architects (12 firms) via a "mock interview" assignment, where students interview with local firms. Students also visit the MAA offices to learn about the internship and licensure process from its Executive Director.

The Faculty's new Co-op program is designed to complement and enrich the academic program with work experience. The program is intended to introduce students to the changing demands of practice and build awareness of internship and licensure processes. The Faculty is aiming to have about 12 placements by the summer of 2018. Landrum is the Co-op Academic Liaison. Launching this program will involve engaging partner firms to learn about their current practice demands and expectations for student placements.

Faculty members participate in many social events cultivating exchange between students, professors and architects. Contemporary practice and licensure are key topics of conversations. These events include: the MAA-student Meet and Greet, organized by UMAAS student representatives each winter; and the Meet Mingle and Mentor event, organized by the Faculty's Partner's Program each Fall. In 2016 this event was held at Manitoba Hydro Place and included a building tour and introduction to its sustainability features.

The program encourages currency in practice and licensure among faculty & students in many other ways:

- professional guests regularly serve as design studio sessional instructors, visiting critics and lecturers;
- many guest speakers in the Cultural Events series (see 3.6.8) are practicing architects; lectures often describe design projects in relation to current professional challenges;
- one faculty member (Landrum) serves as the Winnipeg regional correspondent to *Canadian Architect* magazine, and regularly contributes reviews of new architectural works and books;
- participation in National task forces on current practice: Landrum is currently a member of the *Future of Architecture Task Force*, involving members of CALA (the Canadian Architectural Licensing Authorities) and CCUSA (the Canadian Council of University Schools of Architecture). Meetings have taken place in January, March, July and September 2017;
- faculty members regularly serve on design award juries, including Aquino, Enns, Epp and Fuglem;
- faculty serve on MAA Council (Stern), and the MAA-DoA Strategic Committee (Landrum & Rueda);
- Faculty of Architecture Tenure & Promotion policies encourage Professional Practice as a form of scholarship;
- the Department of Architecture encourages registration by covering up to 50% of membership dues;
- the Faculty regularly posts student job opportunities http://umanitoba.ca/faculties/architecture/employments.html ;
- the MAA normally holds their annual ExAC (Examination for Architects in Canada) at the Faculty.

3.6.5 Field Trips

- *Evidence of the program's facilitation of student opportunities to participate in field trips and other off-campus activities;*

Field trips are an important part of the design studio curriculum, providing students the opportunity to experience cities, settings, buildings, architectural practices, cultural institutions, and environmental conditions that directly inform design projects underway. Typically, every studio takes a five to ten day regional or international field trip in the middle of the Fall term. Destinations are selected for their pertinence to studio topics. Travel times and durations are coordinated across the program to ensure compatibility with other courses. Studios, undergraduate Technology Courses and graduate Topics Courses also take local field trips in and around Winnipeg to construction sites, design sites, noteworthy buildings, architectural firms, showrooms, and workplaces of industry partners.

2016-17

Mexico City – *Social Infrastructures,* ED3 + AMP1 (EVAR 3008), Eduardo Aquino
Sites included The San Cristóbal Stables, Luis Barragán's house and studio, Ciudad Universitaria, Teotihuacan, Mercado El Chorrito, and the National Museum of Anthropology.

Los Angeles – *Logic of the Limit*, M1 + M2 (ARCH 7050, ARCH 7070), Neil Minuk
Sites included Griffiths Park Observatory, the Eames House, Le Brea Tar Sands, Sedlack Residence, Delmer Residence, Schindler House, and the VDL Research House.

New York City – *Analysis as Design*, ED4 + AMP2 (EVAR 4004), Sotirios Kotoulas
Site visits to the MET, Central Park (Olmstead), MoMA, Whitney Museum, Noguchi Museum, Magenta Plains, the Seagram Tower, the Lever House, and a tour of Cooper Union.

Montreal – *Surpassing Surface Studio*, ED3 (EVAR 3008), Chad Connery
Visited the Canadian Centre for Architecture, Place des Arts, Musee D'art Contemporain de Montreal, Maison de l'Architecture du Quebec, DHC Art Foundation, and the PHI Center.

Montreal – *Exchange Studio*, ED3 + AMP1 (EVAR 3008), Terri Fuglem
Sites included the Île Sainte-Hélène, MAC, and Montreal Markets & Neighborhoods.

Montreal, Toronto, Ottawa – *Radical Campus Studio*, M1 + M2 (ARCH 7050, ARCH 7070), Lisa Landrum
Visiting major University Campuses, cultural institutions, architectural works and the offices of Moriyama & Teshima. Also met with architects John Shnier, John Cook, and Ron Keenberg.

Montreal, Toronto, Ottawa – *Critical Path Studio*, ED4 + AMP2 (EVAR 4004) Hurme/Neufeld/Radulovic
Attended POP / CAN / CRIT: Current Conditions in Popular Canadian Architecture Criticism Conference, visited Partisans, KPMB, Williamson Williamson, and Montreal Saucier Perrotte.

Toronto – *Open City Studio*, ED4 + AMP2 (EVAR 4004), Ted Landrum and Carlos Rueda
Activities included Laneway Tour & Interview w/ Michelle Senayah, Lawrence Market, Graffiti Lane, O'Keefe Lane, University of Toronto, and a tour at Moriyama & Teshima Architects.

Ottawa – *Spatial Recall: Indigenous Architecture*, ED4 + AMP2 (4004), Ed Epp
Visited National Capital lands and other urban precincts, public spaces, national galleries, civic buildings, the National Gallery, the Canadian Museum of History, and Carleton Un.

Keewatin, Ontario – *Surpassing Surface Studio*, ED3 (EVAR 3008), Chad Connery
Visited and studied various sites on Keewatin waterfront that were later used as sites for the developed studio projects.

Clearwater – *Force Fields: Technologies & Topologies for Social Change*, M1 (ARCH 7050), Lancelot Coar.
Visited design/build projects from the past 10 years to inform the design/build work taking place in studio.

Rural Manitoba Year – *Haunting Spaces Studio*, ED3 (EVAR 3008), Liane Veness
Included traveling to the Lyons House (Carberry), CFB Rivers Abandoned Military Base (Near Brandon), Atkinson House (Hamoita), and the Birtle Residential School (Birtle).

Winnipeg – *Open City Studio*, ED4 + AMP2 (EVAR 4004), Ted Landrum and Carlos Rueda
Trip through the city involved visiting the Exchange District; the Forks Market, and a site meeting and interview w/ architect Greg Hasiuk about the Forks renovation and adaptive-reuse plan.

Berlin – *Berlin Studio*, ED4 + AMP2 (EVAR 4010), Ralph Stern
The trip included the Markthalle Maheinekeplatz, I.B.A. Projects (John Hejduk), Potsdamer Platz (Renzo Piano, Kollhof, Helmut Jahn, Isozaki, etc.), and the Holocaust Memorial.

St. Boniface, Winnipeg, MB – *Surpassing Surface Studio*, ED3 (EVAR 3010), Chad Connery.
Various sites were studied along the Seine River.

Iceland – *Light & Sound, Space & Span*, M1 (ARCH 7060), Herbert Enns.
Included visiting the Library of Water, Norwegian Wood House Museum, the Blue Lagoon (Basalt Architects), the Holavallagarður Cemetary, Suðurgata, and the Nordic Centre (Aalto).

2015-16

Greece - *Death Architecture*, ED4 + AMP2 (EAVR 4004), Sotirios Kotoulas
Visited major sanctuary sites in and around Athens, Delphi, Epidauros and Bassaë.

São Paulo/Rio – *City Unbound*, ED3, AMP1 and M2 (EVAR 3008, Arch 7070), Eduardo Aquino
Large-scale complex urbanism - Paulista Avenue, Rua 25 de Março, Museum of Art, Ibirapuera Park, Museum of Brazilian Sculpture, Downtown Rio, Copacabana, Ipanema, Museum of Modern Art, Instituto Moreira Sales.

New York City – *Phantasmagoria Studio*, M1 and M2 (ARCH 7050/7070), Lisa Landrum
Visiting several museums and theatres, plus architectural offices of Bone Levine Architects, Michael Sorkin, Rockwell Group, Dingaling Studio, and a meeting with Alan Wexler.

Hay Island, Lake of the Woods – *Construct(ing) a Small Cottage Studio*, ED3 (EVAR 3008), Liane Veness
Organized a day trip to Hay Island to see the site of the cottage.

Copenhagen, Oslo, Stockholm – *Next Urbanity*, M1+M2 (ARCH 7050/7070), Hurme/Neufeld/Radulovic
The trip included a visit to 3XN, White Arkitekter studio, the 8 House (BIG), Radisson Blue Royal Hotel (Arne Jacobsen), Aker Brygge, Oslo Opera House, and Gunnar Asplund's Library.

New Orleans – *Here + Now Studio*, ED4 + M2 (EVAR 4004, ARCH 7070), Lancelot Coar
Visited numerous residential, civic and institutional sites damaged by Hurricane Katrina. Collaborated with Tulane University and members of the faculty on the visit.

Iceland – *Heavy Weather*, M1 (Arch 7060), Herbert Enns
The trip included visiting Reykjavik, Stykkishólmur, Silfra [Thingvellir National Park], Vik, Stokkseyri, and Eyrarbakki. Emphasis on the natural environment and architecture.

Navajo Nation – Arizona, Utah, New Mexico, ED4 Interdisciplinary (ARCG 7202, EVAR 4004, EVLU 4012), Ralph Stern and Marcella Eaton. Visiting various Indigenous sites.

Iowa, Illinois, Nebraska, South Dakota, North Dakota – *Heavy Weather*, M1 (ARCH 7050), Herbert Enns. Sites: St. John's Abbey, Collegeville (Breuer), Walker Art Center (Edward Larabee Barnes, Herzog & Des Meurons), Figge Art Museum (D. Chipperfield), & Des Moines Public Library.

Chicago – *Pirates and Farmers Studio*, ED4 + M2 (EVAR 4004, ARCH 7070), Neil Minuk
Trip included visiting the Chicago Bienale, The Art Institute of Chicago, Museum of Contemporary Art Chicago, and IIT (Mies Crown Hall and Koolhaas student hub building)

Montreal – *Place + Reciprocity Studio*, ED3 (EVAR 3008), Terri Fuglem and Chad Connery
CCA; MAC; Montreal Markets & Neighborhoods

New York City – *Situating Architecture Studio*, ED4 (EVAR 4004), Ed Epp
Studio focused on the waterfront, public spaces, landscapes, interiors, museums, galleries, and design offices. Visited Sorkin Studio and T.Williams B.Tsien Architects.

2014-15

Los Angeles – *Main Street Studio*, ED4, M1 + M2 (EVAR 4004, ARCH 7050, ARCH 7070), Lisa Landrum
Included visits to major cultural institutions plus office and site visits with a number of architects including Michael Maltzan, and Koning Eizenberg.

North Dakota – *Crappy Not Fancy,* ED4, M1, + M2 (EVAR 4004, ARCH 7050, ARCH 7070), Neil Minuk.
Included visiting the abandoned military site in Rivers, MB, Souris, Cartwright, Lincoln Valley, McGregor, University of Mary (Marcel Breuer), and Ronald Reagan's Minuteman Missile Site.

Tadoule Lake/Lac Brochet, MB – *Architecture Oriented Otherwise: Northern Perspectives on Indigenous Housing Studio*, ED4, M1, + M2 (EVAR 4004, ARCH 7050, ARCH 7070), Lancelot Coar Visited numerous community sites and various sacred sites on the land. There were numerous trips for consultation, workshops, and presentations.

Assiniboine River Basin – *Flood Architecture Studio*, ED4, M1, + M2 (EVAR 4004, ARCH 7050, ARCH 7070), Ed Epp. Included visiting the confluence of the Shellmouth Dam at the Red River.

Netherlands – *Flood Architecture Studio*, ED4, M1, + M2 (EVAR 4004, ARCH 7050, ARCH 7070), Ed Epp.
The trip included analyzing numerous cities, water infrastructural works, landscapes, water settlements, as well as a symposium at UNESCO/TU Delft.

Montreal – ED3 (EVAR 3008), Terri Fuglem.
CCA; MAC; Montreal Markets & Neighborhoods

Berlin – *Berlin Interdisciplinary Studio*, ED3, ED4, M1 + M2, ID/ARCH/LA (ARCG 7202, EVAR 4010, EVDS 3710, EVIE 4012, EVLU 4014, GRAD 7090), Ralph Stern.
The trip included visiting the Reichstag, Bauhaus Archiv, Sancoucci Park and Palace, Altes Museum and Lustgarten, as well as an Office Tour at NAK Gesellschaft von Architektur.

- Iceland – Strange Spaces: Cultural Invention in Iceland, multi-disciplinary elective course, ED2, ED3, ED4, M1 ARCH/ID/LA (EVDS 3710, ARCG 7070), Herbert Enns.

LOCAL FIELD TRIPS

2016-17 (typical range each year)

- 62M Case Study Construction Site Visit – Advanced Tech Topics 1, "The Tell Tale Detail", M1 + M2 (ARCH 7000), Hurme

- Various active construction sites within Winnipeg (including Precast Concrete Fabrication plant, Lafarge; & 257 Osborne, 6-story commercial building, construction site) – Architecture Technology, ED4 (EVAR 4002, EVAR 4008), Neil Minuk.

- Paramount Window Factory – Architecture Technology 2, ED3 (EVAR 3006), Liane Veness.

- Robinson Lighting Showroom Tour & Presentation: w/ Kirk West – Advanced Tech Topics, M1 + M2 (ARCH 7000), Ted Landrum.

- Millennium Public Library Tour & Interview: w/ David Kressock MAA principal architect from LM Group Architects – Advanced Tech Topics, M1 + M2 (ARCH 7000), Ted Landrum.

- Various sites on UM campus – Advanced Tech Topics, M1 + M2 (ARCH 7000), Ted Landrum.

- Gillis Quarries – "Hands on Masonry", Advanced Tech Topics, M1 + M2 (ARCH7010), Ted Landrum.

- Red River College Masonry Workshop– "Hands on Masonry", Advanced Tech Topics, M1 + M2 (ARCH7010), Ted Landrum.

- Various sites on UM campus with architects – Active Living Centre, Michael Robertson, Cibinel Architects, ARTLab, Patkau & LM Architectural Group; Wallace Building, Ron Keenberg, Physical Plant, M1 Comprehensive Studio (ARCH 7060), L.Landrum, N.Minuk, H.Enns.

3.6.6 Student Societies

- *Evidence of opportunities to participate in student professional societies, honors societies, and other campus-wide student activities.*

Many students within the Faculty of Architecture are actively involved in multiple associations at various levels. This includes committees within the Department, the Faculty, the University, Winnipeg's design community, as well as with other architectural organizations across Canada. Each committee or association acting within the University is composed of elected members from the student body. The election process consists of a nomination period, with candidates either self nominated or nominated by colleagues, and a student voting period. Generally, elections occur either annually at the beginning of the academic term, or biannually. In the biannual elections, the administrative, programming and association roles are filled at the end of the winter term, while the program representatives are elected at the beginning of the following fall term, providing new students the opportunity to participate.

ASSOCIATIONS FOR ARCHITECTURE PROGRAM STUDENTS
http://umanitoba.ca/faculties/architecture/programs/associations.html

University of Manitoba Association of Architecture Students (UMAAS)
UMAAS represents students in the graduate Masters of Architecture and Architecture Masters Preparation (AMP) programs and is responsible for conducting the student affairs for the Department of Architecture. UMAAS serves to maintain and promote an enthusiastic and amenable environment for students, while exhibiting thoughtful representation and assertive engagement of faculty, professionals and the community. The committee is comprised of the following members:

- President;
- Secretary/Treasurer;
- Technology Representative;
- four class representatives (AMP1, AMP2, M1, M2);
- two Graduate Student Association (GSA) representatives;
- a Manitoba Association of Architects (MAA) Representative;
- a Canadian Architecture Students Association (CASA) Representative.
- Vice President;
- Social Events Coordinator;
- Director of Promotions and Publicity;

UMAAS meets approximately once a month. Along with attending UMAAS executive council meetings, the various student representatives within UMAAS also attend and report on Department Council meetings (where M1, M2 and AMP student reps hold voting rights), the Faculty Council meetings, the Faculty of Architecture Student Association (FASA) meetings, the Faculty of Architecture Endowment Fund committee, SAS council meetings, the Tech Fee committee, the Graduate Student Association committee, the MAA council meetings, and the 10x20x20 committee meetings.

In addition academic and faculty representation, UMAAS is responsible for creating and organizing a number of social events, such as the Ginger Bread Competition, the MAA Meet and Greet, the Faculty of Architecture Year End Exhibition Afterparty, and the graduate student graduation celebration. In addition, UMAAS works closely with the Faculty of Architecture's Partners Program to foster strong relationships between students and professionals. In 2017-18, UMAAS plans to organize student-led architectural discussions between the undergraduate and graduate programs.

Student Architectural Society (SAS)
SAS is responsible for conducting student affairs for the Environmental Design Program. The committee is composed of elected student representatives from all three of the undergraduate streams: Architecture, Interior Environments, and Landscape + Urbanism; plus a Senior Stick, who serves on Faculty Council, EDPAC, and other Faculty committees, as required.

SAS is comprised of many sub-committees:

- the graphics team, responsible for preparing posters and tickets for events and SAS activities;
- the tech representatives, who participate in the Tech Fee committee, vote on new items for CADLab and FABlab, and decide how the accumulated student funds are allocated;
- the community liaison committee, responsible for reaching out to the field and making connections between the working environment and the school; they also run the student initiative fund;
- the events representatives, who plan and facilitate most social events;
- the grad committee, tasked with fundraising for and planning the grad celebration;
- the executive committee, including the senior stick, two vice sticks, a treasurer, a communications representative, and the UMSU rep.
- cross cultural representatives, who foster cultural exchange and support for international students;
- a CASA representative; and
- newly designated health and wellness representatives.

SAS is responsible for initiating and organizing many social and creative events, including: Ditchball (a unique winter sport with a long history in the Faculty); the Buddy BBQ (intended to mix and mentor ED2 and ED3 students); a Halloween social; the gingerbread contest; bake sales; a Christmas formal; film events; a graduation party; a graffiti social; the annual design and distribution of Faculty goods (T-shirts, hoodies, mugs, bags, etc.); and more.

SAS also sponsors two student-selected awards for ED students with a minimum 3.0 GPA who have a strong record of participation in student activities but are not elected members of SAS.

OTHER ASSOCIATIONS WITHIN THE FACULTY OF ARCHITECTURE

Interior Design Association of Students (IDeAS)
IDeAS is responsible for conducting the student affairs for the Department of Interior Design. This includes academic and faculty representation and social events.

Landscape Architecture Student Association (LASA)
LASA is responsible for conducting the student affairs for the Department of Landscape Architecture. This includes academic and faculty representation and social events.

University of Manitoba Association of Planning Students (UMAPS)
UMAPS is responsible for conducting the student affairs for the Department of City Planning. This includes academic and faculty representation and social events. UMAPS has representation on the Graduate Students Association (GSA), the Canadian Association of Planning Students' (CAPS) council and the Manitoba Professional Planning Institute's (MPPI) council.

Canadian Association of Planning Students (CAPS)
The Canadian Association of Planning Students represents all accredited planning school students. Once a year, CAPS holds a conference, around which will revolve presentations by professionals, academics and students. The University of Manitoba Association of Planning Students (UMAPS) has funded students to present their papers at the conference in recent years. http://www.caps-aceau.org/en/

ASSOCIATIONS WITHIN THE UNIVERSITY OF MANITOBA

University of Manitoba Graduate Students' Association (UMGSA)
UMGSA is the student-run association for graduate students at the University of Manitoba, and functions on all three of its affiliate campuses. The UMGSA promotes and provides graduate student advocacy, offering services and support to students, as well as developing and encouraging involvement in the graduate student community. The UMGSA has representation on the University of Manitoba Student Union's (UMSU) council and the University Administration. Two UMAAS reps serve on UMGSA as the

representatives from the Faculty of Architecture. This past year, the UMAAS reps served on an additional sub-committee within UMGSA, the Awards Committee. http://www.umgsa.org/

The University of Manitoba Students Union (UMSU)
UMSU is the largest students' association in Manitoba representing over 26,000 undergraduate student members. UMSU works with the other elected representatives of students' unions in Manitoba and across the country to lobby for high quality, accessible post-secondary education for all. The union advocates on behalf of students to all levels of government - Federal, Provincial, Municipal and Administration. UMSU also offers numerous services including a health and dental plan, campus radio, tutor registry, multiple student run businesses and a gallery of student art, to which architecture students often contribute. http://www.umsu.ca/

The University of Manitoba has an abundance of other student organizations and associations which celebrate a diverse range of interests. https://communitylink.umanitoba.ca/organizations

REGIONAL/ NATIONAL ASSOCIATIONS

Canadian Architecture Students Association (CASA)
Established in 1995, CASA is a non-profit organization which brings together students of architecture from across Canada to promote and celebrate architectural design and education. CASA works in partnership with the Canadian Architecture Certification Board (CACB) and Architecture Canada (RAIC) to provide students with information and resources to enhance the value of their education as well as gain awareness of how to best transition from school into practice. The communications between CASA and UMAAS have been sporadic in recent years. (This will be addressed in 2017-18). The CASA representative actively serves on the UMAAS committee. http://www.casa-acea.org/about/

3.6.7 Student Support Services

- *Description of student support services, including academic and personal advising, career guidance, evaluation of progress, and internship placement (if applicable).*

The architecture program, Faculty of Architecture and University of Manitoba offer a diverse array of support services and resources, providing students with academic and personal assistance.

Department and Faculty of Architecture Support
Due to the close relationship between students and individual faculty members, students typically approach instructors first with specific concerns. Within the Department of Architecture the Department Head, Associate Head, and Thesis Coordinator also provide advice. ED students may also contact the ED Program Chair. At the Faculty level, the Graduate Student Advisor, the Undergraduate Student Advisor, and the Student Services Coordinator provide academic and career guidance. These student advisors are always available by email and for confidential consultation in the main Faculty office by appointment.

New and incoming students to the undergraduate Environmental Design (ED) program are provided with an orientation day, introducing resources and services offered through the Faculty and University. Students entering the undergraduate program through the Architecture Master Preparation (AMP) Option gain an understanding of the Faculty resources through the required Architecture Technology Preparation block course. Important information is also found on the Faculty and Department websites, including student employment opportunities, registration and course information, academic regulations, administrative procedures, scholarships, facilities and available equipment, events, and current research in the Faculty.
http://umanitoba.ca/faculties/architecture/programs/architecture/index.html

Technologists working in the CADLab, FABLab, and Workshop are invaluable resources in teaching students how to operate the available equipment, answer related software questions, and ensure safety. The FADLab also offers additional advising through the Evening Workshop Series, which focuses on new and recently purchased tools, highlighting the use, as well as the application of the tools in design. For 2017-18, the CADLab and FABLab are launching a new joint series of software seminars, including Sunday afternoon software instruction sessions (3-hour labs led by Graduate Students for 30 students each session with advanced sign-up); and Tech Tuesdays (open-door problem-solving sessions with technicians). These sessions are being created in response to student feedback. The sessions will provide needed software training to allow students to more effectively spend design studio time on higher level learning objectives.

Annually, the third-year undergraduate students organize an ED2/ED3 mixer for incoming students. This creates the opportunity for the younger year to form connections with the older year, providing a source of guidance for the students. Additionally, each year of study has an elected student representative. The student rep is responsible for voicing the concerns or issues of colleagues to the Faculty.

The Partners Program offers multiple opportunities to form connections with practicing professionals, through events such as the Meet Mingle and Mentor, various lecture series, and other hosted events. Some fundamental career guidance is offered through the first-year masters Professional Practice course.

The Faculty of Architecture's Co-op/Integrated Work program, currently in development, will become a valuable way for students to gain career opportunities and advice. The program is designed to complement and enrich academic programs with work experience. The work terms will provide students with practical experience, assistance in financing their education, and guidance for future career specialization. As of August 2017, the Faculty of Architecture has hired a new Coop Assistant, who will help develop the details of the program and assist students with resume and cover letter preparation. The Faculty anticipates having about 12 students in work placements as of summer 2018.

University Support

In addition to the resources available through the Department and Faculty of Architecture, The University of Manitoba offers many support services, courses and workshops that are easily accessible to students:

- **Academic Learning Centre** – Serves graduate and undergraduate students. Includes appointment made resources such as peer study groups, writing tutors, English as an Additional Language specialist, writing and study skills workshops, and graduate student writing and/or learning support. Each Faculty within the University has an academic advisor, who is able to address specific faculty concerns. http://umanitoba.ca/student/academiclearning/

- **Campus Security** – There are multiple UM programs to help ensure the safety of students and staff. These include: the Code Blues and Emergency Red Phones; close to 600 closed circuit television cameras located in various classrooms, hallways, parking lots and other public areas; the Safe Walk Program; as well as the Campus Security Bike Unit. The University also offers multiple self-defence programs including the Rape Aggression Defence (R.A.D) course. http://umanitoba.ca/campus/security/

- **Career Services** – Career Services assists all undergraduate and graduate students at the University of Manitoba with career planning and job search issues. The Career Services website provides students with employment resources such as advice on job applications, interview preparation, volunteering, and networking, etc. Career Services also works with employers to help meet their recruitment needs. Services include advertising job opportunities, scheduling on-campus briefing sessions and interviews, as well as providing career fairs and co-operative education/internship program information. http://umanitoba.ca/student/careerservices/staff-directory.html

- **English Language Centre** – The English Language Centre strives to enhance success for students whose first language is not English by providing courses, tests, homestay, and individual support in order that they may achieve their academic goals. http://umanitoba.ca/student/elc/

- **Financial Aid & Awards** – The online database allows students to easily apply for student aid, as well as internal and external scholarships and bursaries. http://umanitoba.ca/student/fin_awards/

- **Health and Wellness –** The University of Manitoba offers a range of services supporting student health, wellness, safety, and academic integrity. Services include: Student Advocacy and Accessibility Services, Student Counselling Centre, University Health Service, Health and Wellness Educator, Student Support Case Management, and the Campus Mental Health Facilitator. Through tuition fees, students have access to the new Active Living Center, located adjacent to the Architecture 2 Building. (http://umanitoba.ca/student/livewell/index.html)

- **Indigenous Student Centre** – The ISC provides academic, cultural, personal, and physical resources such as job postings, funding information, and volunteer initiatives in hopes of easing the transition of students to the university/city/province. http://umanitoba.ca/student/indigenous/

- **Student Counselling Centre (SCC)** – The SCC offers a wide variety of services to help students. Professional counsellors, with a variety of backgrounds (e.g., Clinical Psychology, Counselling Psychology, Educational Psychology and Social Work) are available to provide support and problem-solving assistance for emotional difficulties (e.g., anxiety, depression, stress, trauma, etc.), interpersonal problems (e.g., couple counselling, counselling to help graduate students work more effectively with their advisor, etc.), stressful life situations and career indecision. Different groups and workshops are available including groups for anxiety, depression, coping, and relationships. http://umanitoba.ca/student/staffdir/student-counselling-centre.html

3.6.8a) Guest Lecturers

• A list of guest lecturers and visiting critics brought to the program since the previous site visit;

The architecture program benefits from a faculty-wide Cultural Events series, involving about **35 lectures per year**. Guests include internationally recognized architects, authors, advocates and leaders in allied fields, as well as numerous regional designers and industry partners.

Events include:

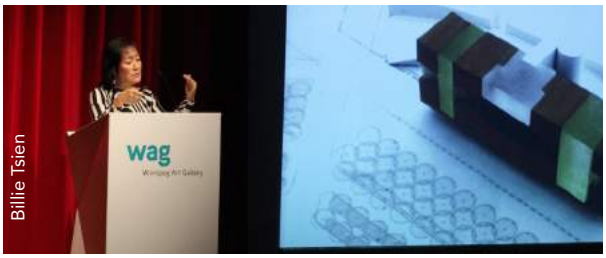
- Evening Lectures;
- Lunchtime Food for Thought Lectures;
- Special Lectures; and
- an annual Atmosphere Symposium.

Events are initiated and facilitated by the Cultural Events Committee, comprised of faculty representatives from each unit (Architecture, Landscape Architecture, City Planning, Interior Design, and Environmental Design), and student representatives from each association (UMAAS, LASA, UMAPS, IDAS, and SAS). The Faculty's Partners Program provides logistical and administrative support. Events are typically held in Centre Space of the J.A. Russell Building, and occasionally at other venues, including the Winnipeg Art Gallery, the University of Winnipeg, and partner firms.

Financial support comes from the Faculty of Architecture Endowment Fund, as well as special lecture funds and generous sponsors, notably:

- Manitoba Masonry Institute;
- Harlyn Thompson Lectureship Fund;
- Emerging Alumni Lectureship Fund;
- Faculty of Architecture Distinguished Lecture fund;
- Dale Henwood Lectureship;
- Al Waisman Lectureship Fund;
- Seagram Visiting Lecture Fund;
- Jeffrey R. Cook Memorial Lectureship fund;
- James Palmer Lewis Lectureship Fund; and
- Professional associations (MAA, MALA, PIDIM, MPPI).

The Partners Program produces an annual poster and maintains a detailed website of "UPCOMING EVENTS," together with a digital archive of events dating to 2011. Posters, emails, Facebook and Instagram announcements keep the architectural community informed.

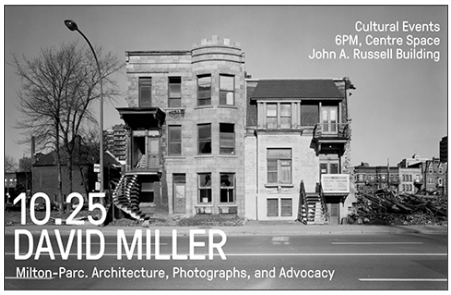


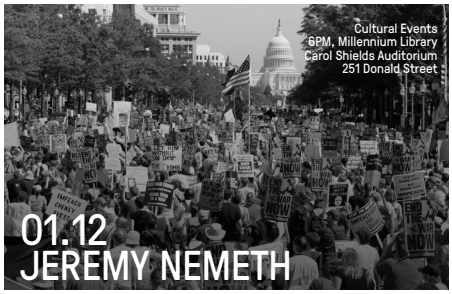
John Ochsendorf

2016-17

CULTURAL EVENTS (Evening Speakers):

John Patkau	Principal, Patkau Architects, Vancouver – *Work / Play* – September 17 In conjunction with the Winnipeg Design Festival and LM Architectural Group
David Miller	Photographer, Montreal – *Milton_Parc: Architecture, Photographs, and Advocacy* – October 25
Petra Doan	Professor, PhD Program Director, Department of Urban Planning, Florida State University – *The Tyranny of Gendered Planning: The Need for Transgendered Safe Spaces* – November 1
John Ochsendorf	Professor & Director, Building Technology Group, MIT – *Innovations in Masonry* – Sponsored by the Manitoba Masonry Institute – December 1
Jeremy Nemeth	Associate Professor of Urban and Regional Planning in the College of Architecture and Planning at the University of Colorado Denver – *Just Space: Why Public Space Matters Now More than Ever* – January 12



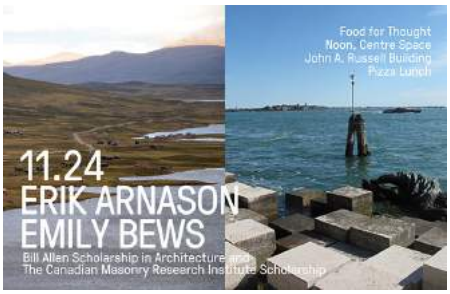


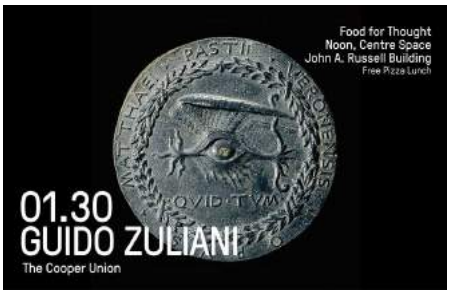
Brigitte Shim

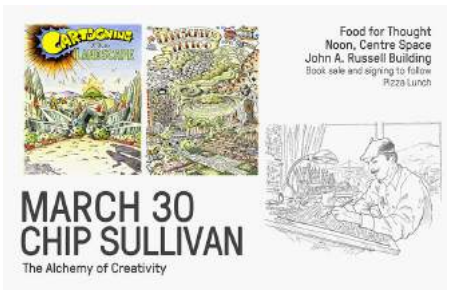
Brigitte Shim	Principal, Shim-Sutcliffe Architects, Toronto – *Embedded Light* – January 12
Billie Tsien	Partner, Tod Williams Billie Tsien Architects, New York – *All That Is Solid* – Sponsored by the Manitoba Masonry Institute – March 2
Johanna Gibbons	Landscape Architect, founding Partner of J & L Gibbons, Director of Landscape Learn – *Second Nature* – March 10
Sabina Ali & Graeme Stewart	Chair of Thorncliffe Park Women's Committee & Principal at ERA Architects – *Modern Tower Blocks and the 21st Century City: Research, Policy and Action* – March 16
Niall Kirkwood	Landscape architect, technologist, architect and Professor at the Harvard University Graduate School of Design – *Phyto (Technologies)* – March 23
Lois Wellwood	Associate Director & Interiors Practice Leader, Skidmore, Owings & Merrill LLP – *Reflection, Translation and Inspiration* – March 29
Jonathan Sotto	Project Leader, Yabu Pushelberg – *Telling Stories: Yabu Pushelberg's Approach to Design* – April 5

FOOD FOR THOUGHT (Lunchtime Speakers):

Winnipeg Design Festival	Dora+Paoblo Batista, Curators – *Challenge What You Know To Change The World Around You* – September 13
Steel Day	Marcus Rarog, Project Designer Sports Studio at Stantec – *A Look Inside Community Recreation Facilities* – September 16
Dwayne Baker	Post-Doctoral Fellow, Department of City Planning, University of Manitoba – *How Light Rail Impacts Gentrification: Evidence from 14 U.S. Regions* – October 27
Emily Bews & Erik Arnason	Master Students, Department of Architecture, University of Manitoba, Winners of the Bill Allen Scholarship in Architecture (Travel & Research) – *The Cultural Identity of Architecture & Fragility of Stone* – November 24
Warming Huts	Peter Hargraves, Founder; and winners of the 2017 design competition – January 26
Guido Zuliani	Professor, The Irwin S. Chanin School of Architecture of the Cooper Union – *The Architect's Gaze* – January 30
Emanuel Jannasch	C.A.S.T. Visiting Researcher, Senior Instructor, School of Architecture Dalhousie University – *Counter-computational Masonry Domes* – February 7
Susan Close	Associate Professor, Interior Design Department, University of Manitoba – *Gabor Szilasi's Photographs of St. Catherine Street* – March 14
Doug Corbett	Executive Architect, Corbett Architecture – *Canada's Diversity Gardens; Whatever Happened to the Design Development Phase* – March 16
Chip Sullivan	Professor of Landscape Architecture at the University of California, Berkeley – *The Alchemy of Creativity* – March 30
Shauna Mallory-Hill	Assistant Professor, Department of Interior Design, University of Manitoba – *Adventures of a Green Building Field Researcher* – April 13







SPECIAL SERIES
Environmental Studies / Environmental Design 50th Anniversary Celebration:

Diarmuid Nash	1974 B.E.S., 1979 M.Arch – Partner, Moriyama & Teshima Architects, Toronto, Supported by the Seagram Visiting Lecture Fund – September 23
Allan Bell	1982 B.E.S. – Architect, John Pawson, Supported by the Visiting Architect Lecture Series – October 18
Sasa Radulovic & Johanna Hurme	1999 B.Env.D., 2003 M.Arch., 2002 M.Arch. – Partners, 5468796 Architecture Inc., Supported by: Al Waisman Lectureship Fund – February 9
David Cabianca	1990 B.E.S. – Associate Professor, York University – February 15
Sarry Klein	2011 B.Env.D. – Landscape Designer, Supported by the Emerging Alumni Lectureship Fund – March 9

SYMPOSIUM
ATMOSPHERE 9: *BEAUTY MEMORY ENTROPY*
Februrary 2-4, 2017

David Leatherbarrow	Professor of Architecture and Chairman of the Graduate Group in Architecture at the University of Pennsylvania – *Modification is the Result, Interpretation the Method, and Time the Medium*
Ellen Braae	Professor of Landscape Architecture Theory and Method at the University of Copenhagen, Denmark – *Excavating Futures*
Guy Maddin	Director, Filmmaker, Writer, installation and Internet artist, lecturer at Harvard – *The Rise Of The Tired Night Boats*
Gabi Schillig	Founder of Studio for Dialogical Spaces, Professor for Spatial Design at the Düsseldorf University of Applied Sciences / Peter Behrens School of Arts at the Faculty of Design – *Spaces of Communication*
Rami Bebawi	Cofounding partner of KANVA Architecture, Montreal – *Memories: Reshaping The Built Environment*

+ 19 peer-reviewed paper presenters from four countries.

David Leatherbarrow

Alberto Pérez-Gómez

2015-16

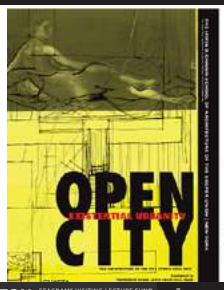
CULTURAL EVENTS (Evening Speakers):

Alan Ricks	Chief operating officer and co-founder of MASS Design Group, Jeffrey Cook Memorial Lecture with University of Toronto, John H. Daniels Faculty of Architecture, Landscape, and Design – September 17
Russell Loveridge	Managing Director of the Swiss National Centre of Competence in Research (NCCR) in Digital Fabrication - *Collaborative Digital Fabrication* – October 20
Michelle Addington	Hines Professor of Sustainable Architectural Design, Yale University School of Architecture - Seagram Visiting Lecture Series – *Disciplinary Mis-translations* – Oct. 29
Inaki Alday Sanz & Margarita Jover Biboum	Founders of Aldayjover Architecture & Landscape, Barcelona – *Hybrid Infrastructures* – Supported by: Visiting Architect Lecture Series, November 3
5468796 Architecture	Winnipeg-based design studio – *BUILD* – November 24
Matti Siemiatycki	Associate Professor, Department of Geography and Program in Planning, University of Toronto – November 26
Toni Casamor	Partner, BCQ arquitectura barcelona – December 3
Jerry van Eyck	Founding Principal, !melk, Landscape Architecture and Urban Design – I*dentity is not Imitation* – January 21
Diane Lewis	Diane Lewis Architect, Professor at the Cooper Union – *Open City: Existential Urbanity* – January 29
Todd Longstaffe-Gowan	Gardens Adviser to Historic Royal Palaces, founding member and President of the London Historic Parks and Gardens Trust, Faculty of Architecture Distinguished Lecture – March 8
Crystal Legacy	Australian Research Council (DECRA) Fellow and a Vice Chancellor's Research Fellow in the Centre for Urban Research at RMIT University, Australia – *Is there a Crisis of Participatory Planning?* – March 17
Jack Nasar	Professor Emeritus City & Regional Planning, The Ohio State University, Harlyn Thomspon Lecture Series – *Outdoor Lighting by Design* – March 22
Alberto Pérez-Gómez	Professor of Architecture, McGill University – *Attunement: Architecture after the Crisis of Modern Science* – April 7
Lucinda Havenhand	Associate Dean for Research and Graduate Studies in the College of Visual and Performing Art at Syracuse University – *A View from the Margin? Reconsiderin issues of Gender in Interior Design* – April 14

Evening Speakers

ALBERTO PÉREZ-GÓMEZ

DIANE LEWIS



TONI CASAMOR

ALAN RICKS

JEFFREY COOK MEMORIAL LECTURE
(2014-2015) THURSDAY, SEPTEMBER 17, 2015
6PM | STANTEC OFFICE | 311 PORTAGE AVENUE

MICHELLE ADDINGTON

disciplinary mis-translations
SEAGRAMS VISITING LECTURE FUND
OCTOBER 29, 2015
6PM | CENTRE SPACE | RUSSELL BUILDING
FACULTY OF ARCHITECTURE | UNIVERSITY OF MANITOBA

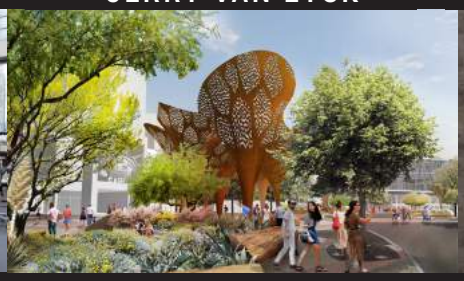
IÑAKI ALDAY SANZ & MARGARITA JOVER BIBOUM

VISITING ARCHITECT LECTURE SERIES | NOVEMBER 3 , 2015
6PM | CENTRE SPACE | JOHN A. RUSSELL BUILDING
FACULTY OF ARCHITECTURE | UNIVERSITY OF MANITOBA

MATTI SIEMIATYCKI

RUSSELL LOVERIDGE

JERRY VAN EYCK



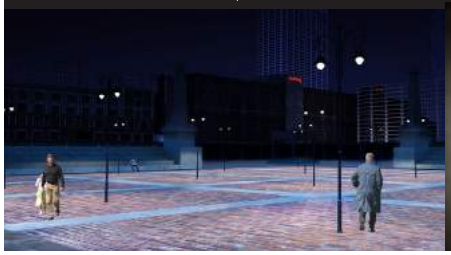
LUCINDA HAVENHAND

TODD LONGSTAFFE-GOWAN

FACULTY OF ARCHITECTURE DISTINGUISHED LECTURE
6PM | MARCH 8, 2016 | JOHN A. RUSSELL BUILDING
FACULTY OF ARCHITECTURE | UNIVERSITY OF MANITOBA

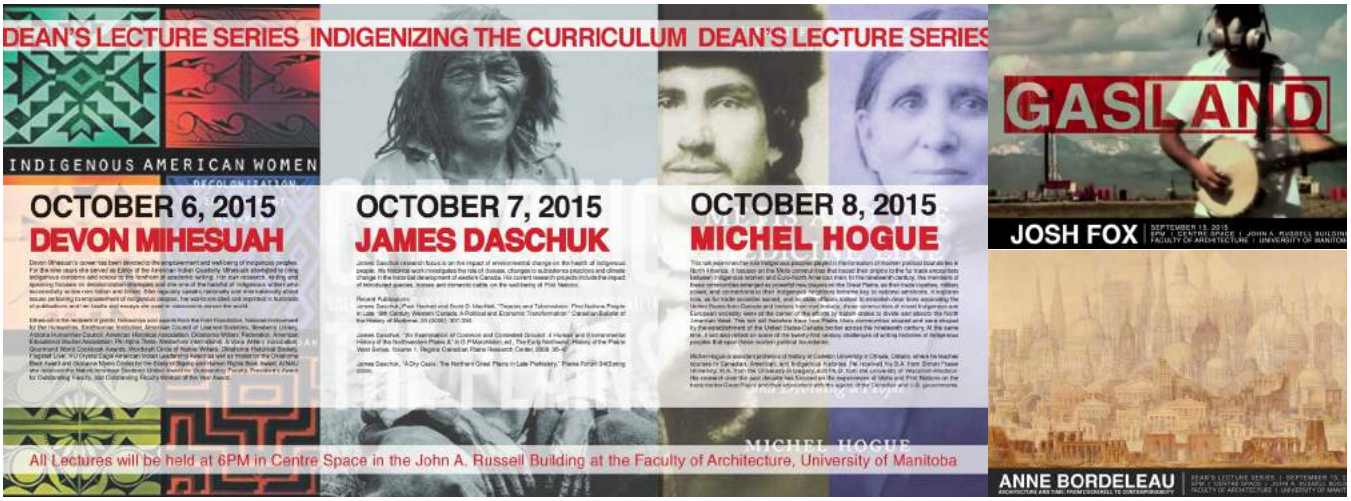
JACK NASAR

HARLYN THOMPSON LECTURE SERIES
6PM | CENTRE SPACE | JOHN A. RUSSELL BUILDING
FACULTY OF ARCHITECTURE | UNIVERSITY OF MANITOBA



CRYSTAL LEGACY

SPECIAL SERIES



FOOD FOR THOUGHT (Lunchtime Speakers):

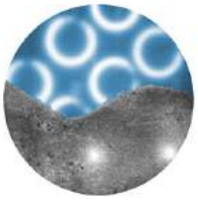
Winnipeg Design Festival	'Chair' your Idea – September 14
Josh Fox	Film director, playwright and environmental activist, New York – *Gas Land* – Jeffrey Cook Memorial Lecture (with University of Toronto) – September 15
Steel Day	Grant Van Iderstine, Architecture Practice Leader in the Winnipeg office of Architecture | 49 – September 18
Jason Hare	FABLab Manager, FabLAB – September 24
Stephen Oberlin	FABLab technician + M.Arch student – *An Aerial Perspective* – September 29
Warming Huts v2016	Supported by: Partners Program – September 28 + January 28
Ian Mauro	Associate Professor, Department of Geography, University of Winnipeg – *Building A Sustainable Future: Climate Change, Communities and Collaboration* – October 5
JNZNBRK	Winnipeg based collaborative art practice – October 20
Joe Kalturnyk	Co-founder RAW:Gallery of Architecture and Design – *Temporary is the New Permanent* – October 29
CIHR	and Woodworks, Supported by: Partners Program – November 12
Braden Smith	Chief Planner for the City of Winnipeg, I Heart Winnipeg – *Urban Planning as an Instrument For Building Vibrant Communities* – November 19
Genuwine Cellars	Supported by: Partners Program – January 12
Caitlin Meuller	Assistant Professor at MIT, joint appointment in the Departments of Architecture & Civil and Environmental Engineering – *Creative Confluence: Architecture, Engineering, and Computation* – January 25
Liz Wreford Taylor	Founder of Plain Projects – *Point and Line to Plain* – February 10
Wins Bridgman & Marcella Poirier	Co-directors of BridgmanCollaborative – *Design Matters: Ableism, Engaging and Weathering* – February 11
Darcie Watson	Senior Associate, Architect, Philip Beesley Architect Inc. – *Edge / Overlap* – March 1
Visitability	Home Design, Solutions and Benefits of Modern Visitable Design, Supported by Partners Program – March 7
Thermo	Design Insulation Supported by: Partners Program – March 15
HTFC	HTFC Design & Planning – *Linking People, Environment, and Time* – March 23
Mike Scatliff	Scatliff+Miller+Murray – March 29
Udo Weilacher	Landscape architect, author & Professor of Landscape Architecture – April 14

«— **SPECIAL SERIES (Dean's Lecture Series)**

Devon Mihesuah	Cora Lee Beers Price Teaching Professor in International Cultural Understanding, University of Kansas – *Educating and Empowering Students with Campus Indigenous Gardens* – Oct. 6
James Daschuk	Associate Professor, Department of History, University of Regina – *Clearing the Plains, Clearing the Air and Some Thoughts about A Post-TRC Canada* – October 7
Michel Hogue	Assistant Professor of History, Carleton University – *Metis and the Medicine Line: Researching & Writing the Traditional Histories of Plains Indigenous Peoples* – Oct. 8
Anne Bordeleau	Associate Professor, School of Architecture, University of Waterloo – *Architecture and Time: From Cockerell to Contemporaneity* – October 27

SYMPOSIUM
ATMOSPHERE 8: *WATER+*
Februrary 25-27, 2016

Maude Barlow	National Chairperson of the Council of Canadians, Co-founder of The Blue Planet Project, and Chair, Food and Water Watch, Washington DC
Kevin Bone	Principal, Bone Levine Architects, New York and Professor, The Cooper Union
Robert France	Professor, Department of Environmental Sciences, Dalhousie University
Drew Gangnes	Senior Principal, Magnusson Klemencic Associates, Seattle, Washington, USA
Grant Stewart	Principal, Gustafson Guthrie Nichol, Seattle,Washington, USA
Peter Kulchyski	Graduate Program Director, Department of Native Studies, University of Manitoba, Co-Director, Canadian Consortium on Performance and Politics in the Americas
Anne Loes Nillesen	Principal, DEFACTO Architecture and Urbanism, Rotterdam, Netherlands

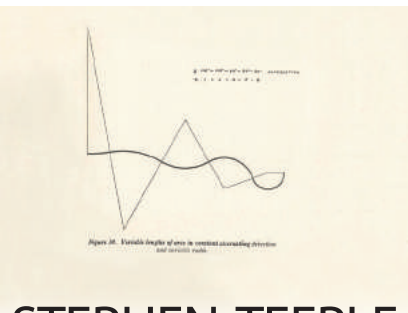


2014-15

CULTURAL EVENTS (Evening Speakers):

Ron Williams	Principal at Ron Williams Landscape Architect and Architect – *Conversation | Landscape Architecture in Canada* – September 19
Mark Pauls	Thomas Auer, Tom Akerstream, Mohamad Araji, Ulrich Knaack, Environmental Design Workshop 01 – *Climate Design, Parametric Design, Embodied Energy, Urban Performance* – September 23
Maged Senbel	Associate Professor, School of Community and Regional Planning, University of British Columbia – *Public Participation in Long-Term Neighbourhood Planning: Leveraging the Potential of Mixed Media* – September 30
Kelty McKinnon	Partner at PFS Studio Vancouver – *Relational Landscapes, Recent Practices of PFS Studio* – October 23
Luke Leung	Director, Chairman, Part Time Professor at IIT – *Design to Connect Life, Performance, Innovation* – James Palmer Lewis Lecture Series – October 30
Stephen Teeple	Founder of Teeple Architects,Toronto – *Sentient Geometry* – November 13
Gregory Henriquez	Managing partner of Henriquez Partners Architects, Vancouver – *Citizen City* – November 17
Eui-Sung Yi	Professor, Design Principal at Morphosis – *Cultural Urbanism* – February 24
Barbara Brown Wilson	Assistant Professor, University of Virginia – *Design as Activism | Activism as Design* – March 9
Teddy Cruz	Co-director, Center for Urban Ecologies & Blum Cross-Border Initiative, Professor University of California, San Diego – *Where is our collective Imagination?* – Harlyn Thompson Lecture Series – March 16

GREGORY HENRIQUEZ
CITIZEN CITY



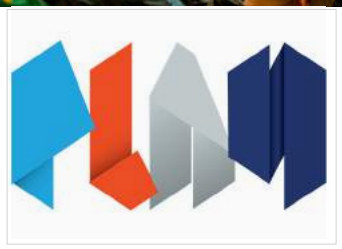
STEPHEN TEEPLE
SENTIENT GEOMETRY

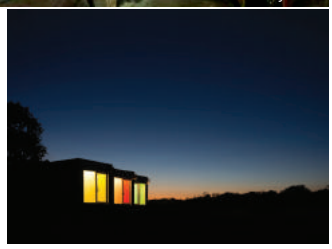
TEDDY CRUZ WHERE IS
OUR COLLECTIVE IMAGINATION

FOOD FOR THOUGHT (Lunchtime Speakers):

Winnipeg Design Festival	Launch – September 16
Cedric Bomford	Assistant Professor, School of Art, University of Manitoba – *Deadhead: Thinking though Building* – September 30
Peter Sampson	Principal Architect of Peter Sampson Architecture Studio – *Practice, Study, Advocacy* – October 9
Jeana Klassen	Master of City Planning student – Street Beat - *An Interdisciplinary and International Pulse of Street Design Practices* – October 28
David Russell	#D Solutions – *Input/output: Sense & Scale* – November 4
Brent Bellamy	Creative Director at Number TEN Architectural Group – *The Death and Life of an Average Canadian City* – November 25
Beth McKechnie	Co-founders of Peg City Car Co-op – *Peg City Car Co-op: Bike. Walk. Bus. And Sometimes, Drive* – January 15, 2015
Mike Seymour	Designer at Bocci – *Amateur* – February 12
Zach Pauls	Project Designer at Morphosis – *SK>MA>HK>TX>MB>LA* – February 25
1x1 architecture	1x1 architecture inc. – *By the Numbers* – February 26
Film for Thought	*The Competition* – February 26

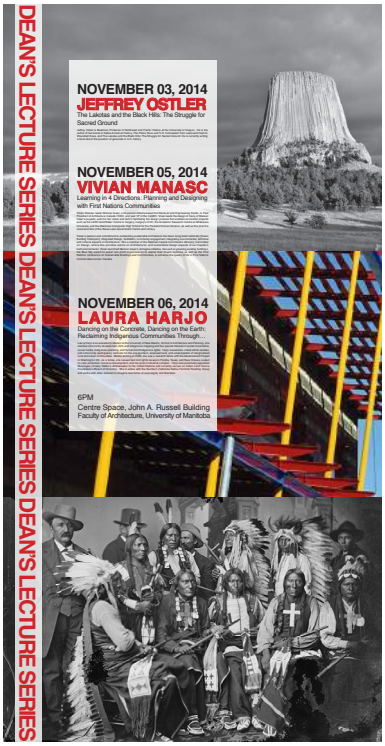
Teddy Cruz

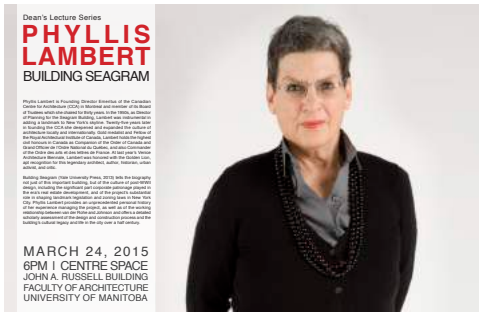


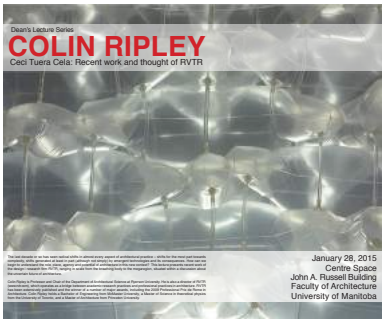


SPECIAL SERIES (Dean's Lecture Series)

Jeffrey Ostler	Beekman Professor of Northwest and Pacific History at the University of Oregon – *The Lakotas and the Black Hills: The Struggle for Sacred Ground* – November 3
Vivian Manasc	Director of Manasc Isaac, Edmonton – *Learning in 4 Directions: Planning and Designing with First Nations Communities* – November 5
Laura Harjo	Assistant Professor, School of Architecture and Planning, University of New Mexico – *Dancing on the Concrete, Dancing on the Earth: Reclaiming Indigenous Communities Through…* – November 6
Coming to a Common Place: Indigenous Peoples and Urban Design, Symposium – November 18-19, with:	Ovide Mecredi, former National Chief of the Assembly of First Nations; Janet Rosenberg, Janet Rosenberg & Studio; Rau Hoskins, designTRIBE, Auckland, New Zealand; Ryan Gorrie, ft3 Architects; Ryan Walker, Department of Geography and Planning; Patrick Reid Steward Architect, Tzeachten First Nation, BC; and more.
Colin Ripley	Professor & Chair of the Department of Architectural Science at Ryerson University, director of RVTR – *Ceci Tuera Cela, Recent Work and Thought of River* – January 28
Phyllis Lambert	Founding Director Emeritus of the Canadian Centre for Architecture (CCA) – *Building Seagram* – March 24
Michael Maltzan	Founder of Michael Maltzan Architecture, Los Angeles – *Elastic* – March 25







SYMPOSIUM
ATMOSPHERE 7: *EMERGENCE*
Februrary 5-7, 2015

Eva Franch I Gilabert	Executive Director and Chief Curator of Storefront for Art and Architecture – T*owards a theory of earliness: Performing Representations*
Nancy Levinson	Editor and Executive Director of Places Journal – *Future of Public Scholarship*
Nina Marie Lister	Associate Professor of Urban + Regional Planning at Ryerson University, Toronto – *Resilience Beyond Rhetoric: Design for a New Sustainability*
Garth Rockcastle	Professor of Architecture, University of Maryland – *Regenerative Design and Adaptive Reuse: Expanding the Scope of Practice from buildings to Communities*
Charles Rice	Professor of Architecture, University of Technology Sydney – *The Atrium Effect*
Timothy Morton	Rita Shea Guffey Chair in English at Rice University – *Escape from Mesopotamia (12000 Years Too Late)*
Rafael Gomez-Moriana	Adjunct Associate Professor, University of Calgary's Faculty of Environmental Design – *Travel Emergency: Toward an Architecture of Tourism*
Hirini Matunga	Assistant Vice Chancellor (Māori and Pacifika) and Professor of Indigenous Planning at Lincoln University – *Once was Home: Indigeneity and the City*
Rod Barnett	Professor and Chair of the Master of Landscape Architecture program at Washington University – *The Objects of Landscape Architecture*

+ 12 peer-reviewed paper presenters

3.6.8b) C.A.S.T. Researcher in Residence + Student Workshops

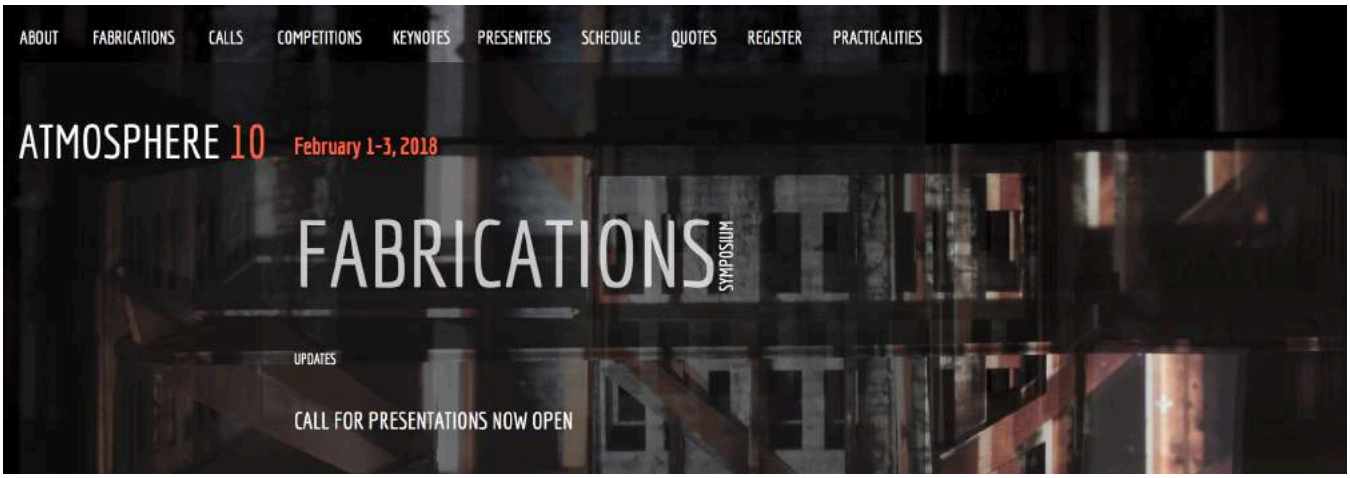
Since its founding in 2003, the Centre for Architectural Structures and Technology (C.A.S.T.) has hosted visiting researchers for various durations to cultivate design innovation and cross-disciplinary exchange. Following a period of restricted funds and changes in personnel, the Researcher in Residence program has been reestablished and a part-time C.A.S.T. Coordinator/Technician has been hired (since fall 2016). A resident researcher was in place from January to May 2017; another researcher is arriving in the fall 2017; and a call for proposals for winter 2018 has been announced.

Together with individual research, the Researcher in Residence engages students, professors, and professional communities in many ways: giving public lectures; offering workshops; participating as a guest instructor or critic; and consulting with students, faculty and partners on areas of expertise. The program is generating new knowledge; broadening and enhancing research already underway at C.A.S.T.; creating new research collaborations; and disseminating University of Manitoba research to international communities. The Researcher in Residence Program is financed in part by the Faculty of Architecture Endowment Fund, and may be supplemented by the Faculty Partners Program and industry sponsors.

For more on the C.A.S.T. facility, see below 3.7 Physical Resources.

2017-18

Researcher in Resident	Myung Duk Chung, graduate of the Massachusetts Institute of Technology Graduate School of Architecture. Resin cast fabric formed shell structures. – Fall 2017 | https://architecture.mit.edu/alumni/myung-duk-chung
Student Workshops	To be scheduled.
Researcher in Resident	Call for Proposals launched Spring 2017. Applications due Sept. 29, 2017 – Winter 2018 | http://umanitoba.ca/faculties/architecture/CAST_ResearchInResidenceProgram.html
Symposium	Atmosphere 10: *FABRICATIONS*, Co-Chairs: Dr. Lisa Landrum, Cultural Events Committee Chair; and Liane Veness, C.A.S.T. Coordinator | www.atmos.ca – Feb. 1-3, 2018



2016-17 RESEARCH/WORKSHOPS

Researcher in Resident	**Emanuel Jannasch**, Senior Instructor, School of Architecture, Dalhousie University – *Pre-Cast Cantilever Masonry Vault Structures* – Winter 2017.
+ Workshop	*Stretching the Possible: Dynamic Structural Models for Learning, Research, & Design* – April 7-9, 2017, with 10 students from all disciplines and levels in the Faculty. http://umanitoba.ca/faculties/architecture/events/2016-2017events/Jannasch_Workshop.html
+ Lecture	*Stretching the Possible: Dynamic Structural Models for Learning, Research, & Design* – April 7, 2017
+ Lecture	*Counter-Computational Masonry Domes* – Feb. 7, 2017 http://umanitoba.ca/faculties/architecture/events/2016-2017events/Jannasch.html
+ Consulting	Thesis Technology Report (ARCH 7080); Design Thesis (GRAD 7090).
Design/Build Studio	***Rainbow Gardens*** (ARCH 7050) – Fall 2016 & Elective (ARCG 7070) – Spring 2017 Instructors: Lancelot Coar and Liane Veness, in collaboration with Prof. Brenda Brown, Landscape Architecture; Dr. Dimos Polyzois, Civil Engineering; and the Rainbow Gardens Immigrant Community Farming Coop, with 10 M1 graduate architecture students. Supported by the Canadian Institute of Steel Construction, FAUM Endowment Fund, Friends of Engineering, Assiniboine Credit Union and the Centre for Engineering and Professional Practice. http://news.umanitoba.ca/rainbow-gardens-supports-immigrant-families/
Design/Build Studio	***Warm Hut/Carbuncle*** (EVAR 3010) ED3 Architecture Studio – January 2017 Instructors: Eduardo Aquino, Chad Connery, Terri Fuglem and Liane Veness, with 38 ED3 undergraduate architecture-option students, in collaboration with the International Institute for Sustainable Development (integrating bio fuel burning stoves), part of Winnipeg's annual international Warming Hut competition. http://news.umanitoba.ca/carbuncle-warming-hut/
Faculty Research	***Ice Bloom Design/Build*** – Feb. 2017. Lancelot Coar, Associate Prof., UManitoba, with Michael Cox and Dr. Sigrid Adriaenssens (Princeton University), Dr. Lars De Laet (Vrije Universiteit Brussles), Mark West, and student research assistants. https://icebloomblog.wordpress.com/

Warm Hut

Emanuel Jannasch

Ice Bloom

Rainbow Gardens

2015-16

Research Project

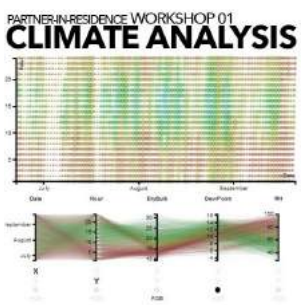
Fabrigami, Design/Build – Feb. 2016. Lancelot Coar, with Dr. Caitlin Mueller (MIT), Dr. Lars De Laet (Vrije Universiteit Brussles), Kim Wiese (ED), Jason Hare (FABLab), and 15 student assistants. Part of the Winnipeg's annual international Warming Hut competition. Fabrigami combined parametric construction and the structural capacity of origami with fabric-formed ice shells to create a unique structure for the visitors at the Forks. https://faumwarminghut2016.wordpress.com//

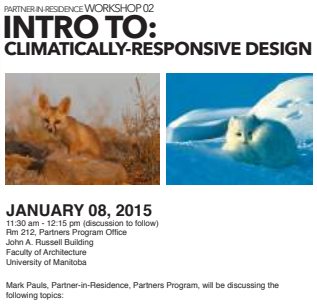
2014-15

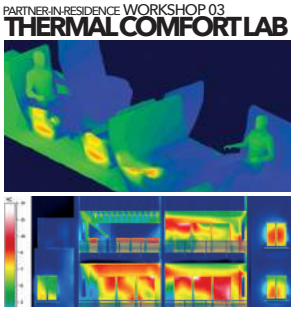
Partner in Resident — Mark Pauls, M.Sc, P.Eng, Building Energy Management Engineer, Manitoba Hydro

+ ED Workshop — *Climate Design, Parametric Design, Embodied Energy, Urban Performance,* also with Thomas Auer, Transsolar & Mohamad Araji, UManitoba – September 23-24,
+ Workshop 1 — *Climate Analysis* – October 20, 2014
+ Workshop 2 — *Climatically-Responsive Design* – January 8, 2015
+ Workshop 3 — *Thermal Comfort Lab* – March 26, 2015

Permafrost Testbox http://news.umanitoba.ca/heating-your-home-with-only-one-light-bulb/







ONGOING/PAST

- Lancelot Coar, Associate Professor, UManitoba (2005-pres.). Since 2016 PhD Research: Ice shells & bending active framed fabric formwork structures.
- Patrick Harrop, Associate Professor, Department of Architecture. UManitoba (2015);
- Kasper Magnussen & Karen Gamborg Knudsen: Gamborg & Magnussen Architects, Copenhagen (2012-13);
- Fariborz Hashemian, Assistant Professor Civil Engineering, UManitoba (2011-12);
- Callum Hill, Professor of Materials Science, Edinburgh Napier University (2011-12);
- Arny Nadler, Associate Professor of Art, Washington University (2011-12);
- Remo Pedreschi, Chair of Architectural Technology, University of Edinburgh (2011-12);
- Dr. Julie Soden, Reader, School of Art & Design, University of Ulster at Belfast (2011-12);
- Grace Nickel, Assistant Professor School of Art, U of M (2011-2012);
- Mathieu Leger, Independent Artist, New Brunswick/Manitoba Creative Residency Program (2010-11);
- John Orr, PhD Candidate, Department of Architecture and Civil Engineering, University of Bath (2010-11);
- Christopher Deane Trumble, University of Arizona (2010-11);
- Mark West, Professor, UManitoba (2003-14), collaborations with: MIT, EPSRC LimesNET Research Team (Prof Peter Walker, PI & Director, BRE Centre in Innovative Construction Materials, Un. of Bath) (2011-12).

3.6.8c) Design Thesis External Examiners

The Department of Architecture invites two External Examiners to participate in the final presentations and evaluations of all Design Thesis Students. Examiners are typically academics at other institutions in North America and/or practicing architects with experience in reviewing thesis projects. After two days of reviews, all students, advisors and examiners participate in a closing discussion. Students have four weeks after these presentations to finalize and submit a Design Thesis book, synthesizing their research and design.

The External Examiners and special guests since the last accreditation are noted below:

2017 May 1-2

Howard Davies	Founding partner of the Montreal-based collective design practice Atelier Big City, Clifford C.F. Wong Professor of Practice at McGill University's School of Architecture, & past coordinator of the final design thesis project. BSc Arch, BArch (McGill)
Jill Stoner	Director of the Azrieli School of Architecture at Carleton University; author, designer & former Professor Department of Architecture, University of California, Berkeley. B.A. (New College, FL); M.Arch (Un. of Pennsylvania).

+ Special Thesis Reviews / Workshops / Conversations with:
Dr. David Leatherbarrow – Feb. 2, 2017
Brigitte Shim – January 12, 2017
John Patkau – September 18, 2016

2016 April 18-19

Lucie Fontein	Architect and Associate Professor, School of Architecture, Carleton University, B.Arch. (Toronto), M.Arch. (McGill), OAQ, NCARB, LEED AP
Dr. Stephen Parcell	Professor and author, School of Architecture, Dalhousie University B.Arch (Toronto), M.Arch (Cranbrook), PhD (McGill)

2015 April 20-21

Dr. Marcia Feuerstein	Architect & Associate Professor at the Washington-Alexandria Architecture Center, Virginia Tech, B.S. (Tufts), M.Arch (Buffalo) M.S.Arch. & Ph.D. (Un. of Pennsylvania)
John Shnier	Founding partner Kohn Shnier Architects, and Associate Professor of Design in the M.Arch program at the John H. Daniels Faculty of Architecture, Landscape and Design, University of Toronto

Design Thesis Closing Discussion, May 2, 2017, with Jill Stoner & Howard Davies

3.6.8d) Guest Critics & Course Lecturers

2016-17

The Architecture Program regularly involves outside critics and lecturers in the curriculum. The 2016-17 academic year was typical of the broad and diverse participation of guests in our design studios and core courses. Together with nine full time academic staff, the professional architecture curriculum was delivered with an additional twelve sessional instructors – including seven registered architects, one registered engineer, and three LEED certified professionals. All are active in local and international design forums. The resumes of full-time professors and sessional instructors are included in the Appendix to this report. The professional curriculum was further enriched by contributions of numerous invited professionals, technical consultants, industry partners, external design critics, visiting researchers, and guest lecturers. The names and affiliations of these **100+ guests** who shared insights and meaningful contact time with students in the context of a required course in 2016-17 are noted below.

MAA LOCAL ARCHITECTS

Michael Banman, Stantec (ARCH 7060)
Sean Bailey, Boreal Studio (EVAR 3008/10)
Brent Bellamy, NumberTen Architects (EVAR 4010)
Dirk Blouw, Public City Architecture Inc. (EVAR 3008/10)
Ken Borton, 5468796 Architecture (EVAR 4004)
Al Coppinger, BLDG Architecture Office Inc. (EVAR 3010)
Ana Coppinger, Architecture49 (ARCH 7060)
Steve Cohlmeyer, Cohlmeyer Architecture Ltd. (EVAR 4004)
Terry Dannelly, LM Architectural Group (GRAD 7090)
Richard Derksen, Winnipeg Plan Examiner (ARCH 7060)
John Duerksen, Harbor Building Workshop (EVAR 3008/10)
Chris Gilmour, 2architecture (EVAR 3010)
Ralph Glor, BLDG (EVAR 3010)
Ryan Gorrie, Brook McIlroy (4004/10)
Greg Hasiuk, NumberTen Architects (EVAR 4004)
Kevin Humeniuk, Architecture49 (ARCH 7060)
David Kressok, LM Architectural Group (ARCH 7060/00)
Brent Lauman, 701 Architecture (ARCH 7060)
Rachel Lemieux, Brook McIlroy (4004/10)
Andrew Lewthwaite, Public City Architecture Inc. (ARCH 7060)
Melissa McAllister, Prairie Architects (EVAR 3008/10)
Fletcher Noonan, Stantec (ARCH 7060)
Lindsay Oster, Prairie Architects Inc. (4004/10)
David Penner, David Penner Architect & StorefrontMB (EVAR 4010)
Michael Robertson, Cibinel Architecture Ltd. (4004/10, ARCH 7060)
Dustin Sharrow, MMP Architects Inc. (EVAR 3008/10)
Andre Silva, 2architecture (EVAR 3008/4010)
Grant van Iderstine, Architecture49 (ARCH 7060)
James Wagner, JRWagner Architect Inc. (EVAR 4010)
Larry Wiens, Architecture49 (ARCH 7060)

MAA INTERNS & ARCHITECTURE GRADS

Chantal Auger (EVAR 3008)
Chris Burke, MAA Intern, 2Architecture (EVAR 3010)
Joel Friesen (EVAR 3008)
Joe Kalturnyk, curator of RAW Gallery (EVAR 3008/10; 4010)
Kailey Kroeker, MAA Intern, 1x1 architecture inc. (EVAR 3008)
Juliana Kusyk, MAA Intern, 2 architecture (EVAR 3008)
Tiffany Leong, MAA Intern, 2architecture (EVAR 4010)
Tony Neustaedter (EVAR 4004/10)
Kyle Wires-Munro, MAA Intern, Work/Shop (EVAR 3008/10)
Dave Thomas, Ayshkum Engineering (EVAR 4004/10)

VISITING ARCHITECTS

Kevin Alter, alterstudio, University of Austin at Texas (ARCH 7060)
Howard Davies, Atelier Big City, Montreal (GRAD 7090)
Brigitte Shim, Shim-Sutcliffe Architects, Toronto (GRAD 7090)
John Patkau, Patkau Architects, Vancouver (ARCH 7070)

For additional guests participating in the program as part of our Cultural Events Lecture Series, see 3.6.8a)

ARCHITECTS ENGAGED FOR OFFICE or SITE VISITS DURING FIELD TRIPS

George Baird, Baird Sampson Neuert Architects, Toronto (ARCH 7050)
Roxane Bejjany, Shim-Sutcliffe Architects, Toronto (ARCH 7050)
John Cook, GRC Architects, Ottawa (ARCH 7050)
Heather Dubbeldam, KPMB, Toronto (EVAR 4004)
Gordon Filewych, Chief of Design, National Gallery of Canada (EVAR 4004)
Maxime-Alexis Frappier, acdf* Architecture, Montreal (EVAR 4004)
Ron Keenberg, IKOY, Ottawa (ARCH 7050)
Dairmund Nash, Moriyama & Teshima Architects, Toronto (ARCH 7050)
Carol Phillips, Moriyama & Teshima Architects, Toronto (ARCH 7050)
John Shnier, Kohn Shnier Architects, Toronto (ARCH 7050)
Partisans, Toronto (EVAR 4004)
Williamson Williamson Architects, Inc., Toronto (EVAR 4004)
Saucier Perrotte Architectes, Montreal (EVAR 4004)

CONSULTING ENGINEERS

Jeffrey Dolovich, P.Eng, Gilles Quarries, MMI (ARCH 7010)
Mike Ferley, P.Eng, UManitoba Office of Sustainability (ARCH 7060)
Tammy Harper, LEED, Red River College (ARCH 7060)
Dr. Dimos Polyzois, P.Eng, UManitoba (ARCH 7050)
Jon Reid, P.Eng, Wolfrom Engineering (ARCH 7060)
John Wells, PhD, P.Eng, Crosier Kilgour & Partners (ARCH 7000/EVAR 4010)

INDUSTRY PROFESSIONALS

Gerry Humphreys, Milestone Project Management (ARCH 7060)
Graham Bergeron, Gilles Quarry, Manager of Drafting (ARCH 7010)
Keith Gillis, Owner/Manager of Gillis Quarries (ARCH 7010)
Brian Gebhardt, mason & instructor, Red River College (ARCH 7010)
Kirk West, Consultant, Robinson Lighting (ARCH 7000)
Eric Bjornson, Founder, Sundial Building Solutions Inc. (EVAR 3006)

ARTS, DESIGN & PLANNING COMMUNITY

Dr. Frank Albo, PhD, Historian, Author (EVAR 4010)
Susan Algie, Winnipeg Architecture Foundation Director (EVAR 4010)
Tommy Allen, Urban Eatin' (ARCH 7050)
Abigail Auld, Winnipeg Architecture Foundation (ARCH 7070)
Jim August, former Forks CEO (ARCH 7070)
Rejeanne Dupuis, UManitoba Campus Planning Office (ARCH 7050)
Robert Guilford, Community Elder, Clearwater, MB (ARCH 7050)
Jonathan Hildebrand, UM Campus Planning Office (ARCH 7060)
Angela Mathieson, Centre Venture Cooporation (ARCH 7070)
Alexander Mickelthwate, Director, Winnipeg Symphony Orchestra (EVAR 4010)
Jayne Miles, Coordinator, Ryerson Urban Farm (ARCH 7050)
Raymond Ngarboui, Immigration Integration & Farming Community Coop (ARCH 7050)
Jeff Palmer, Planner (ARCH 7070)
Judy Pestrak, MAA Executive Director (EVAR 4010)
Carl Stone, Elder, UM Aboriginal Student Advisor (Migizii Agamik) (EVAR 4004/10)
Zephyra Vun, Design Quarter Winnipeg (EVAR 4010)

INTERDISCIPLINARY RESEARCHERS & ACADEMICS

Dr. Oliver Botar, UManitoba School of Arts (EVAR 4010)
Brenda Brown, FAUM, Landscape Architecture Dept. (ARCH 7050)
Dr. Diana Cheng, Independent Scholar, Montreal (EVAR 3000)
Jae Sung Chon, FAUM, ED Program (EVAR 4006)
David Covo, McGill University (ARCH 7050)
Emanuel Jannesch, Visiting CAST Researcher (ARCH 7080/GRAD 7090)
Dr. Serena Keshavjee, University of Winnipeg (EVAR 4006)
Dr. David Leatherbarrow, University of Pennsylvania (GRAD 7090)
Dr. Richard Milgrom, City Planning (EVAR 4004)
Ry Moran, Director UM National Centre for Truth & Reconciliation (EVAR 4004/10)
Dr. Peter Olschavsky, Nebraska State University (GRAD 7090)
Dr. Louise Pelletier, UQAM, Montreal (ARCH 7050)
Marco Polo, Ryerson University (ARCH 7050)
Jill Stoner, Director, Carleton Un. Azreli School of Architecture (GRAD 7090)
Mark Tholon, Faculty of Environmental Design, OCADU (ARCH 7050)
Dr. Joseph Weiss, Canadian Museum of History (EVAR 4004)

2015-16 | 2014-15

Other Guests Contributing to Core Courses Since the Last Accreditation (not included above):

Dr. Catherine B. Asher, University of Minnesota (EVAR 3002)
Scott Bernhard (AIA), Tulane University (EVAR 4004)
Kevin Bone, Bone Levine Architects, NYC (ARCH 7050)
Wins Bridgman (MAA), Bridgman Collaborative (EVAR 4010/ARCH 7060)
Dr. Jim Bugslag, School of Art, UManitoba (EVAR 3000)
Ricardo Castro, Associate Professor, McGill University (EVAR 3002)
Toby Chase, V-P Strategic Planning Forks (EVAR 4004/10)
Jonah Corne, PhD, UManitoba, English Film Theatre (EVAR 4004/10)
Lizette Denechezhe, Community Elder, Lac Brochet FN (EVAR 4004)
Robert de Kort, Defacto Architecture, Netherlands (EVAR 4004)
Hank Koning, Koning Eizenberg Architects, LA (EVAR 4004/ARCH 7050)
Dr.Elizabeth English, Associate Prof., Un. of Waterloo (EVAR 4004)
Dr. Marcia Feuerstein, WAAC, Virgina Tech (GRAD 7090)
Lucie Fontein, Associate Professor, Carleton University (GRAD 7090)
T. Fougere, Director of Design EQ3 (ARCG 7070)
Rudy Friesen (MAA), Partner Emeritus ft3 (EVAR 4004/10)
David Gersten & David Turnball, Cooper Union (ARCH 7050)
Michael Goreski, Scandinavian Modern Inc., MB (ARCG 7070)
Dr.Rutger de Graaf, Delta Sync (EVAR 4004)
Sheila Grover, Winnipeg historian (EVAR 4004/10)
Tom Jazen (MPPI) Scatliff+Miller+Murray (EVAR 4004/10)
Dr. Ron Jelaco, McGill University (EVAR 4000)
Jeffrey Johnson, Columbia University, NYC (ARCH 7050)
Darin Johnstone, djArchitects and SCI-Arc, LA (EVAR 4004/ARCH 7050)
Paul Jordon, CEO Forks Renewal Corporation (EVAR 4004/10)
Dr. Robert Kirkbride, Parsons, NYC (ARCH 7050)
Kurtis Kowalke, City of Winnipeg Planning (EVAR 4004/10)
Dr. Elsa Lam, Editor, Canadian Architect (EVAR 4010/ARCH 7060)
Dr. Linda Larcombe, UM Faculty of Medicine (EVAR 4004/ARCH 7050)
Jen Lathrop, Micahel Maltzan Architects, LA (EVAR 4004/ARCH 7050) Clare MacKay, Forks Corporation (EVAR 4004/10)
Dr. Indra McEwen, Corcordia University (EVAR 3000)
Mike McNeil, Rockwell Group, NYC (ARCH 7050)
Tom Monteyne (MAA), Monteyne Architecture Works (EVAR 4004/10)
David Morck (MAA), NumberTen Architects (EVAR 4010/ARCH 7060)
Michael Moxam (OAA), Stantec, Toronto (EVAR 4004/10)
Dr. Pam Orr, UM Faculty of Medicine (EVAR 4004/ARCH 7050)
Dr. Stephen Parcell, PhD, Associate Prof., Dalhousie Un. (GRAD 7090)
Peter Sampson (MAA), Public City Architecture (EVAR 4010/ARCH 7060)
Michael Scatliff (MALA), Scatliff + Miller + Murray (ARCH 7050/60)
Karen Shanski, Architecture49 (GRAD 7090)
Bob Somers (MALA), Scatliff+Miller+Murray (EVAR 4004/10)
Michael Sorkin, Michael Sorkin Studio, NYC (ARCH 7050)
Adrien Sparling,
Stephen Teeple, Teeple Architects Inc (EVAR 4004/ARCH 7050)
Greg Thomas, Winnipeg historian (EVAR 4004/10)
Harlyn Thompson, FAUM Dean Emeritus (EVAR 4004/10)
Olafur Thordarson, Dingaling Studio, NYC (ARCH 7050)
Billie Tsien, Tod Williams Billie Tsien Architects, NYC (EVAR 4010)
Prof. Kentaro Tsubaki, RA, Tulane University (EVAR 4004)
Michael von Thiessenhausen, MvT Construction (EVAR 4004/10)
Allan Wexler, Artist, Parsons, NYC (ARCH 7050)
Ivan Yassie, Community Elder, Tadoule Lake FN (EVAR 4004/ARCH 7050)
Dr. Chris Zevenbergen, TU Delf (EVAR 4004/ARCH 7050)

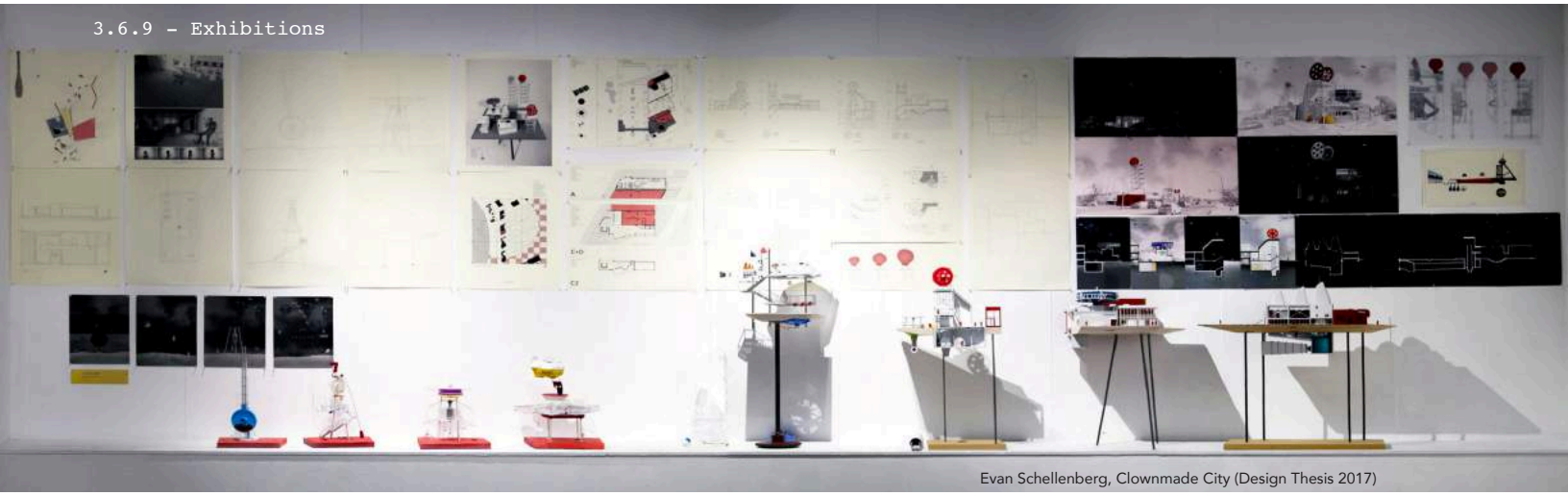
3.6.9 Exhibitions

- *A list of public exhibitions brought to the program since the previous site visit.*

The Faculty of Architecture hosts exhibitions in its Arch2 Gallery, or A2G (depicted above), as well as the Arch2 entry foyer, or PoolRoom (named after its now defunct reflecting pool), plus Centre Space and the entry foyer of the Russell Building. For more on the Faculty's gallery spaces, see below 3.7 Physical Resources. In addition to these dedicated areas, the architecture program benefits from other galleries on campus, including the School of Art Gallery, the Dr. Paul H.T. Thorlakson Gallery, part of the Icelandic Reading Room in Dafoe Library, and the UMSU Gallery in the University Centre, run by the University of Manitoba Students Union.

2016-17

ArchFolio2016	*Architecture Design Studios 2015-16*. PoolRoom – Sept. to Dec.
Model Homes:	*Housing Design 2016*, curated by Storefront Manitoba, sponsored by the Winnipeg Construction Association. A2G – Sept. to Oct.
Design Build:	*Profiling 11 local design-build projects and firms* – RESCHEDUELD due to the University-wide Faculty Union Strike. A2G
Design Thesis	*Research Projects and Studio Reviews*. A2G – December.
MB Design Awards	*2015 Premier's Award for Design Excellence*, with MAA support. Centre Space – January 30 to February 17, 2017
Trans-Plan 2017	*International Student Design Competition: Memory as Cinematic Immersion*, Jeremy Chan, Pauline Ordonez, Karina Leong (UManitoba). A2G – Feb. – Mar.
Paulista Section:	*Dissecting Architecture as the Revelation of Space*, Eduardo Aquino + M.Arch Students (ARCH 7020). A2G – March to April, 2017.
Mamacitas y Taquito	A collaborative postcard of the Mexico City field trip by the Social Infrastructures Studio Eduardo Aquino. PoolRoom – March-May, 2017.
TILED	*Faculty Research Works, Part of the FAUM Year End Exhibition*. A2G Display Cabinets. May 5-10, 2017.
Arch. Design Thesis	*Exemplary Design Thesis Projects*, A2G – May - June, 2017
MidCentury Modern	M.Arch Students (ARCG 7070), with Prof. Ed Epp. PoolRoom - May 2017.
Year End Exhibition	*Faculty-wide exhibition of student work*, all disciplines and all levels shown in all buildings. May 5-10, 2017.



Evan Schellenberg, Clownmade City (Design Thesis 2017)

2015-16

FIT Nation:	*Active Living Spaces by 33 US projects + 19 local projects*, with the AIA, Stantec, Winnipeg Regional Health Authority, Minister of Health, Deputy Minister of Health and Healthy Living and Seniors (MHHLS). A2G – Sept. to Oct.
PreModern Arch	*ED3 & ED4 Student posters for the History and Theory of Pre-Modern Architecture* class (EVAR 3000), with Prof. Lisa Landrum. PoolRoom, Oct. 2015.
Phantasmagoria	*NYC Field Trip Studies*, M.Arch students & Prof. Landrum (ARCH 7050). PoolRoom, Nov. 2015.
New Orleans	Field trip multi-media display of a week long tour of New Orleans, Tulane University and the Tulane City Centre, ED4 students & Prof. Coar. PoolRoom, Dec. 2015.
BUILD:	5468796 Architecture, with support of 13 industrial partners. A2G, Nov. – Jan.
TRANS-PLAN 2016:	*International Student Competition. Envelop*, Erin Hamilton, Cathryn McCall, Raquel Torres (UTexas Austin). A2G, Feb. – April, 2016.
TILED	*Faculty Research Work*, Part of the FAUM Year End Exhibition. A2G Display Cabinets. April 2016.
CSLA 2016	*Canadian Society of Landscape Architects Awards of Excellence*, Apr. – May 2016.
Joinery and Alchemy	M.Arch Students, with Prof. Ed Epp. PoolRoom - April 2016.
Year End Exhibition	*Faculty-wide exhibition of student work*, all disciplines and all levels shown in all buildings. April 22-26, 2016.

2014-15

Exquisite Corpse	*Drawing Faces*, ED3 Student work Drawing: Freehand and Digital, with Prof. Eduardo Aquino. PoolRoom.
Building Toys:	*Architecture on the Red Carpet*, curated by Rae St. Clair Bridgman. A2G Sep. – Oct.
Modern Arch	*ED3 & ED4 Student posters for the History and Theory of Pre-Modern Architecture* class (EVAR 4000), with Prof. Lisa Landrum. PoolRoom, Oct. 2014.
Tadoule Lake	& Lac Brochet FN, "Otherwise" - Studio display of field trip to Tadoule lake and Lac Brochet First Nations, ED4/M.Arch students & Prof. Coar. PoolROom, Nov. 2014.
Flood Architecture:	*The Manitoba Project.* Prof. Ed Epp. PoolRoom - Dec. 2014
Re-Emerging:	*Winnipeg*, curated by Manitoba Storefront. A2G, Nov. – Dec.
Centennial Centre:	*Winnipeg's Civic & Centennial Centre: An Architectural Exploration*, curated by Jeffrey Thorsteinson, with the Winnipeg Architecture Foundation. A2G, Jan. – Feb.
On the Spot	Selection of Design Studio work from the Department of Architecture. PoolRoom - March 2015.
Urbanizing the Mojave:	*LAS VEGAS*, curated by Nicole Huber & Ralph Stern. A2G, Mar. - Apr.
Site Wood Building	M.Arch Students, with Prof. Ed Epp. PoolRoom - April 2015.
Year End Exhibition	*Faculty-wide exhibition of student work*, all disciplines and all levels shown in all buildings. April 24-28, 2015.
Frozen Forces:	Fluid Forces - fabric and rope installation, advanced technology topics course, M.Arch students & Prof. Coar. PoolRoom, 2015.

The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Métis Nation.

Campus Shuttle Information
umanitoba.ca/campus/parking/shuttle

Parking Services Game Day Parking Information
umanitoba.ca/campus/parking

University of Manitoba Events Calendar
events.umanitoba.ca

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umtoday.ca

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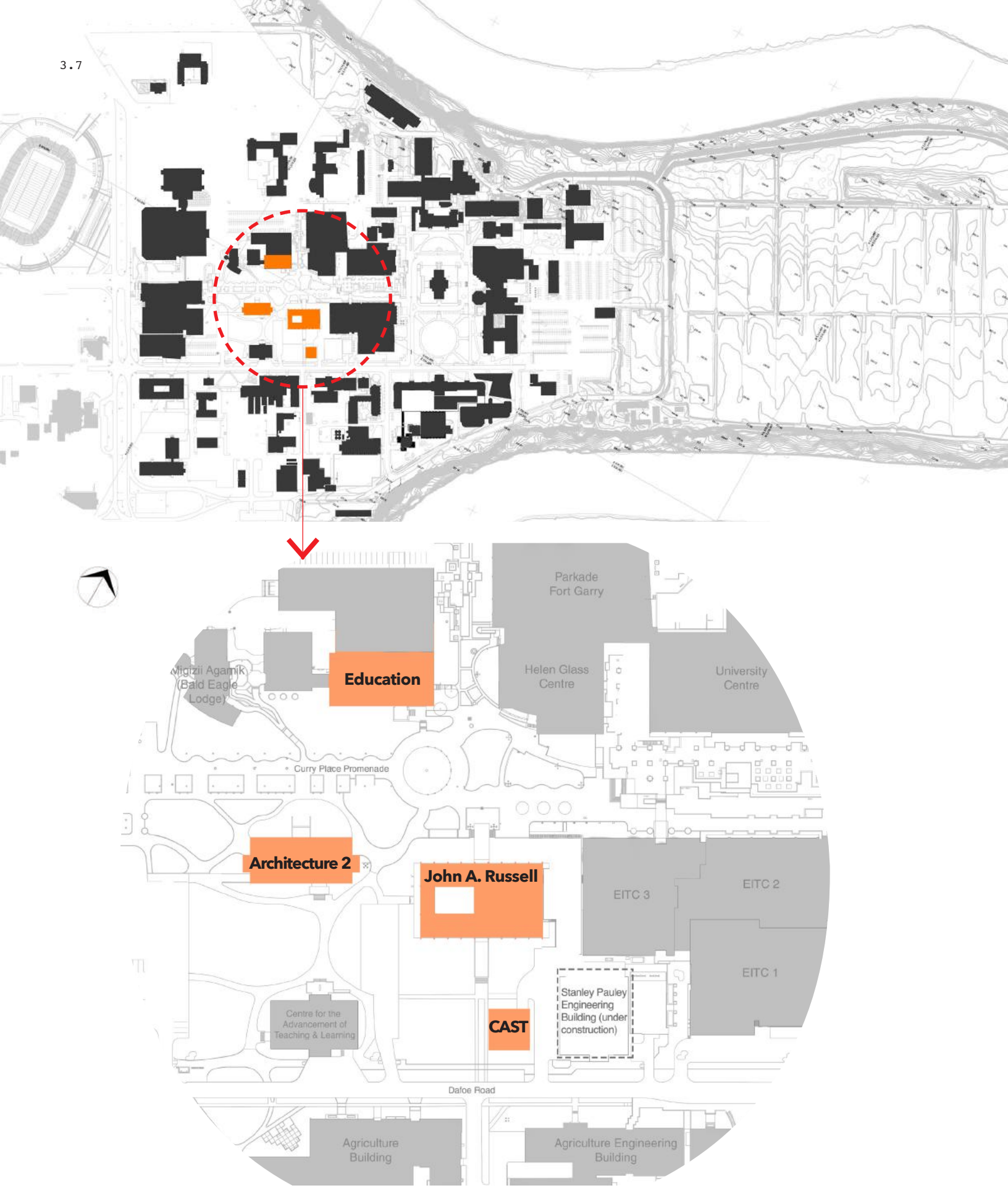

Parkade
Fort Garry
Migizii Agamik
(Bald Eagle
Lodge)
Education
Helen Glass
Centre
University
Centre
Curry Place Promenade
Architecture 2
John A. Russell
EITC 3
EITC 2
EITC 1
Stanley Pauley
Engineering
Building (under
construction)
Centre for the
Advancement of
Teaching & Learning
CAST
Dafoe Road
Agriculture
Building
Agriculture Engineering
Building

3.7 Physical Resources

The program must provide physical resources that are appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each full-time student; lecture and seminar spaces that accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space.

The APR must include:

- *A general description, together with labeled plans, indicating seminar rooms, lecture halls, studios, offices, project review and exhibition areas, libraries, computer facilities, workshops, and research areas;*
- *A description of any changes under construction, funded, or proposed.*

FACULTY OF ARCHITECTURE: OVERVIEW OF BUILDINGS

The Faculty of Architecture occupies three adjacent buildings on the University of Manitoba's Fort Garry Campus: the John A. Russell Building; the Architecture 2 Building; and the Centre for Architectural Structures and Technology (C.A.S.T.). The nearby Education Building accommodates a basement annex (renovated in Summer 2016), providing studio space for ED2 students. Faculty of Architecture students have access to all UM facilities on two campus (Fort Garry and Bannatyne), including 19 libraries, a University Centre, athletic facilities, and several labs in the Faculty of Engineering and School of Art.

John A. Russell Building

The John A. Russell Building, also known as the Russell Building or JAR, is named after the first Dean of the Faculty of Architecture. Completed in 1959 and designed by Smith Carter Katelnikoff Associates, with James Donahue as principle designer, the building is the first in Canada specifically designed as a school of architecture. It is also the first curtain wall building in western Canada. The Russell Building is considered a masterpiece of modernist design – see "Heart of Glass" *Canadian Architect* (Feb. 2007).

The Russell Building houses upper level studios for City Planning, Interior Design, and Landscape Architecture, as well as key common spaces for the Faculty: Centre Space (the principal public lecture venue and flexible review space); the Architecture/Fine Arts Library; a lecture hall (rm. 214), classrooms and seminar spaces; the Dean's office, faculty lounge and administrative offices; the Partners Program office; faculty offices; and, on the basement level, the Workshop and FABLab. The Russell Building also has a distinctive inner courtyard and a well-trafficked entrance foyer cutting through its north-south axis, which is used daily by numerous UM students and staff en route to other campus destinations. "Night and Day," a 1963 bronze sculpture by Cecil Clarence Richards, adorns the north cantilevered entry platform.

In 2005-6, the Russell Building underwent a major renovation led by LM Architectural Group, Crosier Kilgour and Partners as envelope consultants, Bockstael Construction Ltd., and University of Manitoba's Physical Plant. The refurbishment earned a 2008 Heritage Winnipeg Preservation Award. Work included:

- complete removal and replacement of exterior cladding, including asbestos and mold abatement;
- roof replacement and waterproofing;
- reconstruction and re-landscaping of the John A. Russell Building courtyard (completed 2008) by Hilderman Thomas Frank Cram Landscape Architecture and Planning.

Between 2009 and 2014, upgrades responded to concerns raised in previous VTR's, including disability access requirements. Other improvements have addressed basement-level repairs and electrical upgrades related to digital needs and the 2013 creation of the FABLab. Office and library renovations and improved air-handling capacity were implemented to maintain high-quality environment for students, faculty and staff. Work included:

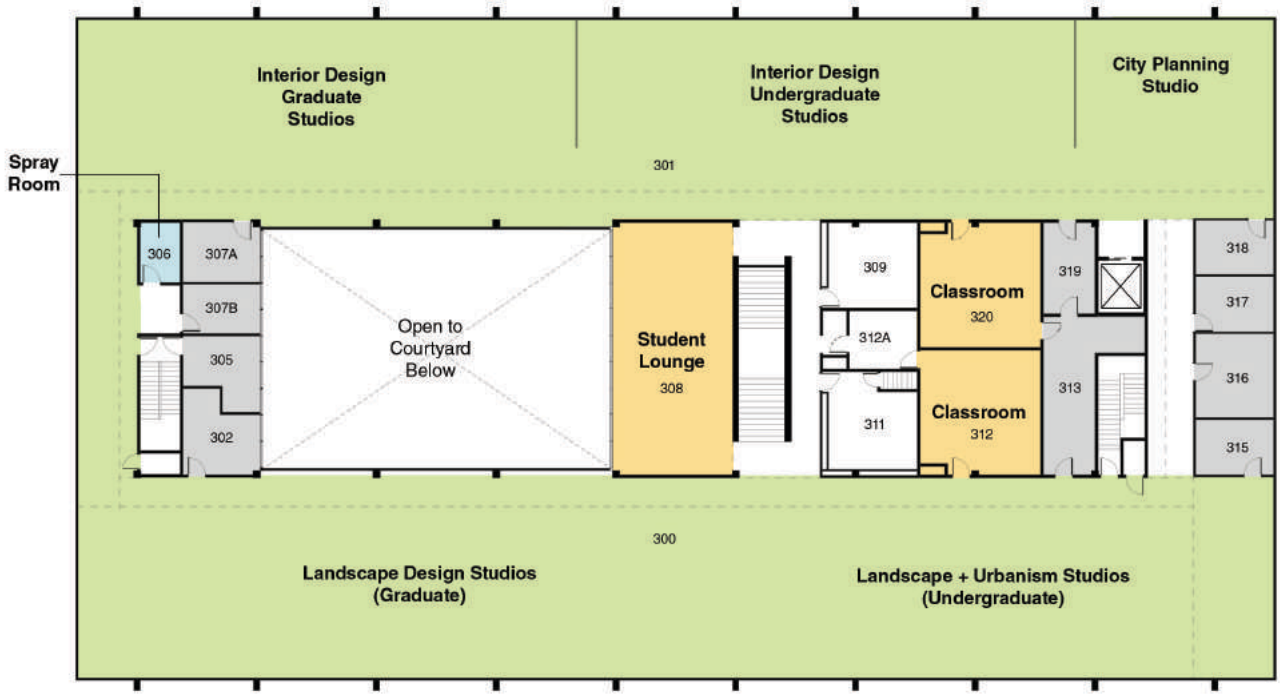
- replacement of the Architecture and Fine Art Library basement floor and basement renovation;
- main floor refurbishments and service desk upgrades to the Architecture and Fine Art Library;
- upgrade of restrooms, including accessible restrooms in the basement;
- new tunnel to the Frank Kennedy Building and repair to the tunnel between Russell and Arch2;
- interior upgrades to the Education Building ED Studios;
- interiors and furnishing upgrades to the administrative offices and faculty lounge;

Since 2014, the following Russell Building upgrades have been completed or are underway:

- upgrading of wireless capacity;
- FABLab renovations
- classroom refurbishment (rm. 209)
- electrical upgrades in the studios
- Library reception area upgrades

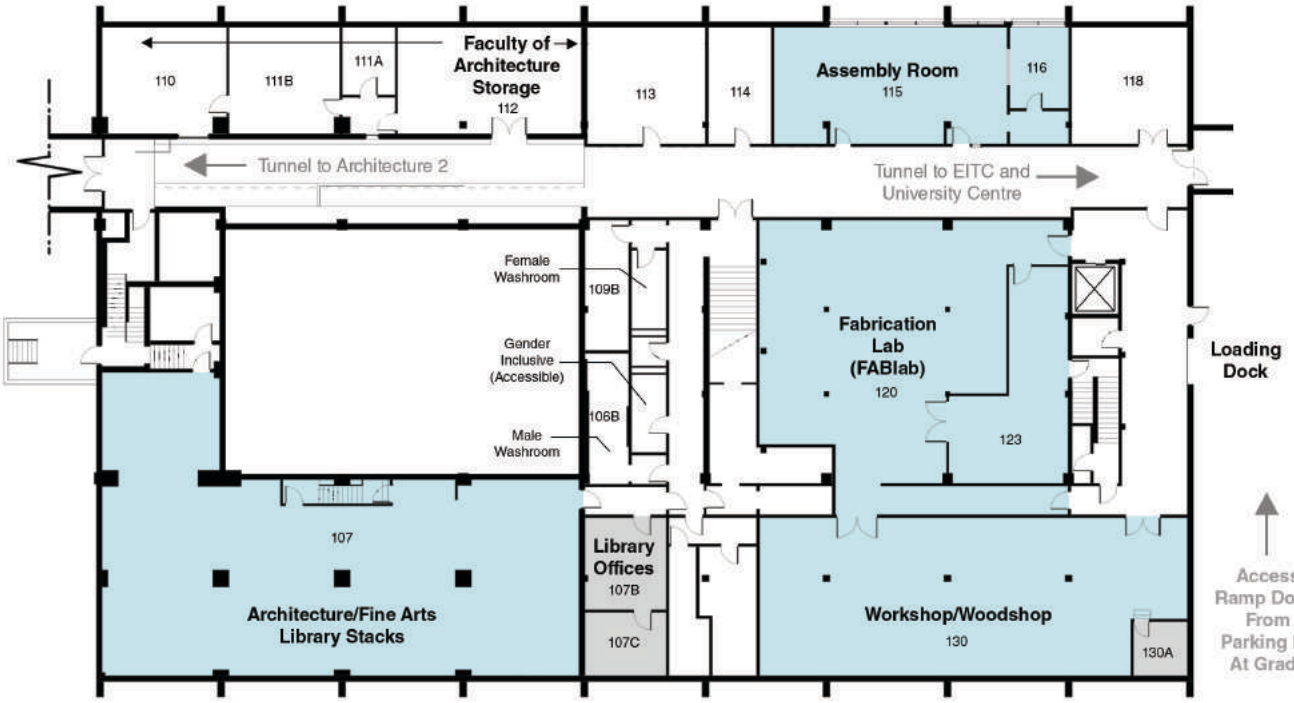
A complete list Facility upgrades for all Faculty of Architecture buildings, including budgets and timelines, is appended at the end of this section.

In the long-term, the Faculty further intends to pursue upgrades to the Russell Building exterior steps and entrances (a proposal for this work was submitted to Physical Plant in 2014-15).



J.A. Russell Building third floor/300 Level

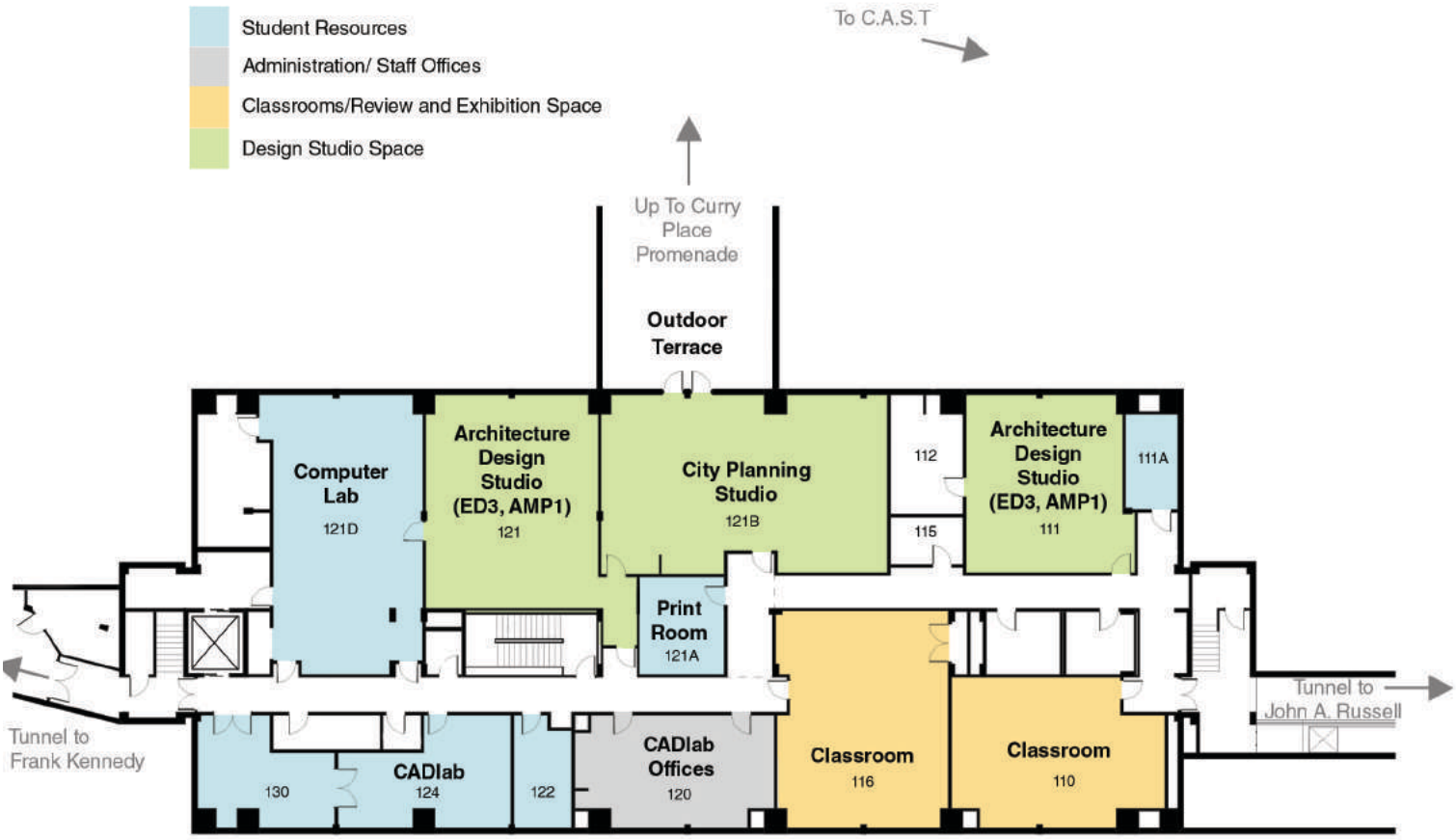
main floor/200 Level



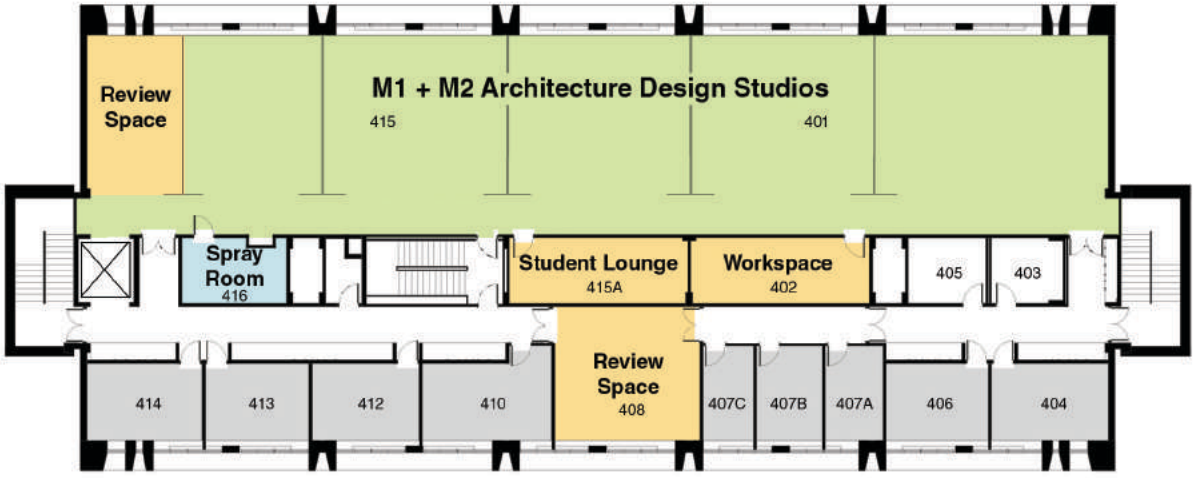
J.A. Russell Building

basement/100 Level

Architecture 2 Building
main floor/200 Level

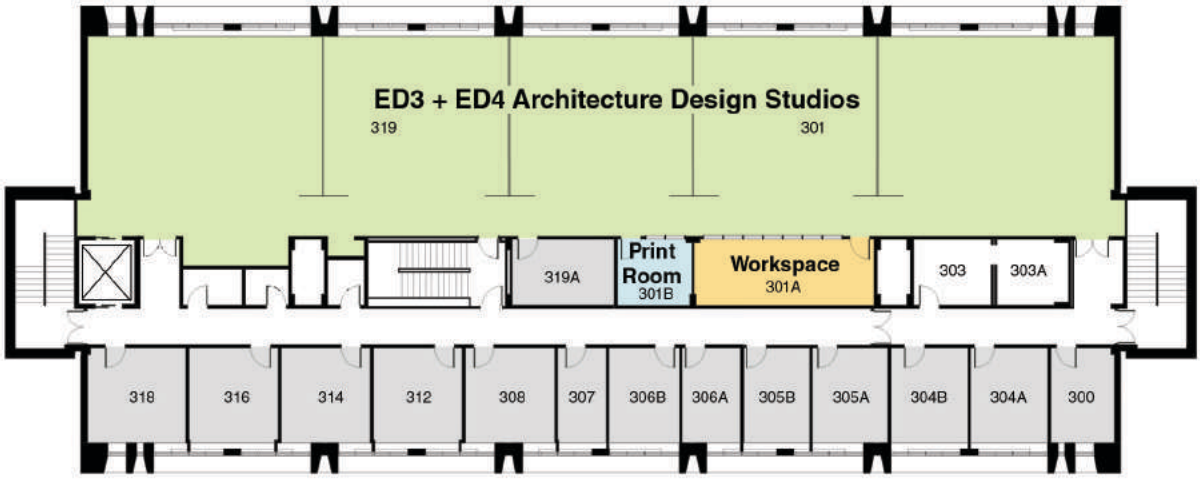


Architecture 2 Building
basement/100 Level

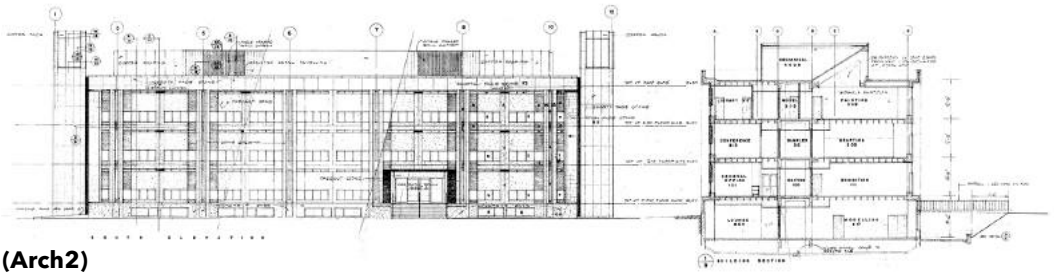


Architecture 2 Building
fourth floor/400 Level

- Student Resources
- Administration/ Staff Offices
- Classrooms/Review and Exhibition Space
- Design Studio Space



Architecture 2 Building
third floor /300 Level



Architecture 2 Building (Arch2)

Designed by Smith Carter Searle Associates to house the School of Art in 1965, the Architecture 2 Building has accommodated Faculty of Architecture studios and offices since around 1992. Since 2008, the Department of Architecture is completely accommodated in the Architecture 2 Building, also called Arch2. It houses all M.Arch studios; all ED3 and ED4-Architecture Option studios; and all Department of Architecture faculty offices (and other faculty and sessionals), plus additional offices, lounges and work areas. It is home to about 160 students, and 25 faculty and staff. The Arch2 studios (former painting studios) provide excellent north-facing light, with continuous clerestory windows on the fourth floor, and generous north glazing on the third. The building also houses on the main floor the Arch2 Gallery; a large multi-purpose lecture, review and exhibition space (rm. 225); the Product Catalogue Collection (PCC); plus the basement-level CADLab.

The Architecture 2 building has provided safe and acceptable accommodations for many years, yet has been in serious need of upgrades. Since the last Accreditation Visit, the following improvements have been completed or are underway:

- major exterior refurbishments, including basement window replacements; masonry repair and waterproofing; roof work and bulkhead repair (started summer 2016, to be completed Fall 2017);
- CADLab upgrades, and new student printing room (see details below);
- Room 216, seminar space – new LED wall-mounted screen;
- Room 225, large review space – new A/V projection equipment;
- Room 110, basement classroom upgrades (new windows, wall panels, painting, etc.);
- spray booth (rm. 416) – new fire-rated cabinets and cleaning;
- PoolRoom Gallery at entry (painting);

2017 Teaching Laboratory Renewal for Arch2:

Together with the localized improvements listed above, a comprehensive interior refurbishment plan is underway. A Teaching Laboratory Renewal proposal for improvements to the Architecture 2 Building was submitted in April 2017 to the University of Manitoba Physical Plant and Associate VP Administration (see below). It was approved. Work on all levels will proceed. A detailed scope of work and timeline were developed over the summer 2017. A Request for Quote was issued on July 31st, 2017, for the design of new studio furniture (student workstations, seating, space dividers, and moveable presentation pin-up panels). Proposals will be reviewed in mid to late September 2017. Design prototyping and workstation mock-ups are expected by December 2017. Manufacturing is scheduled for winter 2018, with installation expected to commence in spring 2018, to be ready for use in fall 2018.

In addition to furnishings, this renewal project entails infrastructure improvements (electrical and lighting upgrades and new ceiling acoustic tiles), to be completed in summer 2018. The scope includes design studios (rooms #301, 319, 401 & 415); and auxiliary rooms, including supporting studio workrooms (#301a, 415a and 402), review lounge (#408), seminar room (#216), and the multipurpose space (#225).

The Renewal Proposal is being developed in collaboration with:

- Jaret Klymchuk, Director, Architectural & Engineering Services (AES), UManitoba Architect;
- Michael Robertson, Associate Architect, Cibinel Architecture (Code Review);
- James Lund, Electrical Eng. Technologist, UManitoba Physical Plant;
- Paul A. Schaeffer CT (Arch.), Senior Architectural Designer / Technologist, UManitoba Physical Plant;
- Thom Fougere / EQ3 Winnipeg, Product Design consultant;
- Gabrielle Bartsch, Assistant Director IST- Bannatyne, Audio Visual Support;
- Kirk Dyson, Facilities Coordinator, Faculty of Engineering

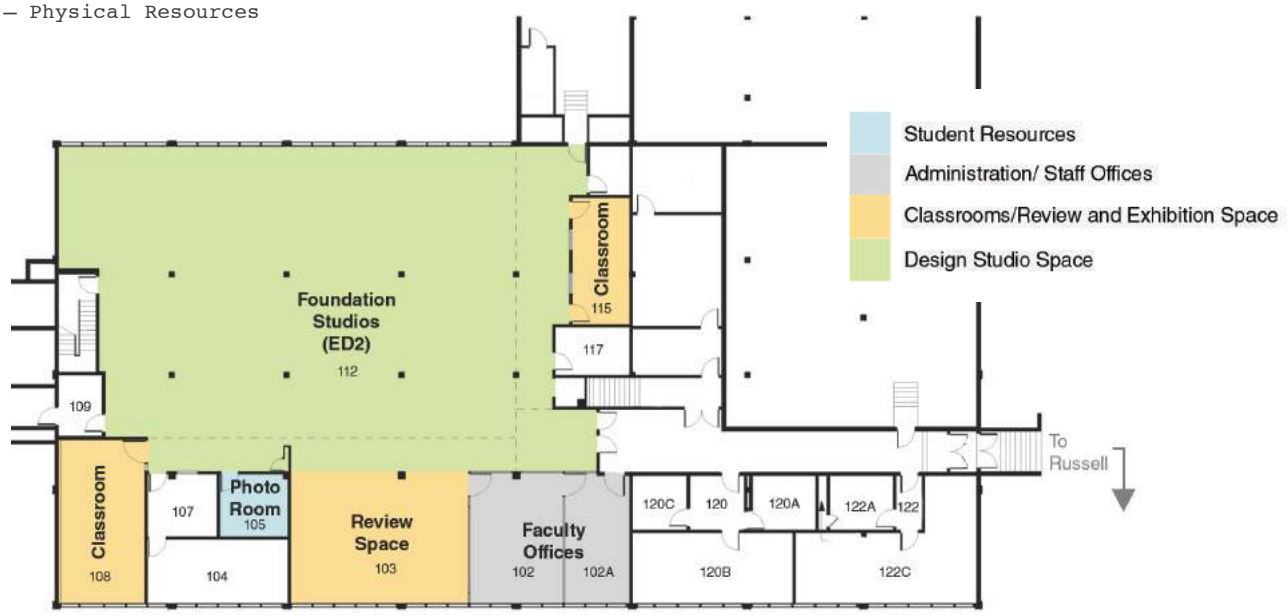
+ Faculty of Architecture support from Suzanne Therrien-Richards, PCC Manager; Michele Brown, Business Manager; Eduardo Aquino, Herbert Enns & Carlos Rueda, Dept. of Architecture; and Dean Beddoes.

Proposed Scope of Work (Submitted April 7, 2017; now approved; currently being developed and refined)

1/ TEACHING LABS / STUDIOS (Rooms #301, 319, 401, and 415)			
ELECTRICAL			
a.	Electrical panels (4 units)	$20,000/each	$ 80,000
b.	New wiring	$60,000/floor	$120,000
c.	Individual flexible outlets	$150/student	$ 24,000
			$224.000 Subtotal 1
LIGHTING			
a.	Track lighting diffused (up and down)		$100,000
b.	Individual workspace spotlight		$ 32,000
			$132,000 Subtotal 2
FURNITURE			
a.	Individual worktops w/ adjustable height	$1,000/each	$160,000
b.	Individual storage cabinets	$ 300/each	$ 48,000
c.	Individual seats	$ 200/each	$ 32,000
			$240,000 Subtotal 3
SPACE			
a.	East and West walls (4 walls/review space)	$5,000/each	$ 20,000
			$ 20,000 Subtotal 4
2/ AUXILIARY AREAS			
ROOM 216 (Seminar Room)			
a.	Fixed projector		$ 5,000
b.	Pull down projection screen		$ 1,000
			$ 6,000 Subtotal 5
ROOM 225 (Multipurpose room)			
a.	Dividing partitions (acoustic and pin-able)		$ 20,000
b.	Fixed projector		$ 5,000
c.	Pull down projection screen		$ 1,000
			$ 26,000 Subtotal 6
SUPPORTING STUDIO ROOMS (Rooms #301a, 415a and 402),			
a.	Pin-able surfaces		$ 5,000
b.	Board table and chairs		$ 10,000
c.	Fixed Projector		$ 5,000
c.	Pull down projection screen		$ 1,000 Subtotal 7
			$ 21,000
REVIEW LOUNGE 4th floor (Room #408)			
a.	Replace the pin-able surfaces		$ 5,000
			$ 5,000 Subtotal 8
PAINTING BOOTH (Room #416)			
a.	Ventilation system		$ 20,000
b.	Renovation		$ 10,000
			$ 30,000 Subtotal 9
WALL PAINTING			
a.	Interior / all teaching laboratories and public spaces		$ 50,000
			$ 50,000 Subtotal 10
		SUBTOTAL (ALL)	$754,000
		Contingent (10%)	$ 75,400
		TOTAL	**$829,400**

PHASE 1 [Electrical & Furniture] = $464,000.00
PHASE 2 [Lighting, Auxiliary areas, Dividers, & Painting] = 365,400.00

Note: as of September 8, 2017 the estimated allocated budget is now **1.3 million**.



Education Building basement/100 Level

The pre-disciplinary foundation studios and related instructor offices and support spaces are housed in a 3,468 ft² (322m²) basement-level space of the Education Building, which was designed by Libling Michener and Associates in 1962. The Faculty of Architecture has used this space since 2007. In the summer of 2016, significant upgrades to the space were completed. Work included: new furniture and lighting; electrical upgrades; lounge, office and review space upgrades; general painting; etc.

ED1/U1 and ED2 students use classrooms and review spaces in the Arch2 and Russell Buildings, as well as other nearby facilities: the large Schultz Theatre in St. John's College, which easily accommodates the 150+ students in the Introduction to Environmental Design class (EVAR 1600); and the Faculty of Agriculture Lecture Hall for Visual Literacy (EVAR 1602) and Cultural History courses (EVAR 1660/70).

Inventory of Studio Space in the Faculty of Architecture

Architecture Program

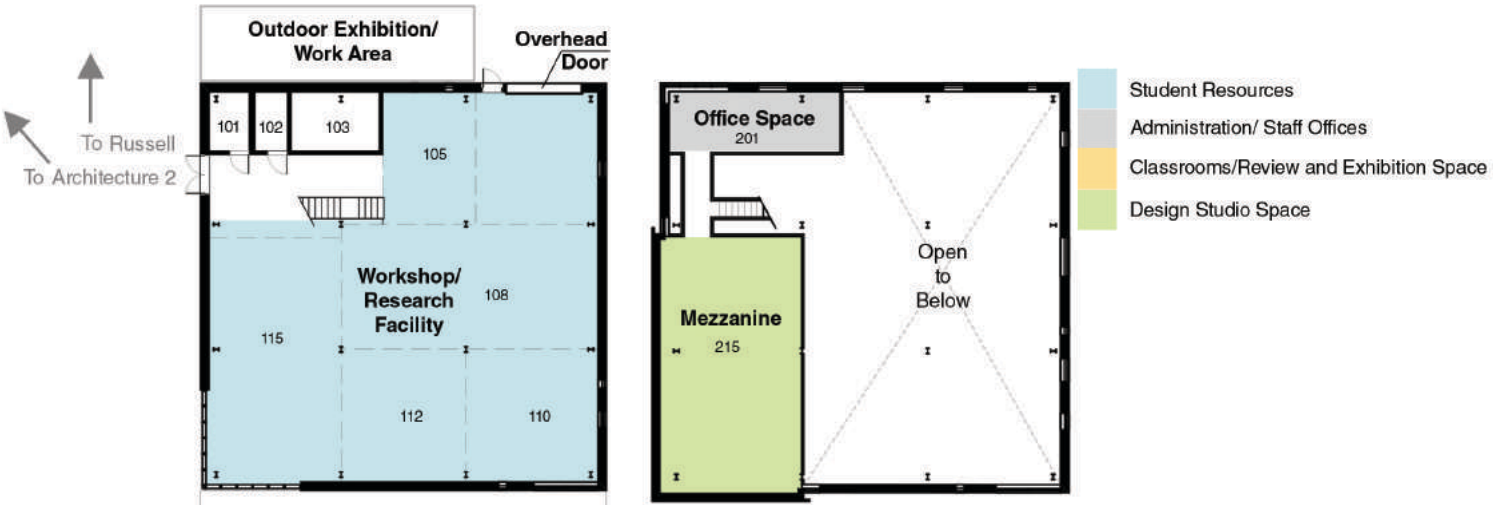
sq.ft	sq.m.	BUILDING – STUDIO SPACE, ROOM #
4,240	394	Arch2 – 4th fl. Arch. Studios, rooms 415 + 401 (less West review space)
4,728	439	Arch2 – 3rd fl. Arch. Studios, rooms 319 + 301 (115 'x 30.5')
987	92	Arch2 – bsmt Arch Studio, room 121
763	71	Arch2 – bsmt Arch Studio, room 111
10,718	996	Total Architecture Studio Area
		138 Total FTE Students in Fall 2017
77.7ft²	**(7.2m²)**	**Available studio space per student**

Other Option Programs

sq.ft	sq.m.	BUILDING – STUDIO SPACE, ROOM #
1245	116	Arch2 – bsmt CP Studio, room 121B
5877	546	Russell – LA & L+U Studios, room 300
6329	588	Russell – ID & CP Studios, room 301 (including West wing)
13,451	1,250	Total Studio Area for CP, ID, LA, plus ED-IE and L+U Options
		200 Total FTE Students in Fall 2017 (49 CP; 36 ID; 53 LA, plus 62 ED/ IE & L+U)
67 ft²	**(6.3 m²)**	**Available studio space per student**

Engineering Information & Technology Complex (EITC)
The Faculty of Architecture is adjacent to the Engineering Information and Technology Complex, consisting of three interconnected buildings dating from 1912, 1949/1957 and 2005, with a total area of approximately 450,000 sq.ft. These buildings contain a library, labs, classrooms, and a large public atrium, which are occasionally used by architecture students.

Stanley Pauley Engineering Building
Construction of the new 46,100 square foot Stanley Pauley Engineering Building began in the summer of 2017. Located between the EITC, Russell and C.A.S.T. it will house the Engineering Innovation and Prototyping Centre (design team prototyping facilities), Co-op/Industrial Internship Program Office, Internationally-Educated Engineers Qualification Program (IEEQ) Office and Facilities, Student Study Space (graduate and undergraduate), Undergraduate Teaching & Research Laboratories, and Biomedical Engineering Laboratories. While mainly responding to needs of the Faculty of Engineering, students in the Faculty of Architecture will have access to the Undergraduate Teaching and Research Laboratories, which will include a Welding Facility and a Paint Facility with an air re-circulating spray booth. Occupancy expected in late-2018.



C.A.S.T. main floor mezzanine

The Centre for Architectural Structures and Technology (C.A.S.T)
Founded in 2003, the Centre for Architectural Structures and Technology is an interdisciplinary research laboratory embracing technical and poetic dimensions of making. C.A.S.T. provides unique conditions for critical and creative experimentation with technologies germane to the design, construction and performance of the built environment. The generous and well-equipped facility enables research at diverse scales and with a variety of media and tools. C.A.S.T. is well equipped for work in any standard—and many non-standard—fabrication materials and methods, including concrete, masonry, carpentry, fabric/textiles and earthworks. Researchers at C.A.S.T. explore materials and assemblies; experiment with building techniques and construction methods; devise and test prototypes; study the limits and potential of natural laws; investigate sustainable practices; cultivate Indigenous modes of making; and collaborate in the rigorous play of imagination. C.A.S.T. supports both discipline-specific and cross-disciplinary research that advances knowledge, promotes creativity, and supports innovation in teaching. C.A.S.T. seeks to promote research benefiting students, researchers, industry, the public and our planet.

C.A.S.T. is centrally located on the University of Manitoba's Fort Garry campus, situated between the Faculties of Architecture and Engineering, and close to the sculpture and ceramic studios of the School of Art. The C.A.S.T. building offers 500m^2 (5,500ft^2) of open workshop space, including a 75m^2 (800 ft^2) mezzanine equipped with drafting boards, computer workstations, projectors, a seminar table, and office

space. The C.A.S.T. building includes an overhead door, and generous well-placed windows for light and for public viewing of the research within.
The C.A.S.T. facility is unique in Canada, having been specifically designed to support a vision of architectural education and research grounded in shared acts of making. C.A.S.T. participates in an expanding constellation of world-class research facilities within and beyond the University of Manitoba. C.A.S.T is known worldwide for producing innovative research in the field of architecture and construction.

The C.A.S.T. Building was designed and constructed with nearly $1.5 million in support from the Canada Foundation for Innovation; the Manitoba Innovations Fund; Western Economic Diversification Canada; and over one hundred companies, organizations, and individuals in the local and regional construction industry. The C.A.S.T. building was featured in Canadian Architect (Feb. 2003).

C.A.S.T. Special Features and Equipment:

- 45 m^2 (490 ft^2) strong floor for structural testing, with 50 Mpa (110,000 lb.) MTS hydraulic actuator (supplemented by the nearby Department of Civil Engineering WR McQuade Structures Lab).
- Floor tools and hand tools for fabricating prototypes and models including:
- Metal Cutting and soldering tools; Textile cutting and sewing equipment; Concrete mixing and placement equipment; Air-drive and electric wood working tools (supplemented by the JAR Workshop);
- computer stations, supplemented by the JAR FABLab, with digital modeling software, CNC router, Laser cutters, 3D printing and scanning, and vacuum former; plus:

Projector
Sewing Machines (3)
Soldering station
Pencil Style Soldering Irons (3)
Concrete/cement Mixer (140L)
Cement Mixer (100L)
Concrete/Masonry Saw
Compression Tester
Hydraulic Lift
Shop Vac (Rigid) (2)
Drill Press (Delta)
Bandsaw(Delta) (2)
Bandsaw(Rockwell)
Table Saw(sawstop)
Concrete/Masonry Saw
Chop Saw (Makita)
Belt/Disc sander
DustFX 1 Hp Dust Collector (w/HEPA filters)
Flat Wood Hole Drill Bit (set)
Hole Saw Drill Bit
Forstner Drill Bit Set
Drill Bits
Multiple clamps

<u>Hand Power Tools:</u>
Sheet Sander (Mastercraft)
Hammer Drill (Dwalt)
Cordless Drills (Makita)
Cordless Impact Drills (Makita)
Recipro Saw (Makita)

<u>Safety Equipment:</u>
Hard Hat
Vests
Safety Glasses
Gloves
Ear Protection
Organic Vapour Mask (3m-6200)
Organic Vapour Mask (A0 5 Star)
Small Mask

C.A.S.T. Personnel

Since Fall 2016, C.A.S.T. is managed by a half-time Coordinator/Technician, responsible for general facility oversight, health safety, and special projects. Planning and programming support are provided by a C.A.S.T. Committee, consisting of the CAST Coordinator/Technician, the Associate Dean (Research), an elected representative from each Department/Program in the Faculty of Architecture, up to two representatives from the Faculty of Engineering, two students (undergraduate and graduate), and a Chair.

For the C.A.S.T. Researcher in Residence Program and associated workshops for students, see above, 3.6.8. Human Resource Development: Guest Lecturers/Researchers (pp. 149-151).

C.A.S.T. Future Initiatives

The Coordinator/Technician, with the support of the C.A.S.T. committee and office of the Dean, is actively planning numerous initiatives, including the following:

- Create a new Student Resources area in the mezzanine for technical data and samples pertaining to building technology, construction and assembly, plus catalogues of past and current C.A.S.T. research, and other relevant publications. This will involve installing new bookshelves, and a large format printer.
- Set up five to six computer/design work areas on the mezzanine space for Researchers in Residences, as well as for students and/or faculty temporarily working in C.A.S.T.;
- Host a Food for Thought and "open house" in Fall 2017 to re-introduce C.A.S.T to the Faculty and ensure access and opportunities are clearly presented to all students and faculty (scheduled for Sept. 18, 2017 - http://umanitoba.ca/faculties/architecture/events/2017-2018events/Veness.html;
- Complete re-design of website by September 2017 (now complete), including an ongoing photo archive of past work (in development);
- Work with all Faculty Technology instructors to discuss how the facility can be used as a "lab" space to apply and test the technical knowledge taught in the classroom;
- Support students and instructors in the design/build another "warm hut" for the 2018 Warming Hut competition at the Forks (December 2017-February 2018);
- Continue building relationships with industry; create opportunities for regional and visiting professionals to offer workshops and/or lectures to all students and faculty;
- Hire 2 student technical assistant for ongoing initiatives, maintenance, supervisions etc. (funding already approved);
- New/Replacement Tool Purchases ($6000 in funds /application in progress):

Reciprocating Saw/Sozzle
Safety Signs + Floor Tape
Metal Saw Blade
New Saw Blades (General purpose)
Thin metals & mild Steel Saw Blade
Band Saw Blades
Shelving System (Horizontal wood Storage)
mounting hardware for large fabric roles
New PPE (ear plugs, safety glasses, gloves, dust masks)
100' heavy Duty garden hose replacement
Hand Planer (wood)
Concrete Planer
Plate Joiner Kit

C.A.S.T. website: http://umanitoba.ca/faculties/architecture/cast/index.html

WORKSHOP

The Faculty of Architecture Workshop provides equipment, facilities, staff and instruction to the Faculty of Architecture students for the execution of design projects and enrichment of their educational experience. The Workshop provides a full complement of power and hand tools for the manipulation of wood and related media. A limited selection of equipment for the working of metals and other materials is also available. Two full-time staff provides user assistance, training and supervision while offering extensive knowledge of materials, tools, processes and safety. Workshop technicians offer students personal instruction on a variety of subjects, including joinery techniques, veneering, curved lamination, form making, casting of a range of materials, and welding. Other services include: supporting faculty and staff in the design and construction of office work spaces and storage; providing technical support to design-build studios and special courses; managing materials; and overseeing all laser cutting activities.

The workshop is a 2020 sq.ft. facility located in the basement of the J.A. Russell building, with clerestory windows, a separate staff office, and easy access to a loading dock area and elevator.

Materials: The workshop stocks and sells basic materials to students. These include: ¾" shop birch plywood; Baltic birch plywood in 6 thicknesses; aircraft ply in 1.5 and .8mm thickness; MDF in 6 thicknesses; Acrylic in 7 thicknesses; 3mm acrylic in clear, black, white, sign red and mirror; acrylic rod and acrylic tube; acrylic adhesive and dispensers; Brass rod and threaded rod; Solid wood is offered in maple,

shop pine, fir, basswood, clear cedar; veneer is offered in an assortment of species; Styrofoam in 1"-4"thickness.

2017 Workshop Tool Inventory:

- Stationary tools
- 2 Sawstop Industrial tablesaws
- 1 Inca Modelmakers tablesaw
- 1 12" Jointer
- 1 16"Thickness Planer
- 1 13" Thickness Planer
- 1 24" Thickness sander
- 1 12" sliding compound miter saw
- 1 10" sliding compound miter saw
- 1 7.5" sliding compound mitersaw
- 2 15 " bandsaws
- 1 20" bandsaw
- 4 drill presses
- 1 router table
- 1 horizontal mortising machine
- 1 15" disk sander
- 1 6X108" oscilating verticle belt sander
- 1 oscillating spindle sander
- 1 wood lathe
- 2 metal lathes
- 1 scroll saw
- 1 2X72" metal cutting belt grinder
- 1 24" hotwire foam cutter
- 1 4'x8' vacuum press

Portable Tool Inventory:

- 2 24" strip acrylic heater/bender
- 1 Domino Joinery system
- 1 Domino XL Joinery system
- 1 Biscuit Joinery system
- 8 Festool sanders
- 2 portable beltsanders
- 1 Festool tracksaw with track system
- 5 jigsaws
- 9 corded drills
- 15 cordless drill/drivers
- 2 reciprocating saws
- 2 hammerdrills
- 4 festool shop vacuums
- 3 Fein shop vacuums
- 8 routers
- 7 hot wire foam cutters
- 1 Vacuum bag clamping system
- 1 24" hand held hot wire foam cutter
- 1 vacuum clamp system
- 2 plywood carts
- Veritas dowel maker set
- Veritas tapered tenon maker set

Hand Tool Inventory:

- 2 sets firmer chisels
- 1 set mortising chisels
- 2 sets carving chisels,
- assorted rasps rifflers and files
- 109 woodworking clamps
- 78 parallel jaw clamps
- 3 sets twist drill bits
- 2 sets imperial plexi points
- 1 set metric plexi point drill bits
- 2 sets imperial brad point drill bits
- 1 set metric brad point drill bits
- 1 set metric twist drill bits
- 2 sets imperial forstner drill bits
- 1 set metric forstner drill bits
- 1 set of router bits
- dovetail and joinery handsaws
- 3 safety ruler straight edge

Safety: The workshop has a mandatory safety orientation, to give students a basic familiarity with the workshop equipment and principles of safe working practices. These sessions are organized in the first week of each term (and according to need). There is a table saw safety course offered, this is voluntary, as it is the workshop technician's responsibility to operate the table saw. Attendance of the table saw safety course allows students to operate the saw for themselves. A Workshop User Handbook and Assembly Room Etiquette guidelines are provided online.

Recent Upgrades include improvements to the ventilation system; the workshop floor has been filled and epoxy coated; new metal storage cabinets for tools & supplies; and lumber racks for increased inventory.

The development of the Digital Fabrication Lab (rooms 120-123) in 2013 represents a significant increase in area – from 2020 sq.ft. to 4620 sq.ft. While focused on digital tools and exploration, the adjacent FABLab space also serves as an assembly area with a large hybrid zone to benefit both traditional and advanced fabrication. A nearby Assembly Room (room 115) offers an additional 952 sq.ft. for large work.

Improvements to the workshop are being made on an ongoing basis to keep the facilities relevant to student and faculty needs. Current examples include the development of custom hot wire tools for cutting Styrofoam and the design and making of a machine for tapping threads.
Workshop Website: http://umanitoba.ca/faculties/architecture/facilities/workshop.html

FABLab

The FABLab is a 2600 sq.ft. facility in the basement of the Russell building (rooms 120 and 123), directly adjacent to the Workshop. Formerly a mixed-use assembly area, the space was designated FABLab in 2013, and has since been updating its technology, facilities and services for all students and instructors in the Faculty. The FABLab complements the Workshop by serving as an interdisciplinary design laboratory, supporting education and research in the realm of digital fabrication, parametric design, modeling, mapping, and full-scale prototyping. FABLab resources are typically integrated with design studio projects, providing students in all design disciplines opportunities to work in sophisticated and variegated modes of practice. FABLab technologies are funded by the FAUM Technology Investment Program Fund (TIPF). Over the last three years, TIPF has contributed $650,000 to FABLab equipment, with ongoing purchases.

FABLab Facility

- 2600 sq.ft. basement facility connected directly with the Workshop
- easy access to the University tunnel system and truck delivery loading area
- (4) AD1000 BOFA 3 stage particle filters
- Two Separate air handling systems for laser cutters
- 22 Ethernet ports, all lab computers connected to University's active directory
- Lockable work cell for CNC router and industrial laser
- Hardwired, drop down extension cords
- (8) Clean airlines at 80psi

FABLab Equipment

- 400watt Meta Beam 4C, industrial laser cutter
- (3) 120watt PLS6.150D Universal laser cutters. Inc. rotary fixture
- Three axis AXYZ CNC Router. Inc. Vacuum table, tangential knife, automatic tool changer, vacuum cups
- 3D Systems Projet 360. powder based 3D printer
- Stratasys uPrint, plastic extruder 3D printer. Inc. Support removal bath
- 3D Systems 1200, UV resin based 3D printer
- DJI Inspire 1 pro, UAV. Inc. Zenmuse X5S
- Creaform Go! SCAN 3D, 3D scanner. Inc. portable workstation laptop
- Formech 508FS thermal former
- (12) Dedicated PC 3.4Ghz Quad Core i7 workstations. Software includes: Windows 10 Professional, AutoDesk Suite, Adobe Design Standard, Microsoft Office 2013, Rhinoceros 5.0 [Plugins: RhinoCAM2016, Grasshopper, Firefly, Python, KUKAprc], Meshlabs, Pix4D.
- Dedicated EPSON BrightLink 585Wi interactive projector and EPSON HD projector.
- 125+ solid Carbide tool library for CNC router.

FABLab Personal

- One FABLab Director (also an ED instructor: Kim Wiese)
- One FABLab Manager/Coordinator (Full time: Jason Hare)
- 8 Student FABLab technicians (Part time)
  Personnel provide advice to academic staff and students; lead workshops; maintain equipment; initiate and coordinates new acquisitions; stock consumables; participate on the Technology Investment Program Fee Committee (TIPF); maintain health and safety; and undertake and support research.

FABLab Recent Research Support

- Northern Manitoba, University College of the North
- European digital fabrication research labs
- ROBARCH 2016

- Hida Japan, Research/Residency Studio 2017
- Bee|House|Lab project—*This project was a cross disciplinary venture between the University of Manitoba,Office of Sustainability, Department of Entomology and the Faculty of Architecture. Bee|House|Lab began as an open design competition to imagine what a home for bee species. The FABLab acted as technical advisor, donating time and equipment to fabricating 70+ bee houses, which were installed in 13 locations around Winnipeg over the summer of 2016, to be later examined by the department of Entomology for rates of success of the design/fabricated houses.*

FABLab Workshops & Tours:
- bi-weekly workshops during the academic year on digital tools and techniques;
- MINI-U 'digital designer' program over the summer months;
- workshops for external Partners Program members, and tours as necessary;
- orientation session as part of course work, including the Intro to Environmental Design Course

Recent Workshops:

Open Lab: Laser Cutter Wednesdays 5:30-7:30
Soldering and Wire Bending, Nov.7, 2016
Sewing and Pattern Making, Nov.14, 2016
3D printing, Nov.21, 2016
Fundamental Parametricism, Mar.13, 2017
Applied Parametricism, Nov. 20, 2017
Serging/sewing felt structures, Nov.27, 2017
Charette/Bee Bench, Apr.15, 2017

FABLab Future Initiatives
- expand workshop offerings to students interested in learning new techniques and softwares;
- ongoing hardware & software updates, including acquisition of the following:
  - KUKA LBR iiwa R820 14KG, 7 axis robotic arm;
  - Zenmuse XT Radiometric thermal camera - 640 30Hz 13mm;
  - Karamba - Plugin for Grasshopper
  - Upgrade laser tube wattage on 3 Universal laser cutters – from 65W to 120W

FABLab Website: http://umanitoba.ca/faculties/architecture/fablab/fablabindex.html

ARCH 2 GALLERY (A2G)

A2G is located on the main floor of the Architecture 2 building (room 215). It is one of the few regional galleries featuring work related to design. The Gallery serves all students and instructors in the Faculty of Architecture, and regularly attracts academics, professionals and artists from across Winnipeg. The A2G mandate is to serve as pedagogical vehicle; to exhibit work of Winnipeg designers; and to build linkages with other design communities by disseminating exhibition news and hosting traveling shows.

The Arch 2 Gallery is approximately 700 sq.ft. (24' wide x 30' deep x 10' high). The exhibition space consists of three blank walls and a full glass front with two glass doors, providing a visually accessible yet sonically discreet space. The Gallery opens onto an entry foyer with two display cabinets. This foyer – a primary circulation space for the school – frequently serves as a reception venue. A storage room (rm. 211) is adjacent to the gallery and a loading dock is on the same level, down the hall (rm. 228). The space is equipped with track lighting and electrical outlets.

The Faculty's Gallery Committee provides programming and upkeep for A2G. The committee is comprised of five elected academic representatives (one for each Department and Program), and a Gallery Director, appointed by the Dean.

Funding for the Gallery primarily comes from the Faculty of Architecture Endowment fund, to which the Gallery Director applies each year. For the last three years the awarded amount is as follows: $4,000 (2016-17); $6,000 (2015-16); $5,520 (2014-15). Additional funds for particular exhibitions may come from the Dean's office, Provincial and National arts funding bodies, local professional and arts organizations, individual firms, and foreign consulates.

At this time there are no proposed changes or planned upgrades to the Architecture 2 Gallery. For a list of exhibitions since the last accreditation, see section 3.6.9.

A2G Website: http://a2g.ca

POOLROOM GALLERY

The PoolRoom is named after a defunct terrazzo reflecting pool at the base of a blank interior wall facing the entry foyer of the Architecture 2 building. Since 2011 the pool has been covered to serve as a low pedestal and the wall has been painted and maintained for the display of current student work. Volunteers in the Department of Architecture maintain the space and coordinate exhibitions. For a list of exhibitions since the last accreditation, see section 3.6.9.

PRODUCT CATALOGUE COLLECTION

The Product Catalogue Collection (PCC) has been operating in the Faculty of Architecture since 1991. It was established with generous support from design product manufacturers and distributors. PCC is home to over 10,000 product resources, including technical data and material samples, all organized with the Construction Specifications Institute MasterFormat system. This is a valuable library for all students in the Faculty of Architecture, serving about 10-15 students per day. PCC also serves the local design community. Samples are available free on loan, and assistance is provided to find and order products not housed in the PCC. Each year, about 50 special orders are placed for students from a variety of suppliers.

Space + Inventory: The PCC is housed on the main floor of the Architecture 2 Building (room 203). It consists of a main room, a sample room, and the "Cage", totalling 1300 sq.ft. The **Main Room** (775 sq.ft.) contains a reception desk, lounge and two worktables. This room features most of the architectural and landscape architecture samples, including: gypsum panel systems; exterior siding; brick; masonry; wall and window assemblies; geotextiles; and a large display of precast concrete pavers, slabs, retaining walls and glass fiber reinforced concrete samples, along with installation drawings (also accessible on-line). The main room also includes two paint chip displays, plastic laminate displays and samples of metals, wood, plastic composites and carpets, as well as sustainable samples for indoor and exterior application. The **Sample Room** (230 sq.ft.) mostly contains interior finish samples: wall coverings, textiles, flooring, glass, ceiling panels, plastics, and more. A computer and scanner are available for student use, as well as a light box where colour temperatures ranging from 2700K to 6500K can be compared. Sample boards displaying fasteners for various applications are also on display. The **Cage** (315 sq.ft.) contains an organized collection of overstock and discontinued products. Many local firms and design shops donate materials to the Cage. This room is well used by students seeking materials for samples boards and models. It contains two worktables, cutting boards and a tile cutter. The materials from the Cage do not need to be signed out and returned, and therefore can be used for experimental purposes by students.

Funding: The Faculty of Architecture supports the PCC with a minimal operational budget plus salary costs. In the past few years, the PCC Resource Manager has been a student in the Masters of Interior Design program. The PCC is open every Tuesday, Wednesday and Thursday from 11:30am to 2:30pm. Operations times are posted online and on the display board adjacent to the PCC. During the summer months (mid-June through August), the PCC is open by appointment only.

Orientation + Initiatives: For the past three years, the PCC Resource Manager has participated in the Environmental Design student orientation in September. Students are given a short presentation on the services and accompanied by tours. PCC also collaborates with IDAS (the Interior Design Association of Students) to schedule Food for Thought lectures, during which supplier representatives provide updates on new products and new uses for products. In the past three years, eight lunch and learn sessions have been scheduled. The PCC collection is continuously being updated. In 2007, PCC was renovated with "green" products. A specific effort has been made since then to acquire sustainable products and to encourage students to consider life cycle and effects on the environment when specifying products. The PCC also ensures that surplus material is recycled, either by returning products to the manufacturer or by

donating material to a non-profit community arts group for use by local artists. Beyond normal updates to the collection, there are no proposed changes or planned upgrades to the Product Catalogue Collection.

PCC Website: http://umanitoba.ca/faculties/architecture/facilities/pcc.html
PCC Blog: https://wordpress.com/stats/day/umpcc.wordpress.com

CADLab

The Faculty of Architecture CADLab consists of several spaces distributed in three buildings. The main offices, Print Shop, Computer Lab and student services desk are located in the Architecture 2 Building basement. An additional Lab is located off the studios in the J.A. Russell building. Print and scanning facilities are also in Russell and the Education Building. CADLab provides services to all students, faculty members, and support staff in the Faculty of Architecture.

Summary of Facilities:

PURPOSE	ROOM #	BUILDING
Office Space for two full time staff	120	Architecture 2
Storage Space for equipment, paper, and supplies	120 & 122	Architecture 2
Print Shop, Student Services Front Desk & Equipment loans	124 & 130	Architecture 2
Computer Lab (Main Lab) – 18 stations + instructor station w/ proj.screen	121D	Architecture 2
Computer Lab – 4 high-end stations for special CAD projects	313	J.A. Russell
Student Print and Scan Facilities	121A & 301	Architecture 2
Student Print and Scan Facilities	300	J.A. Russell
Student Print and Scan Facilities	103	Education
Large Format Scanning Table	111A	Architecture 2

CADLab has two full time employees: a coordinator and a technician. CADLab also employs approximately five part-time students during the Fall and Winter terms to staff the Print Shop front desk and help with support requests. The Print Shop (124 Architecture 2) is also where all sign-out equipment is stored.

The computer labs and "Print & Scan" areas are open to students 24/7. The Print Shop has set office hours posted on the CADLab website site. During the academic year, the Print Shop is open 7 days a week (typically Mon.-Fri. 8:30am-7:30pm; Sat. 1-6pm; Sun. 1-7:30pm). The summer hours are Mon.-Fri. 1-4pm.

CADLab Upgrades and Initiatives

In 2016, Room 121A Architecture 2 was completely renovated to serve as a Print and Scanning facility, accessible only to students in the Faculty of Architecture with an electronic card swipe. The laser printers and scanners in 121A were previously housed in 130 Architecture 2. Room 130 now provides additional storage for loanable equipment purchased with the technology fee. A new low-cost wide-format printer (currently being sourced) will also be housed in room 130. Renovations to 121A and the new printer for 130 are funded by the CADLab Printing Account, derived solely from the sale of printed goods.

Room 111A previously housed video editing workstations, but digital video editing has become quite commonplace, even on consumer laptops, so the dedicated facilities were no longer needed. This room now houses a custom-made large-format scanning table.

CADLab IT Resources – see below, Section 3.8 Information Technology.

CADLab Website: http://umanitoba.ca/faculties/architecture/cadlab/index.html

ARCHITECTURE AND FINE ARTS LIBRARY

The physical and technical resources of the Faculty of Architecture and Fine Arts Library are described in the subsequent section 3.8.

3.7 - Faculty of Architecture Physical Resources Upgrades

	YEAR	COST
Arch2 Building - Teaching Laboratory Renewal (Interior renovations - 225 space, 300 and 400 level studios)	2018	$ 1,200,000
Arch2 Building - Exterior masonry, roof repairs plus window replacements in 100 Level	2016-17	$ 1,006,148
Arch2 Building - Classroom renewal upgrades - 110 classroom	2017	$ 110,000
Arch2 Building - AV upgrades - room 225	2016	$ 43,783
Russell Building - Classroom renewal upgrades - rm. 209	2017	$ 110,000
Russell Building - New furniture for Student Services assistant in the Dean's Office reception area	2017	n.a.
Russell Building - New work stations for two new support staff in the Dean's Office reception area	2017	n.a.
Russell Building - Pedestal floor mounted electrical receptacles - 300 level studios	2016	$ 5,355
Russell Building - Washroom renovation - 300 level	2015	$ 20,191
Russell Building - FABLab renovations	2016	$ 32,930
Education Building - Renovation/upgrade to 100 level - electrical, interior areas and entrance, student work stations, lounge/review seating, staff office space	2016	$ 512,274
All Studios - Ongoing replacement of student drawer units over several years at a cost of approximately $125 per unit (materials only, labour not included) – about 75 have been built by workshop staff to date	Ongoing	n.a.
	TOTAL	**$3,040,681**

3.8.1 Information Resources and Information Technology

The architecture librarian and, if appropriate, the staff member in charge of visual resource or other non- book collections must prepare a self-assessment demonstrating the adequacy of the architecture library. The library collection must contain a wide variety of print, visual, and electronic media, and be adequate in size, scope, content (both current, and retrospective), and availability for a professional degree program in architecture. The collection must include at least 5,000 different Library of Congress NA or Dewey 720-729 titles along with technical and support volumes to provide a balanced architecture collection as described by the Art Libraries Society of North America and the Association of Architecture School Librarians. Its staff and services should be adequate and appropriate to support the goals, objectives, and curriculum of the architecture program. Visual resources and other non-book materials are considered an integral part of an architecture education, and students must have ready access to these materials. Access to other architecture libraries in the region is not a substitute for an on-site library.

The APR must include:

- *The type of architecture library serving the program;*
- *A self-assessment of the library, including library collections, visual resources and other non-book collections, services, staff, facilities, and budget / administration / operations (see Appendix A-2 for guidelines on preparing a self-assessment);*
- *A Library statistics report (Appendix A-3 contains a form for reporting library data).*

INFORMATION RESOURCES

NOTE: *The main report content was prepared by Mary Lochhead, M.L.S., Head Librarian, Architecture and Fine Arts Library, January 2017, with minor additions by Acting Head Librarian Liv Valmestad, M.A., M.L.I.S., Aug. 2017.* (As of May 1, 2017, Mary Lochead is on leave, and will retire in *2018, after 25 years of service).*

Type of Library

The University of Manitoba Libraries (UML) consist of eleven unit (or branch) libraries and seven satellite information centres located on the Fort Garry and Bannatyne Campuses, and at the St. Boniface, Victoria, Seven Oaks, Grace, Concordia, Deer Lodge Centre, Riverview, and Misericordia General hospitals. With collections of over 2 million volumes, an annual operating budget of over 25 million dollars and a staff of over 200 employees, the University of Manitoba Libraries serve a community of approximately 38,000 students, faculty and citizen borrowers.

The University of Manitoba Libraries holds membership in the Association of Research Libraries, the Canadian Association of Research Libraries and the Center for Research Libraries. The Libraries is also a member of the Council of Prairie and Pacific University Libraries (COPPUL) and was a founding member of the Canadian Research Knowledge Network.

Architecture and Fine Arts Library

The Architecture and Fine Arts Library is a branch library serving the Faculty of Architecture and Faculty of Fine Arts. It has its own substantial collection and also draws on resources of the Elizabeth Dafoe Library, the University's main Humanities and Social Science Library.

A library devoted to architectural resources was established in the mid-1930s in the Tier building. A new architecture library was included in the design of the John A. Russell Building, which opened in 1959. This facility was expanded in the 1970s when the resources in support of the School of Art were added to the collection. This necessitated enlarging the basement crawl space into a full basement. Extensive renovations to the exterior and interior of the Russell Building were completed in recent years including a complete renovation of the basement (2010) and the circulation/reference area (2013).

Today, the Architecture/Fine Arts Library serves the primary resource needs of all departments within the Faculty of Architecture (Architecture, City Planning, Environmental Design, Interior Design and Landscape Architecture) and the School of Art (studio and art history).

LIBRARY SELF-ASSESSMENT

i) LIBRARY COLLECTIONS

Context

The Architecture and Fine Arts Library abundantly supports the mission goals and curriculum of the architecture program. The library is required to provide a statement of support whenever a course or program is changed, introduced or reviewed. Course bibliographies, bibliographies in key texts and other resources are checked against our holdings. The evaluation of the results of the checking follow the Conspectus methodology for collection assessment developed by the Research Libraries Group. In all cases the library has been found to support the course/program at the required level. "Special Topics" courses can sometimes be difficult to support given the variety of potential topics and instructors are encouraged to consult with the librarian to ensure adequate resources are available.

Scope of Collections & Subject Coverage

Books

Journals, publishers' catalogues and vendor databases are reviewed for titles to purchase. Suggestions from faculty and students are encouraged and given priority treatment. In the last three years 96 requested titles have been purchased (32 from students and faculty in the Department of Architecture). Most books are still bought in print. E-books are selected dependent on the topic, anticipated use, and cost. In 2016/2017, 309 books were ordered of which 35 were ebooks.

New books are displayed for one week on the New Book shelf. Patrons may place requests on these items, which are made available after the display period. The New Book list is available on our library webpage and can be received as an email upon request.

In 2002 our library acquired a tremendous donation from the estate of Jeffrey Cook, a graduate of the UM architecture program and a professor of architecture at the Arizona State University at the time of his death. 2,980 books were added to our collection, with the majority in the areas of architecture and design. Particularly rare titles were placed in Archives and Special Collections in the Elizabeth Dafoe Library.

Journals

Serials (e.g. print and online journals, databases) are managed centrally by the UMLibraries so a budget breakdown by discipline is not available. Currently, the Architecture/Fine Arts Library has 125 active print subscriptions. Each year the Libraries evaluate the availability of electronic journals and if the content is not compromised in the digital version, the print subscription is cancelled. This creates a savings in terms of processing and space and improves accessibility. In 2015, 27 print titles were cancelled due to electronic availability.

The core journal list produced by the Association of Architecture School Librarians lists 54 titles. The library subscribes to print or full-text e-versions or has selected holdings of 50 of the 54 or 93%.

Many journal titles not previously held by the Libraries have been made available through our subscriptions to packages and services such as EbscoHost, ProjectMusic, and JStor. Sharing the costs of some of these large collections through cooperative arrangements with other Canadian university libraries has allowed our collection to grow in ways our budget would not otherwise allow.

Building Plans

The library has a very small collection of building plans (48), some of which have been scanned and stored electronically by the Faculty of Architecture CADLab. This work should continue as part of the Libraries focus on digital initiatives.

DVDS / Films / Video

Educational, documentary and feature films on DVDs have been acquired to support research and teaching. The Faculty of Architecture also provides the library with copies of guest lectures on DVD. There

are 546 current holdings. DVDs are shelved in the reading room for easy browsing and may be borrowed by any library patron. Earlier films and lectures on videotape are held in Storage.

In recent years the library has added illustrated talks by architecture and related designers through its subscription the Pidgeon Digital Collection, an online audiovisual service. Budget reductions resulted in the cancellation of OnArchitecture (a similar product from Chile) and Art & Architecture in Video in 2015.

GIS

Geographic Information Systems (GIS) services provided by the Elizabeth Dafoe Library include geospatial data access, geospatial workshops for all UManitoba affiliates (students, faculty and staff), the hosting of an annual GIS Day, and access to a computer lab equipped with top of the line geospatial and statistical software.

Elizabeth Dafoe Library shares geospatial data with UManitoba affiliates from the City of Winnipeg (sometimes via a City of Winnipeg data sharing license), the Province of Manitoba, Land Information Ontario, DMTI Spatial Inc., Atlis Geomatics Inc. and other online, governmental and commercial entities. Instruction is offered on the use of federal data from GeoGratis. In the winter of 2017, an ArcGIS Server should be operational to distribute much of the data. The library has footprints for many remote sensing imagery products (e.g., aerial photography, satellite multispectral, RADARSAT and LiDAR) held by departments at the University of Manitoba and the province.

The Geospatial Semester, is a series of workshops offered twice in the fall and winter semesters, once to graduate students, and again to all U. of Manitoba affiliates. The titles include:

- Visualizing Data Using Maps & Charts
- Creating Maps to show changes over time
- Mapping from a MS Excel spreadsheet
- Map Analysis and Publishing Using ArcGIS Desktop
- Story Maps

Similar workshops are offered for individual student or faculty groups or for undergraduate or graduate courses.

The software accessible in the Elizabeth Dafoe Library Brown Lab includes ArcGIS v.10.4, a Geospatial Modeling Environment plug-in, Geomatica 2015, AutoCAD 2015, GeoViewer 5.5, Google Earth Pro, SAS, Stata, SPS and R. *[C. Dietz, GIS Librarian]*

Government Documents

The Elizabeth Dafoe Library was a full depository for Manitoba provincial documents and also received Canadian federal documents until the federal program terminated in 2013. The Government of Canada Publication E-Collection is freely available at http://publications.gc.ca/site/eng/home.html. Manitoba government publications are available at http://digitalcollection.gov.mb.ca. The Library also houses publications from other provinces, from countries other than Canada, and from a wide variety of international agencies. UNdata (United Nations) and World Development Indicators (World Bank) are now open access. The Libraries subscribes to OECD iLibrary, IMF eLibrary Complete and to the Data Liberation Initiative with Statistics Canada. The Libraries also subscribes to products from the University of Toronto designed to deliver Statistics Canada data (e.g. Canadian Census Analyser, and SDA@CHASS). The Documents/Data Librarian provides assistance to students wishing to research, access and manipulate data. *[G. Strike, Documents/Data Librarian]*

Images

The Slide Collection was closed in 2011. The Winnipeg Building Index, developed by the library, includes information on over 2,450 buildings and over 4,300 scanned images from the holdings of the Slide Collection. The WBI also points to additional sources of information about individual buildings where available. Maintaining this database has been hampered by storage and stability issues. The database was migrated to the Libraries' digital asset management system in 2017. There are hopes to expand this database to include images of Manitoba architecture currently available in slide format only.

The Kalen Collection (Winnipeg architectural photograph) and other digital archives made available through the Libraries' Digital Collections are invaluable resources for local and Manitoba architectural history.

The Libraries subscribes to Artstor, which includes more than 1 million images in a wide variety of subject areas including architecture.

Theses
Architecture Design Theses are held in the library with the most current two years available in the Reading Room. The remainder are held in storage. All are for use in the library only and may not be signed out without permission as per the Dept. of Architecture. While a DVD is often provided with the print thesis, no online version is available. These Design Theses should be posted to MSpace. All other UM theses must be placed in MSpace, the University's institutional repository. This increases access and preserves the content.

Policy Statements
Policies are developed and reviewed by one of two library management groups and are consistent in all units. Policies are available to public here: http://www.umanitoba.ca/libraries/directors_office/index.html.

The Head Librarian of the Architecture and Fine Arts Library is a member of Faculty of Architecture Council. The Librarian regularly reports to and receives feedback from members of Faculty Council.

MISSION: The Libraries, as an essential partner in the mission of the University of Manitoba, provides access to knowledge in support of the University's teaching, research and community service programs.

– quoted from the *UM Libraries Strategic Directions Framework*, last updated Nov. 2013:
https://staff.lib.umanitoba.ca/sites/staff.lib.umanitoba.ca/files/StratPlanFrameworkREV%20NOV%2015%202013.pdf

Hours
The library is open 62 hours a week during the academic year. This is a reduction of 6.5 hours per week and is the result of the layoff of all hourly staff in 2016. The library is open Monday to Thursday 8:30am – 8:00pm, Friday 8:30am-4:30pm, Sunday 12:00-8:00pm. The Faculty has been understanding of our budget situation and no concerns or complaints have been brought to our attention regarding the reduction in hours. The library is open Monday to Friday 8:30am-4:30pm during the summer months.

Information Access
The Libraries' OneStopSearch feature allows users to search for articles, journals, books and more in one convenient search. Specific searches within the Libraries' catalogue are also possible.

Subject Guides have been created for all programs within the Faculty of Architecture. These guides highlight significant resources and provide guidance in research strategies. These and related guides can be found on the Libraries' homepage under the "Subject Guides" tab.

Reference and Information Literacy
All library staff members provide a level of assistance in using library resources. For faculty and students requiring more in depth help they may meet with the Reference Librarian. The Libraries also provides an online chat service called AskUs.

We actively promote the partnership of librarian and professor in the classroom to inform students about the vast array of material available, how to select and evaluate that material, and how to document findings. In 2015/16 our Reference Librarian reached 495 Faculty of Architecture students in 7 in-class sessions, including EVAR 3000 and 4000. We also draw on liaison librarians with expertise in other areas such as the GIS librarian and the Indigenous Services librarian.

Circulation

All UML library units follow the same circulation policies. UM students, faculty and staff may borrow books for term loans (mid-December, mid-April, mid-August) and may renew their loans up to three times. Items signed out to one user are subject to recall by another. Journals may be borrowed for one week with the exception of the most current issues, which do not circulate. Patrons may place requests on material currently on loan, available in the stacks, or in storage. Requested items can picked be up in any unit selected by the patron.

In addition to staff at the circulation desk the library has a self-checkout unit and may soon be making available self-checkout through the MeeScan app which users load onto their cell phones.

Faculty may request that library materials be placed on Reserve for specific periods of time. They may also place personal copies on Reserve for the library to manage. Some heavily used material, such as the National Building Code, are on permanent reserve.

Fines are charged on overdue recalled and Reserve items. If an item is greatly overdue the Libraries assumes it is lost and the patron will receive a bill for the replacement of the item.

Document Delivery

Materials not held in the UML collection may be requested free of charge from other libraries and research centres around the world. The GetIT@UML link is available in most bibliographic databases allowing users to conveniently place Document Delivery requests. Requested articles are sent to the patron electronically. Requested books published within the last five years are usually simply purchased for the collection rather than borrowed from another library.

Reciprocal Borrowing

Students and faculty wishing to work in another Canadian city with a university library may request reciprocal borrowing privileges, enabling them to use the collections and services of that university library.

ii) STAFF

Administration and Personnel

Currently, the Head of the Architecture and Fine Arts Library is responsible for all activities and reports to the Associate University Librarian for Academic Engagement Services. The Head Librarian is also a member of the Faculty of Architecture Council and provides reports on library matters as required.

For the UM Libraries overall organizational chart, see the publically posted chart, last updated Sept. 2014, available here: http://www.umanitoba.ca/libraries/directors_office/images/libraries_org_chart_sep_2014.pdf

The Libraries embarked on a significant reorganization in 2016. An updated organization chart is in progress. New positions will include the Coordinator, Learning and Instruction Support who will build partnerships with academic support units to create innovate initiatives in support of faculty teaching and student learning and success. The Coordinator, Research Services and Digital Strategies will lead the planning, development, management and coordination of the Libraries' research support and services including scholarly communication, data and digital object repositories and digital preservation.

Staff Numbers

There are currently four full-time continuing staff members in the Architecture and Fine Arts Library: the Acting Head Librarian, Library Supervisor and 2 Library Assistants. The current Head Librarian is on leave and will be retiring after 25 years in 2018. The former Reference Librarian has been appointed Acting Head for the remainder of the year at which point permanent appointments will be made. The Acting Head Librarian will continue with some of reference and teaching responsibilities. A part-time librarian was hired on May 24th for six months. This will be continued for another six months when her term expires.

There are also plans to hire a part-time librarian to assist with reference, teaching and collection development until the end of the year.

All hourly staff positions were discontinued in 2016. Support staff from the Libraries' Access Services unit now assist with shelving and stack maintenance.

Professional Status

Staff have written job descriptions and regular performance reviews. Promotion criteria for academic librarians are outlined in the current collective agreement between the University of Manitoba and the University of Manitoba Faculty Association. Both the Head and the Reference Librarian have Masters of Library and Information Studies degrees and are full Librarians, the top rank. Librarians are eligible for Study Leaves and may take up to 12 research days each academic year.

Librarians receive Travel and Expense funds to attend conferences, pay for professional memberships, etc. Funds have also been received for support staff to attend development activities. All staff are encouraged to attend workshops offered by the Libraries and the Learning and Development office at the University. That being said, the Libraries' new staffing model, instituted in 2016, makes scheduling time away for development activities very difficult.

iii) FACILITIES

Space

The Architecture and Fine Arts Library consists of nearly 7,000 square feet on two levels of the J.A. Russell Building. The main entry is conveniently located off the main entry hall of Russell. The circulation room and reading room have south and west facing clerestory windows and floor to ceiling windows on the north, facing a landscaped outdoor courtyard. These courtyard windows provide ample transverse views through the courtyard to the Faculty's administrative offices and up to the Interior Design Studios and student lounge. The Library is welcoming, well used and uplifting with an abundance of indirect natural light. All windows have operable blinds. The spaces are fully air-conditioned and meet all national standards for environmental quality and humidity control. The basement has industrial portable de-humidifiers running from May to September.

The Library consists of the following spaces in Russell:

- a 1,150 square foot service, circulation and reference area (206A & 206B);
- a 1,850 square foot reading and reference room (206C & 206D);
- a 3,000 square foot area of stacks in the fully renovated basement (room 107);
- and 920 square feet of supporting office space (rooms 206E, 207 & 207A, 107B and 107C).

The elevator to access the different floors is located outside the Library within the Russell Building. The Library is not easily accessible for physically challenged individuals. Staff will provide whatever help is required for these patrons.

The collections of the Architecture/Fine Arts Library are currently housed in three locations. The main collection of books, journals, DVDs, reserve and theses is located in the John A. Russell Building. Back runs of selected periodicals, books and student projects are held in an auxiliary space in the Engineering Building next door (E3-175). Approximately 15 years ago one quarter of the collection was relocated to the Annex, a high-density storage facility for lower-use items and material in a fragile condition. The Annex is located next to the Elizabeth Dafoe Library. Items held in both the storage space in the Engineering Building and the Annex are retrieved on request, available in one to two days, except on weekends.

Equipment

The library is equipped with 12 computer workstations, one scanner, two printers (black & white and colour), a copier and a self-checkout unit. In 2013 a large LCD monitor was installed in the circulation area on which we advertise new books, faculty presentations and publications, Libraries and University events, and images from the *Winnipeg Building Index*. There are plenty of outlets for personal laptop computers.

Furnishings

The library has seating for 58 patrons, including soft-seating and computer workstations. There are four semi-private study carrels and seven open tables for individual and group study. The proximity of the library to student studio space has proved to be advantageous for study purposes and quick and easy access to the library collections and services.

The 2013 renovation of the circulation and reference area integrated a student-design idea to locate workstations and printers/copier near the library entrance. Four spots for laptops were also created.

A height-adjustable table for patrons in wheelchairs and two tables for laptop use were received in the 2016/2017 fiscal year.

LIBRARY ACTION PLAN

Extensive renovations to the exterior and interior of the Russell Building were completed in 2008. A complete renovation of the Library basement stacks was completed in 2010; and the circulation and reference area were refurbished in 2013. At this time, the action plan consists of maintaining the UM Libraries mission, integrating the new forthcoming organization structure, and ensuring adequate staffing.

LIBRARY STATISTICS REPORT

Type of Collections	# of Volumes		Notes
	2017	2014	
Books and Bound Periodicals	85,627	81,992	Includes 14,921 NA classification monographs + 8,257 Library of Congress (720-729) monographs
Periodical Subscriptions	125	138	Print subscriptions are cancelled if an electronic version is already part of the Libraries' holdings and the content is deemed equivalent
Other Serial Subscriptions			
Microfilm	65	65	Majority of the Libraries' microforms collection held in the E. Dafoe Library
Microfiche	0	0	
Slides	0	0	Collection closed in 2011 (slides not already available digitally are gradually being scanned).
Videos	333	333	
DVDs	548	469	Includes commercial films and Faculty lectures/conferences
CD-Roms	66	66	
Drawings	0	0	
Photographs	0	0	
Building Plans	48	48	

Expenditures

The chart below indicates the expenditures for Faculty of Architecture resources over the last five years. A breakdown by department and type of collection is not available. Acquisitions are firm ordered, with the addition of an approval plan for city planning purchases.

Fiscal year	Individual order expenditures	Approval plan expenditures	Gift fund expenditures	Total expenditures
2015/2016	$19,293*	$1,922*	$4,766	$25,981
2014/2015	$21,034*	$3,562*	$3,719	$28,315
2013/2014	$33,754	$3,949	$12,344	$50,047
2012/2013	$30,708	$3,473	$7,602	$41,783
2011/2012	$37,514	$2,505	$10,400	$50,419

*Expenditures in 2014/15 and 2015/16 are estimates

In 2014/2015 our allocation for individual orders was reduced by 50% making us ever more reliant on gift funds. While this reduction had an impact on the number of titles purchased for the library, all faculty and student requests were filled and new areas of interest have always been addressed. At the same time, the acquisition of large e-book packages has made thousands of books available for research and teaching. The Manitoba Association of Architects provides $1500 each year for the purchase of materials to support graduate level research in Architecture. Annual interest allocations from the Dr. Frank Allen Fund have allowed the library to subscribe to new journals and to acquire additional monographs for the collection.

The Head Librarian is responsible for all related collection development activities (e.g. ordering new materials, writing course statements) in support of the programs of the Faculty of Architecture.

3.8.2 Information Technology

For Information Technology Resources, the program must also provide the information technology infrastructure and corresponding staff support in order to effectively contribute to the delivery of the curriculum, as well as supporting activities of staff and faculty.

The APR must include:

- *A description of the hardware, software, networks and other computer resources available to students, faculty and staff;*
- *A current action plan outlining recurring levels of staff support, renewal of hardware and infrastructure and student software access, as well as anticipated modifications to current installation;*
- *Demonstrate sufficient funding to execute the action plan.*

CADLab Physical Resources – see above, section 3.7 Physical Resources.

Computer Hardware, Software, Networks and other Digital Resources

Computer Labs

CADLab maintains two computer labs. The lab in 121D Architecture 2 contains 18 student workstations and one instructor workstation, each with a 27" Apple iMac computer purchased in 2014, with the maximum available memory, storage, and graphics options available at the time. These workstations were replaced with new hardware over the summer of 2017, funded from the CADLab's operating budget. They are set up to dual boot Mac OSX and Windows, and contain the following software:

- 7-Zip (Windows only)
- Beyond 20-20 Browser (Windows only)
- Apple Creativity Apps (Mac only)
  - Garageband
  - iMovie
  - iDVD
  - Photos
- Adobe Creative Cloud (2015 Release):
- ESRI ArcGIS 10.4 (Windows only)
- ESRI City Engine 2015
- Autodesk 2016 Suite:
  - AutoCAD (version 2015 on Mac)
  - 3ds Max Design (Windows only)
  - Revit (Windows only)
- Cinema 4D R15 Studio
- FileZilla
- Google Chrome
- Google Earth Pro
- Trimble Sketchup Pro
- Internet Explorer (Windows only)
- iTunes
- iWork (Mac only)
  - Pages
  - Numbers
  - Keynote
- Microsoft Office 2016 Win / 2016 Mac
- Mozilla Firefox
- NVivo Qualitative Data Analysis (Mac Only, Windows is coming)
- Rhinoceros 3D v5
  - Grasshopper plugin (Windows only)
  - Kangaroo add-on for Grasshopper (Windows only)
  - Weaverbird add-on for Grasshopper (Windows only)
- Safari (Mac only)
- Vectorworks 2016
- VLC Media Player

The lab in 313 Russell contains 4 high-end PC workstations purchased in 2015 for special CAD projects. These computers have the same core software as the main computer lab, but with more memory, better graphics capabilities, and more CPU power. These machines were funded by the student technology fee.

Print and Scan Areas

The CADLab has 4 self-service student "Print & Scan" areas: Room 121A Architecture 2 has laser printing, two 12x18 flatbed scanners, one 18x24 flatbed scanner, and a 36" sheet fed scanner. Rooms 301 Architecture 2, 300 Russell, and 103 Education each have student laser printers and two 12x18 scanners. Additionally, Room 111A Architecture 2 has a custom-made large-format 36"x48" "scanning table". This is a magnetic table with lights and a moveable arm, which holds an SLR camera overhead and is connected to a computer that controls the camera. This scanning table is used to photograph large delicate materials, such as paintings or collages, which cannot be fed through the sheet-feeding scanner. The photographs are stitched together by the computer to provide a single large output image, similar to using a scanner.

Student laser printing costs are as follows:
- Letter, B&W - $0.05/page
- Tabloid, B&W - $0.10/page
- Letter, Colour - $0.15/page
- Tabloid, Colour - $0.30/page

Students pay with printing credits purchased in advance from the Printing Office in 124 Architecture 2.

Wide-Format Printing
CADLab operates a wide-format print shop in the Students Services office, rm. 124 Architecture 2, where students can print posters of varying length, up to 42" wide. Print Equipment includes:
- two 44" Canon iPF8300s 8-colour graphic arts printers, stocked with Bond, Satin, and Canvas media up to 42" wide (customers can also supply their own paper);
- a KIP 3000 wide format laser printer, which can produce low cost black and white prints up to 42" wide.

The pricing for wide format printing varies depending on the printer and paper type. Current pricing is listed on the CADLab website: http://umanitoba.ca/faculties/architecture/cadlab/cadlab_wide_printing.html

Equipment Lending
The CADLab print shop (124 Arch2) has a large library of equipment that can be signed out to students & staff at no charge. Most equipment was purchased via the student technology fee. The inventory includes:
- Laptops x5
- HD LCD Projectors x5
- Digital SLR Cameras x14 (Various models)
- Camera lenses & accessories (macro & wide-angle lenses, flashes, light stands, tripods, GPS kits)
- HD Video cameras (7 GoPro cameras, 3 Canon personal camcorders, 1 Sony Super 35 NXCAM)
- Assorted Audio Equipment (Digital Recorders, microphones, headphones, and speakers)
- Wacom drawing tablets
- Large assortment of small accessories, such as USB cables, card readers, mice, keyboards, video & audio cables, adapters, power cables

Staff Computers
Each newly hired full-time academic staff has an allocation of $3000 to spend on computer equipment. This money comes from the CADLab operating budget.

Each full time academic staff is allocated a further $750 per year from the CADLab in a computer spending account. This money carries over from year to year and is to be used to purchase replacement computers.

When a staff member purchases a new computer via their spending account, their previous computer must be returned to the CADLab. It will be securely erased and stored for redeployment or used for parts.

Part time instructors, RAs, TAs, and others can request a returned computer for their work. Requests must be approved by a Department Head, and include a date when the computer will be returned to CADLab.

Software
For operating systems, about 75% of Faculty members use Mac, the rest use Windows. The following software is available for staff and students:

- Microsoft Office (Outlook, Word, Excel, PowerPoint) – UM site license for all staff; Students provided with Office 365
- Adobe Creative Cloud (Acrobat, Photoshop, InDesign, etc) – Full time academic staff are provided with a subscription; Students must purchase their own license
- Autodesk Products (AutoCAD, Revit, 3dsmax, etc) – UM site license for staff; Autodesk provides free student versions
- ESRI Products (ArcGIS, City Engine) – Staff and Students can use U of M network license
- Cinema 4D – Staff can use Faculty network license; Students can get free copies via CADLab
- Vectorworks – Staff can use Faculty network license; Vendor supplies free student copies
- Rhino 3D – Staff can use Faculty network license; Students must purchase their own copy
- NVivo – Students and Staff can use Faculty network license

We have also subscribed to academic licensing programs with Microsoft and VMWare where members of the faculty (both faculty and students) can use their products free of charge. This is used to install Windows-only software on Mac computers.

Networking
Between 2014 and 2015 the wireless network in the Faculty of Architecture was massively upgraded. Many new access points were installed in the Faculty's three buildings: Russell, Arch 2, and Education. This upgrade has increased the number of devices that can be connected simultaneously. Speed has greatly improved; the average speed on the old network was 1-10Mbit/sec, now its now 60-200Mbit/sec.

FABLab Resources
- (12) Dedicated PC 3.4Ghz Quad Core i7 workstations. Software includes: Windows 10 Professional, AutoDesk Suite, Adobe Design Standard, Microsoft Office 2013, Rhinoceros 5.0 [Plugins: RhinoCAM2016, Grasshopper, Firefly, Python, KUKAprc], Meshlabs, Pix4D.

(For further FABLab resources, see above, Section 3.7, Physical Resources).

Staff Support and Action Plan for Renewal and Development of IT Resources
CADLab has two full time employees: a coordinator (Chris Leigh) and a technician (Sean Watson). CADLab also employs approximately five part-time students during the Fall and Winter terms to staff the Print Shop front desk and help with support requests.

FABLab has a full-time Manager/Coordinator, a Director (who is also an ED Instructor); and eight part-time student technicians.

Several IT Action Items have recently been completed and are noted above, including the following:
- CADLab workstations are being replaced with new hardware over the summer of 2017. This will be funded from the CADLab's Operating Budget. Such upgrades occur every three years.
- the wireless network in the Faculty's buildings was significantly upgraded in 2014-15; the University's Information Services and Technology (IST) Service Desk coordinate upgrades as performance and new technology dictates;
- printing rooms in the Architecture 2 Building (121A and 111A) have been refurbished, and stocked with a new wide-format printer (See Section 3.7);
- Additional IT initiatives are reviewed regularly in meetings of the Tech Fee committee.

Funding for IT Action Plan
In addition to Faculty baseline funding, generous support for IT – and related tool, equipment and material investments – comes from the Faculty's Technology Investment Program Fee (TIPF). This fund accrues regular contributions from students. A TIPF committee solicit and review proposals for expenditures twice a year. The TIPF committee consists of voting student representatives from all levels and disciplines; as well as facility coordinators for the CADLab, FABLab, CAST, and Workshop; the Dean and Faculty Business Officer. Terms of Reference for the Committee and public information about the Technology Fee is maintained on the Faculty website. http://umanitoba.ca/faculties/architecture/students/index.html

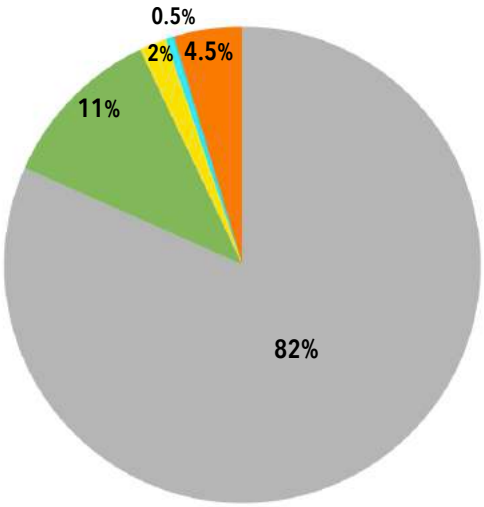
Since the last CACB Accreditation Visit, nearly $750,000 has been invested (either spent or allocated) in IT-related resources, including most recently the following:
- Robotic Arm
- Thermal Camera for Drone
- Wacom Tablets
- Objet Eden 250 (Polyjet 3D printer) and Proto3000 3D Printer
- APS and Full Frame DSLR Cameras and Canon 6D Mark II DSLR cameras
- Photo Room Set Up
- Virtual Reality Headsets
- META BEAM Laser Cutter
- Private network for FABLab
- Sawstop - Table Saw in CAST
- CAST Tool Maintenance & replacement
- Workshop Tool Replacement

Tech fee expenditures are posted online:
http://umanitoba.ca/faculties/architecture/students/586.html

3.9 Financial Resources

Programs must have access to sufficient institutional support and financial resources.
The APR must include:
- *A Program budget, endowments, scholarships, and development activities.*

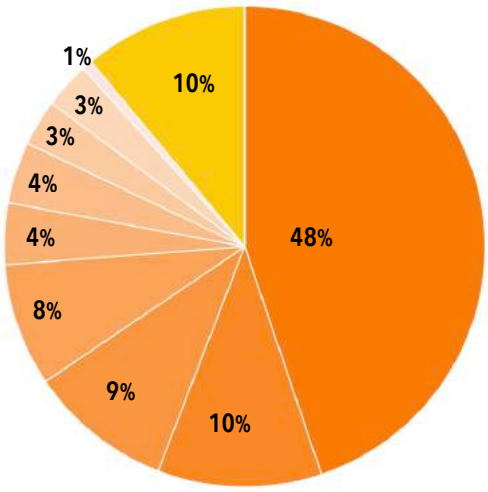
DEPARTMENT OF ARCHITECTURE
Program Operating Budget 2017-18



Academic Salaries (incl. Jan. 2018 new position)	$1,344,067	(82%)	—**$1,569,426** BASE BUDGET
Benefits	$ 185,607	(11%)	
Health & Education Levy	$ 30,753	(2%)	
Student Wages (Teaching Assistants & Graders)	$ 9,000	(0.5%)	
Non-salary Expenditure Allocation	$ **76,500**	(4.5%)	–*see separate breakdown below*
	$1,645,926 TOTAL		

See spreadsheet on next page for the Financial Data for 2013-14 to 2017-18 Fiscal Years.

Non-Salaried Expenditures 2017-18
(Projected estimates based on past precedent)



COURSE EXPENSES (Field Trip Support; Guest Lecturers; Consultants; Thesis Examiners, etc.)	$ 36,500	(48%)	—OPERATIONAL
Academic Support (Communications, Printing, etc)	$ 8,000	(10%)	—DEPARTMENT DISCRETIONARY FUNDS **$36,500**
Critics and Speakers (Design Studio Guests)	$ 7,000	(9%)	
Research/Prof.Development (Support to Faculty Members)	$ 6,000	(8%)	
Professional Fees (Support for Registered members)	$ 3,000	(4%)	
Recruitment (Publications / Communications)	$ 3,000	(4%)	
CCUSA Meeting Travel (Canadian Council of University Schools of Architecture)	$ 2,250	(3%)	
Exhibition Support (Printing, labour, etc.)	$ 2,250	(3%)	
DoA Faculty Retreats (Meals / rentals)	$ 500	(1%)	
CACB APR Support (Student assistant + alumni and professional engagement events)	$ 8,000	(10%)	
	$76,500 TOTAL		

Department of Architecture Baseline Funding 2013-14 to 2017-18 Fiscal Years

Code	Title	2013-14 Base Budget	2014-15 Base Budget	2015-16 Base Budget	2016-17 Base Budget	2017-18 Base Budget	
Academic Salaries		$1,338,898	$1,356,704	$1,246,781	$1,266,037	$1,344,067	1
Student Wages		$112	$0	$9,000	$9,000	$9,000	
Benefits		$229,097	$170,397	$167,121	$170,781	$185,607	2
Health and Education Levy		$28,694	$29,169	$28,389	$28,802	$30,753	
	Total Wages & Benefits	**$1,596,801**	**$1,556,270**	**$1,451,291**	**$1,474,620**	**$1,569,426**	
Changes to baseline funding +/-			-3%	-7%	2%	6%	
Enrolment							
M.Arch Dept of Architecture Student Enrolment (M1+M2)		47	43	52	46	57	
ED Program Student Enrolment ED3 & 4 - Arch Option		63	57	61	66	71	
ED AMP1		19	16	14	14	3	
ED AMP2		0	0	1	2	5	
Total Students Taught		**129**	**116**	**128**	**128**	**136**	projected
Baseline funding per student		**$12,378**	**$13,416**	**$11,338**	**$11,520**	**$11,540**	
Significant Changes Highlighted (all include general increases)			*resignation of Fantauzzi; baseline excluded*	*departure of Harrop, West & Subotincic*		*New faculty position acquired*	
Non-salary expenditure allocation		**$39,000**	**$80,000**	**$50,647**	**$56,000**	**$76,500**	3 4
Total Departmental funding per student		**$12,681**	**$14,106**	**$11,734**	**$11,958**	**$12,102**	

Includes adjustment for 1) new hire; 2) Other; 3-4) Accreditation expenses.

Environmental Design Program Fiscal Funding 2013-14 to 2017-18 Fiscal Years

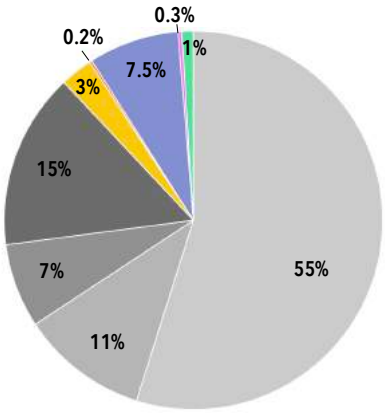
Code	Title	2013-14 Fiscal Budget	2014-15 Fiscal Budget	2015-16 Fiscal Budget	2016-17 Fiscal Budget	2017-18 Fiscal Budget	
Academic Salaries		$416,666	$467,646	$478,288	$457,250	$468,707	
Student Wages		$51,452	$32,920	$54,619	$105,180	$78,450	
Benefits		$70,806	$82,177	$81,593	$78,551	$93,017	
Health and Education Levy		$10,214	$10,755	$11,620	$11,742	$11,764	
	Total Wages & Benefits	**$549,138**	**$593,498**	**$626,120**	**$652,723**	**$651,938**	
Changes to fiscal funding +/-			8%	5%	4%	0%	
Enrolment							
University 1/Environmental Design 1		306	255	219	270	285	projected
ED Program Student Enrolment ED2		101	100	104	101	100	projected
		407	355	323	371	385	
Fiscal funding per student		**$1,349**	**$1,672**	**$1,938**	**$1,759**	**$1,693**	
Significant Changes Highlighted (all include general increases)							
Non-salary expenditure allocation		**$39,000**	**$17,000**	**$16,000**	**$16,000**	**$39,000**	
Total Department funding per student		**$1,445.06**	**$1,719.71**	**$1,987.99**	**$1,802.49**	**$1,794.64**	

FACULTY OF ARCHITECTURE
Baseline Funding

BASELINE FUNDING BY DEPARTMENT/PROGRAM

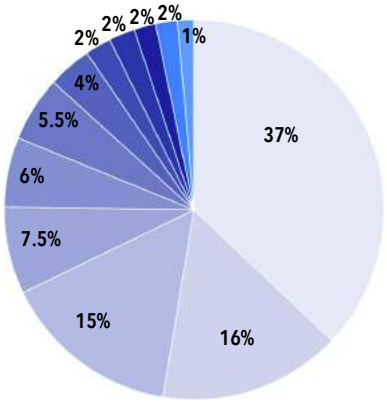
	2013-14	2014-15	2015-16	2016-17	2017-18
Faculty of Architecture	**$7,472,287**	**$7,483,900**	**$7,158,556**	**$7,060,110**	**$7,275,994**
Targeted Tuition	$344,200	$343,700	$354,800	$320,080	$329,300
(student field trips, etc)	4.47%	4.67%	4.96%	4.53%	4.52%
General Faculty	$1,601,508	$1,515,847	$1,507,746	$1,337,192	$1,352,106
(Admin staff, Partners, CADLab, etc.)	21.43%	20.25%	21.06%	18.94%	18.58%
Department of Architecture	$1,590,680	$1,623,432	$1,451,291	$1,474,620	**$1,569,426**
(incl. ED3/4 Arch/AMP Option)	21.29%	21.69%	20.27%	20.89%	21.57%
Department of City Planning	$820,048	$708,229	$721,624	$740,113	$740,113
	10.97%	9.46%	10.08%	10.48%	10.17%
Department of Interior Design	$1,163,659	$1,216,362	$1,134,849	$1,150,496	$1,150,496
(incl. ED3/4 IE Option)	15.57%	16.25%	15.85%	16.30%	15.81%
Department of Landscape Arch.	$1,403,198	$1,440,792	$1,350,619	$1,387,464	$1,484,864
(incl. ED3/4 L&U Option)	18.78%	19.25%	18.87%	19.65%	20.41%
Environmental Design Program	$558,994	$629,538	$637,627	$650,115	$650,115
(U1/ED1 & ED2)	7.48%	8.41%	8.91%	9.21%	8.94%

Faculty of Architecture – Operating Budget 2017-18



Salaries – Academic Staff	$3,937,917	(55%)	
Salaries – Admin/Support Staff	$ 780,078	(11%)	
Salaries – Sessional Instr.	$ 516,030	(7%)	
Benefits	$1,080,826	(15%)	
Student Salaries	$ 198,456	(3%)	
Student Benefits	$ 15,480	(0.2%)	
Operating Expenses	$ 554,600	(7.5%)	– See breakdown below
Travel	$ 22,500	(0.3%)	
Course Expenses	$ 70,750	(1%)	

Faculty of Architecture – Operating Expenses 2017-18 (estimates based on past precedent)



Contingency	$200,000	(37%)	
Dept. Operating Allocation	$84,000	(16%)	
CADLab	$82,000	(15%)	
Workshop/FABLab	$40,000	(7.5%)	
Telecommunications /IT/Printing	$32,000	(6%)	
Partners	$30,000	(5.5%)	
Other (Hosting, Warming Huts…	$20,100	(4%)	…Year End Exhibit, Student Prizes, etc.)
Dues/Memberships	$12,000	(2%)	
Supplies	$12,000	(2%)	
Building Renovations	$10,000	(2%)	
Research/Academic Support	$10,000	(2%)	
Academic Recruiting	$ 7,500	(1%)	

FACULTY OF ARCHITECTURE

New De-centralized Budget Model as of 2018

The University of Manitoba has operated using an incremental budget model. This incremental budget model has ensured that each year each Faculty receives an increment to their budget to account for salary increases. In addition, through an annual Strategic Resource Planning (SRP) exercise Faculties could request funds for other incremental budget amounts to support specific endeavours. For example, as a result of the 2017-18 SRP process, the Faculty of Architecture was granted more than $1 million in funding to renovate and refurbish the architecture program studios on the 300 and 400 levels of the Architecture 2 Building.

As part of a budget review process, it was recently decided that the incremental budget model did not provide sufficient flexibility for Faculties to respond effectively to changes in enrolment patterns or other factors that alter the cost of operating programs. As a consequence, one of the goals of the *Taking Our Place: Strategic Plan 2015-2020* is to "Develop a culture of continuous dialogue, collaboration, and consensus building to improve communication and inform institutional development within the context of stable or diminishing resources" – with a corresponding action to "Better link planning and resource allocation in the support of the University's academic mission and priorities."

To achieve this goal of the Strategic Plan the University has recently completed a Budget Model Redesign Initiative. The guiding principles of this budget model redesign are to:

- Align resource management, planning, and allocation with the University's mission and strategic priorities.
- Enhance collaboration between and within academic and support units.
- Incent creativity, innovation and the pursuit of revenue opportunities to position the University for a strong, sustainable future.
- Promote fiscal understanding, responsibility, and accountability throughout the University.
- Be straightforward and transparent.

The result is that in October 2016 the University announced it would adopt a new more decentralized activity based budget model in which revenues flow first to Faculties and are then distributed to support the various University operations. A primary advantage is that this model will move budget decisions that directly affect Faculties from Central Administrative units to the Faculties themselves, and thereby allow Faculties to be more responsive to program requirements.

The new budget model will be implemented starting in the 2018-19 fiscal year (starting April 1, 2018). In fiscal year 2018-19 all Faculties will receive the same budget as would have been the case under the previous model. The exact impact on the Faculty budget in future years is still to be determined, however it is expected that this new budget model will be beneficial for the Faculty of Architecture, as it will better reflect the budget impact of students in the various levels of Faculty programs (U1/ED1 preliminary year, ED2 foundation studies, ED3/4 option years, Masters students and Ph.D. students). Additionally, it is expected the new more decentralized activity based budget will provide the Faculty of Architecture greater opportunities to pursue activities beyond those of the baseline academic programs.

Information about the development and introduction of the new budget model is available at:
http://umanitoba.ca/admin/budgetplanning/budgetmodelredesign.html

ENDOWMENTS

The Faculty of Architecture Endowment Fund

The Faculty of Architecture Endowment Fund accrues generous contributions by students, as well as alumni, staff and friends. The fund is administered by an Endowment Fund Committee, which is comprised of 4 students, 2 academics, 2 professionals, 2 alumni, and 1 friend of the Faculty (someone having cultural ties and/or business relations with the Faculty, recommended by the committee). Terms of Reference are posted online: http://umanitoba.ca/faculties/architecture/facstaff/EndowmentFund.html

The Endowment Fund is designed to advance the academic enrichment and research goals of the entire Faculty of Architecture. Grants may support conferences, speakers, special events, the acquisition of library material and special equipment, as well as encourage research and creative work. Each year the committee reviews applications and recommends distribution of funds based on the following key criteria:

- involves direct student inputs, leadership, and influence to peers;
- benefits a target number of constituent members or the larger community;
- offers unique, inventive and creative stimulation for the Faculty, and provide lasting value;
- enhances the Faculty's positive presence within the design community and the larger community;
- proponents are capability of carrying out the proposal, and have sought alternate sources of funding.

Endowment Fund Grant Recipients for the last three years (note the increase in funds each year):

2017 GRANT RECIPIENTS

Grant Recipient	Short Title of Project	Amt Awarded
Student Emily Sinclair	Freshbrew	300
Student Heather Schnaider	LASA Student Night & MALA AGM	1,000
Student Osayuwame Ize-Iyamu	Mapping of Faculty Students	650
M.Arch Student Aaron Pollock	MAA Meet & Greet	1,000
M.Arch Student Michael Butterworth	10x20x20	1,000
M.Arch Student Michael Butterworth	Gingerbread Competition	800
Prof. Richard Perron	Cultural Events 2017/2018	20,000
Prof. Richard Perron	Food for Thought 2017/2018	4,500
Susan Algie, Dir. Winnipeg Arch.Foundation	Architecture+Design Film Festival	1,500
Student Conor Smith	City Planning Quiz Night	1,000
Prof. Carlos Rueda	CAST Researcher in Residence	7,500
Brandy O'Reilly, FAUM Communications Office	Year-End Exhibition	5,000
Instructor Jae-Sung Chon	Arch2 Gallery	4,000
Prof. Lisa Landrum & CAST Coor'd. Liane Veness	Atmosphere 10: Fabrications	17,500
Student Erns Wall	IDAS Meet & Greet	800
ED-Arch Students Alena Rieger/Ally Pereira-Edwards	Warehouse 26	23,800
Student Simone Sucharov-Benarroch	Ditchball 40	1,000
		$91,350 Total

2016 GRANT RECIPIENTS

Grant Recipient	Short Title of Project	Amt Awarded
M.Arch Student Mamie Griffith	Thunderbird House Community Garden	3,500
Student Amanda Austin	Warehouse Journal Volume 25	20,000
M.Arch Student Taylor Clackson	UMAAS Gingerbread Competition	800
M.Arch Student Taylor Clackson	10X10X20	800
Student Hanqing Zhao	Nagashi-Somen (flowing noodle)	300
ED-Arch Student George Vincent	Ditchball 40	1,500
Brandy O'Reilly, FAUM Partners Office	Year-End Exhibition	4,000
Prof. Richard Perron	Cultural Events Lecture Series	18,500
Prof. Richard Perron	Food for Thought	4,500
Instructor Jae-Sung Chon	Architecture Gallery	4,000
Prof. Carlos Rueda	CAST Researcher in Residence	3,500
Prof. Lancelot Coar	Rainbow Community Garden	3,500
Prof. Alyssa Schwann	Atmosphere 9	15,000
Student Shannon Loewen	Modern Era Designers: Phase 3	3,000
		$82,900 Total

2015 GRANT RECIPIENTS

Grant Recipient	Short Title of Project	Amt Awarded
Prof. Alyssa Schwann	FOA Evening Lecture Series	18,400
Prof. Alyssa Schwann	Food for Thought	4,000
Sessional Neil Minuk	Gallery Exhibitions	6,000
ED-Arch Student Liane Lanzar	Warehouse Journal 24	17,000
Prof. Janice Barry	Indigenous Planning Studio	1,200
ED-Arch Student Branton Leskiw	Cool Gardens 2015	500
Prof. David van Vliet	Atmosphere 8	15,000
Brandy O'Reilly, FAUM Partners Office	Year-End Exhibition	3,000
M.Arch Student Zoé Lebel	UMAAS Gingerbread Competition	550
M.Arch Student Zoé Lebel	MAA Meet & Greet	600
M.Arch Student Zoé Lebel	10X10X20	1,000
Student Scott Irvine	Freshbrew	600
Student Shannon Loewen	Modern Era Designers: Phase Two	2,000
M.Arch Student Jaya Beange	Women in Architecture	500
M.Arch Student Jaya Beange	Creative Winnipeg	500
M.Arch Student Stephen Oberlin	Aerial Imaging and Mapping Conference	1,150
ED-Arch Student Kyla Crawford	Ditchball	1,500
		$73,500 Total

STUDENT SCHOLARSHIPS, BURSARIES & AWARDS

The Faculty of Architecture is continually striving to provide additional funding for students. The best form of assistance is that provided through scholarships, fellowships, bursaries and teaching assistantships. Teaching assistantship positions, having course-specific qualifications, are openly advertised through ReachUM. Scholarships and fellowships are provided on merit, based on academic competition. Bursaries are awarded confidentially on the basis of financial need and in most cases a minimum academic standing.

Total Amount of **Scholarships** available to Architecture Students in the Graduate Program: **$97,075**
Total Amount of **Bursaries** available to Architecture Students in the Graduate Program: **$48,265**

The Faculty of Architecture is developing new student support opportunities on an ongoing basis. Two new awards for Master of Architecture students are forthcoming: 1/ The Barbara Humphreys Memorial Scholarship in Architecture, with an initial gift of $250,000, will generate a fellowship of about $10,000 per year beginning in 2018-19; 2/ The NumberTEN Scholarship in Architecture, with gifts totaling $25,000 by 2020, will recognize student work with a Northern Canada and/or Indigenous focus. This scholarship will become available in 2019-20.

Scholarships, Bursaries and Awards currently available for graduate students in the architecture program, as well as students in the undergraduate Environmental Design Program are listed on the Faculty of Architecture Awards Database, http://umanitoba.ca/faculties/architecture/award/awardsdatabase.html, and listed below:

Department of Architecture

BASED ON STUDENT APPLICATIONS:

Scholarships	Application Deadline	Approx. Value
Allan Waisman Aboriginal Architecture Scholarship - Faculty Wide	Sept. 28, 2017	$ 6,000
Raymond S.C. Wan Architect Inc. Recruitment Scholarship	Oct. 3, 2017	$10,000
Bill Allen Scholarship in Architecture (Research)	Jan. 12, 2018	$ 6,500
Bill Allen Scholarship in Architecture (Travel)	Jan. 12, 2018	$ 6,500
Canadian Masonry Research Institute Scholarship - Faculty Wide	Jan. 12, 2018	$ 2,100
Fridrik Kristjansson Scholarship in Architecture - Faculty Wide	Jan. 12, 2018	$ 6,500
Maxwell Starkman Scholarship in Architecture - Faculty Wide	Jan. 12, 2018	$12,500
G. Clarence Elliot Fellowship	Mar. 15, 2018	$ 3,500

Bursaries	Application Deadline	Approx. Value
Donald L. Dunklee Award in Architecture	Dec. 1, 2017	$ 2,000
Faculty of Architecture Emergency Bursary - Faculty Wide	Oct. 6, 2017	$ 400
Keith B. and Edith Jean Davison Bursary	Oct. 6, 2017	$ 5,000min
Shanski Bursary in Architecture	October 6, 2017	$ 1,000

Department of Architecture

NO APPLICATION REQUIRED (Based on Academic Merit):

Scholarships

Cibinel Design Achievement Award	$ 5,500
Faculty of Architecture Endowed Scholarship	$ 1,000
Harry Seidler and John Russell Recruitment Award in Architecture	$11,250
Leonard C. Klingbell Scholarship in Architecture	$ 6,000
Manitoba Association of Architects - Architecture Recruitment Award	$ 5,000
Mel P. Michener Architectural Fellowship	$ 3,700
Norman Ripley Memorial Scholarship	$ 375
Northern Sky Architecture Award for Environmental Stewardship	$ 1,000
Price Industries Limited Faculty of Architecture Recruitment Award (Previous name: E.H. Price Graduate Award)	$ 2,000
Randy Gilbart Memorial Scholarship for Excellence in Architectural Design	$ 2,900
Stantec Architectural and Interior Design Fellowships	$ 2,500
William E. Sheets Scholarship in Architecture	$20,000

Bursaries

Edwin (Ted) Raines Bursary (1,200)
Étienne Gaboury Bursary in Architecture (635)
Faculty of Architecture Endowed Bursary (530)
Frank and Marjorie Silver Bursary (2,700)
Isadore Coop Bursary in Architecture (4,500)
John A. Russell Alumni Bursaries (10,900)
Lount Bursary for Indigenous Students (19,400)

Prizes

Alpha Rho Chi Medal
American Institute of Architects Certificate of Merit
American Institute of Architects Medal
ARCC/King Student Medal
Le Prix Jacques Collin en Architecture
Manitoba Association of Architects Medal
R.A.I.C. Student Medal

Environmental Design Program

BASED ON STUDENT APPLICATIONS:

Scholarships	Application Deadline	Approx. Value
Terry Cristall Scholarship in Environmental Design	October 3, 2017	$550
James Palmer Lewis Student Award	October 3, 2017	$1,500

Bursaries	Application Deadline	Approx. Value
Peggy Jackson Seed Bursary in Architecture	October 26, 2017	$1000

NO APPLICATION REQUIRED (Based on Academic Merit):

Scholarships

Arthur Buckwell Memorial Scholarship
Building Energy Management Manitoba (BEMM) Scholarship in Architecture & Engineering
Corrigill Scholarship
Dan Muir Memorial Award
Donald W. Beattie Architectural Scholarship
Dr. A.W. Undergraduate Scholarships
Price Industries Limited Undergraduate Award
Faculty of Architecture Design Award
Isbister Scholarship in Environmental Design
James Palmer Lewis Student Scholarship
Kasian Scholarship for Architecture & Design Excellence
Michael Cox Scholarship
R.A.C. Memorial Scholarship
Students' Architectural Society Award
William & Olive Humphrys Scholarship for Architecture

Bursaries

Barbara C. Poole Bursary (Interior Design)
J.M. Gilchrist Bursary in Architecture (485)
James Palmer Lewis Student Bursary (1,500)
Neil Kay Brown Memorial Bursary (480)
Paul Grant Bursary in Architecture (2,380)
Richard Jackson Memorial Bursary (829)
Sari Golden Memorial Bursary
Victoria C. Hull Memorial Award (1,090)
William E. Sheets Bursary in Architecture
Winston Leathers Award

Prizes

Pinky Prize | University Gold Medal

University of Manitoba Graduate Fellowships (UMGF)

These fellowships are awarded annually to graduate students who have demonstrated academic ability and accomplishments. UMGF's are for students with a minimum GPA of 3.75 in each of the last two years of study. They are valued for a 12-month period at $18,000 for PhD students, or $14,000 for Master's students. The University awards units a certain number of UMGFs based on a formal, which takes into consideration the number of students in a program, among other factors. The number of UMGF's available to M.Arch students in the last 3 years: 2017-18: 0;
2016-17: 6 (4 were elevated to MGS, see below);
2015-16: 0 (3 earned MGS);
2014-15: 6
– http://umanitoba.ca/faculties/graduate_studies/funding/585.html

Manitoba Graduate Scholarship (MGS)

The Government of Manitoba has provided funds to ensure that Manitoba's best students continue education at home, to foster research that leads to economic growth and to attract excellent students to study in Manitoba. Awards are valued at $15,000/ year for two years. The University of Manitoba Graduate Fellowship (UMGF) competition is used to determine the recipients of the MGS.
– http://umanitoba.ca/faculties/graduate_studies/funding/605.html

Social Sciences and Humanities Research Council of Canada (SSHRC)

Graduate students in Architecture holding UMGFs are required to apply for SSHRC Canada Graduate Scholarships, which provide $17,500/year for the 2-year M.Arch program. Applications are vetted through the University of Manitoba's FGS SSHRC subcommittee. Recommended applicants are then reviewed at the national level. Awards are based on academic standing and research. SSHRC awards to architecture students in the last 3 years, include: 2017-18: 2 students
2016-17: 1 student
2015-16: 3 students
2014-15: 2 students
– http://umanitoba.ca/faculties/graduate_studies/funding/index.html#internal

Faculty of Graduate Studies Awards Database

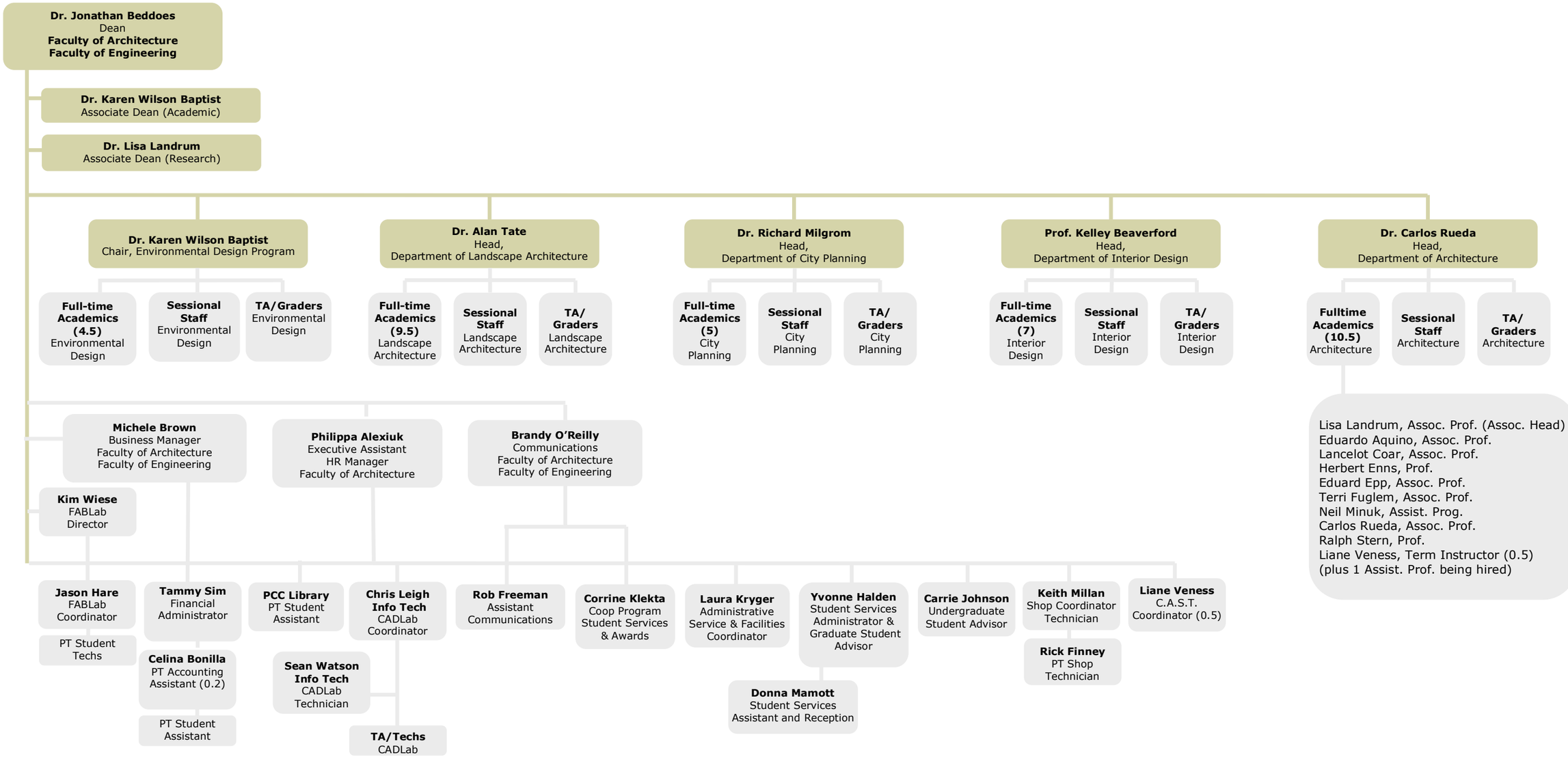
University-wide opportunities are made available to students through the Faculty of Graduate Studies Awards Database http://webapps.cc.umanitoba.ca/gradawards/

DEVELOPMENT ACTIVITIES

Many development opportunities are itemized above in Section 3.6: Human Resource Development. An overview is provided here:

- Department of Architecture Discretionary fund for research and professional licensure;
- Faculty Professional Development Allowance (PDA);
- Faculty Studio Enrichment Fund;
- Partners Program support;
- Recognition Programs: Carl Nelson Teaching Award (Faculty); FGS Excellence in Graduate Student Mentoring Award, Faculty of Graduate Studies; Outstanding Teacher Recognition Award;
- UM Teaching and Learning Enhancement Fund; etc.

3.10 Administrative Structure



3.10 Administrative Structure

The program must be part of, or be, an institution accredited by a recognized accrediting agency for higher education. The program must have a degree of autonomy that is both comparable to that afforded to the other relevant professional programs in the institution and sufficient to assure conformance with all the conditions for accreditation.

The APR must include:

- *A description of the program's administrative structure;*
- *A comparison of this structure with those of other professional programs in the institution; and*
- *A list of any other programs offered in a multi-discipline unit.*

THE ARCHITECTURE PROGRAM ADMINISTRATIVE STRUCTURE

This section elaborates on the Program Administration introduced above in 3.5.3 HR: Administration.

As indicated in the organization chart on the preceding page, the architecture program is administered by the Department of Architecture, which is one of four Departments in the Faculty of Architecture. The other Departments in the Faculty are the Department of Landscape Architecture; the Department of Interior Design; and the Department of City Planning. Each Department independently delivers a professionally accredited program leading to Master's degree: an M.Arch, M.L.A., M.I.D., and M.C.P., respectively. The Department of Interior Design also offers a post-professional M.I.D. Each graduate program is roughly the same size (47-54 students), with Interior Design slightly smaller (37), using 2016-17 figures. Each of the four Departments is led by a Department Head and managed via a Department Council, consisting of all full-time academic members within a Department, plus student representatives. Department Heads are responsible to the Faculty of Architecture Dean, and the Faculty of Graduate Studies (FGS).

The Departments collaboratively deliver and administer a four-year undergraduate Environmental Design Program, resulting in a B.Env.D. Whereas the graduate programs together total 192 students, the undergraduate ED Program serves 318 students (2016-17 figures). The first two years of this ED Program (ED1/U1 and ED2) are multidisciplinary "foundation studies"; the third and fourth years (ED3 & ED4) are "intermediate studies" in which students competitively elect into disciplinary specific options: Architecture, Interior Environments, or Landscape + Urbanism. The ED Program is led by an Environmental Design Program Chair in collaboration with the Department Heads and other members of the Environmental Design Program Advisory Committee (EDPAC). The ED Program Chair oversees curriculum for the multidisciplinary foundation years (ED1 & ED2); the Department Head oversees curriculum in the disciplinary specific option years (ED3 & ED4). EDPAC reports to Faculty Council, the governing body of the Faculty, consisting of all full-time academic members of the Faculty, plus student and support staff representatives.

The Faculty of Architecture additionally offers an interdisciplinary Ph.D. Program in Design and Planning, managed by a Doctoral Studies Committee, chaired by the Faculty's Associate Dean Research.

FACULTY OF ARCHITECTURE PROGRAMS:

LEVEL	PROGRAM / DEGREE	GOVERNING BODY
Undergraduate	Environmental Design (B.Env.D.)	EDPAC / Faculty Council (FC)
Graduate	Architecture (M.Arch)	Department Council / FC / FGS
Graduate	Landscape Architecture (M.L.A.)	Department Council / FC / FGS
Graduate	Interior Design (M.I.D.)	Department Council / FC / FGS
Graduate	City Planning (M.C.P.)	Department Council / FC / FGS
Graduate	Ph.D. in Design and Planning (Ph.D.)	Doctoral Studies Committee / FC / FGS

Further information on each administrative entity – EDPAC, Department Council, Faculty Council, the Faculty of Graduate Studies (FGS), and the University of Manitoba – is provided below.

EDPAC – Environmental Design Program Advisory Committee

EDPAC has responsibility for developing and recommending to Faculty Council curriculum improvements to the Bachelor of Environmental Design degree program. EDPAC committee members bring to EDPAC recommendations for curriculum improvements from their respective constituencies. Recommendations are also coordinated through the Deans and Heads Committee. EDPAC Membership:

- Chair of the Committee (votes only in event of a tie): Associate Dean - Academic, unless the Associate Dean-Academic is the same person serving as the Environmental Design Program Chair, in which case the Dean of the Faculty of Architecture will Chair the Committee;
- Environmental Design Program Chair;
- One member from the faculty members appointed to teach in the ED program, elected by those faculty members;
- Department Heads (or designates) of Architecture, Interior Design, Landscape Architecture & City Planning;
- Senior Stick of Environmental Design program (or designate);
- Dean, Faculty of Architecture (ex officio, non-voting member).

Quorum is the Committee Chair, ED Program Chair and all Department Heads (or designates).

– Terms of Reference approved at Faculty Council, April 5, 2016 | http://umanitoba.ca/faculties/architecture/media/DO_ToR_EDPAC_April52016.pdf

Chair, Environmental Design Program

The Environmental Design Program Chair is appointed by the Dean and is delegated with the following responsibilities:

- Be responsible for managing the overall undergraduate ED program and coordinating its curriculum development with Department Heads;
- Collaborate with Department Heads in all aspects of shared curriculum;
- Serve on the Environmental Design Program Advisory Committee (EDPAC), according to its terms of reference, and report to Faculty Council;
- Prepare and submit to the appropriate authority all announcements of the ED Program to be included in the University Calendar;
- Be responsible for recruiting and evaluating sessional appointments, and the assignment of duties to academic staff appointed to the ED Program (ED1 and ED2);
- Be a member ex-officio of all committees of the ED Program;
- Recommend to the Dean the appointment, change of service, discipline and dismissal of the members of the staff of the ED Program;
- Present each year to the Dean and Faculty Council a report on the ED Program;
- Perform other such duties and services as may be necessary and appropriate to the administration of the Undergraduate ED Program.

DEPARTMENT

An Academic Department is an organizational sub-division of the University established by the Board of Governors, normally on the recommendation of the Senate, for the purpose of conducting teaching and research, scholarship and creative work in a specified field or group of related fields of study and outreach. A Department may be a sub-division of a Faculty, School or Professional College.

Departments are led by Heads, who report to Deans or Directors. The Head is the senior academic and administrative officer of the Department. Heads are responsible for general supervision over and direction of the work of the department.

The academic affairs of a Department are governed by a Department Council that is established by Faculty, School, or Professional College bylaw. Department Council's powers to act and to recommend on matters are conferred by the Faculty, School or Professional College Council, according to a general guideline approved by Senate. Prior to approval by the Faculty Council, all Department Council bylaws shall be reviewed by the Senate Committee on Rules and Procedures.

– http://umanitoba.ca/governance/media/Definitions_of_Academic_Units_Policy_-_2014_11_25_RF.pdf
– (see also the UM governing doc. on Departments) http://umanitoba.ca/admin/governance/governing_documents/academic/341.html

Department Heads
The responsibilities of Heads of Departments are summarized in a University of Manitoba Governing Document policy: http://umanitoba.ca/admin/governance/governing_documents/officers/223.html

The Head of each Department shall be the chief executive officer of the Department. The Head shall be responsible to the Dean in the administration of the Department. The Head of Department shall:

- Be the channel of official communication of the Department;
- Have the right to call and preside at all meetings of the Department Council, subject to the right of the Dean and Director of the Faculty/School or the President to preside at any such meeting;
- Be a member ex-officio of all committees of the Department Council;
- Recommend to the Dean or Director the appointment, promotion, tenure, change of service, discipline, retirement, and dismissal, of the members of the staff of the Department;
- Be responsible for the assignment of duties to the members of the Department;
- Prepare and submit to the appropriate authority all announcements of the Department to be included in the calendar or calendars of the University;
- Present each year to the Dean or Director a report on the work of the Department during the preceding year, for transmission to the President;
- Present to the Dean or Director, every year when required, an estimate of expenditures and receipts of the Department, for the next ensuing fiscal year;
- Do such other things, exercise such other powers, and perform such other duties and services as may from time to time be properly prescribed or requested of the Head by the appropriate authority.

The Head may delegate any of the powers, duties and functions of the Head as the Head sees fit and prescribe conditions governing the exercise of any delegated power, duty and function, including the power of sub-delegation.

The Department of Architecture
In addition to a Head (Dr. Carlos Rueda), the Department of Architecture at this time also has an **Associate Head** (Dr. Lisa Landrum), appointed for a period of two years (2016-2018) to lead the preparation of the 2017 Architecture Program Report for CACB, to be responsible for schedules and the review of other Departmental regulations, and to generally assist with the transition of leadership, since a new Head from outside the University was appointed in September 2015.

Department of Architecture Council
Department Council is the governing body of the Department. Each Council has bylaws. The Department of Architecture Council Bylaws were last refined and ratified in June 2013:

Membership includes, voting members:
- the President of the University;
- the Vice President (Academic) and Provost;
- the Dean of the Faculty;
- the Head of the Department;
- all members of the academic staff of the department holding appointments as professors, associate professors, assistant professors, lecturers, senior instructors, instructors 1 and instructors 2;
- one (1) full time student from each of the Master of Architecture program years M1 and M2, one (1) full time student from the AMP program years AMP1 or AMP2, and one (1) full time student from the Architecture Option years ED3 or ED4 of the Environmental Design program.

Non- voting members shall include:
- all adjunct professors of the Department;
- all other persons who teach a course in the Department and who are not noted above;
- all Professors Emeriti and Senior Scholars in the Department;
- one assessor from each other Department in the Faculty, as elected or appointed by that Department;
- the Graduate Student Adviser, or delegate, as assessor.

The role of the Department of Architecture Council is:
- to advise the Head on all matters submitted to it by the Head;
- to recommend to the Head or, through the Head, to any appropriate officer or body in the University, such actions as it may deem desirable;
- to carry out such duties and responsibilities as may be assigned to it by Faculty of Architecture Council.

Powers To Act – In addition to such power as may be granted from time to time by the Faculty of Architecture Council, the Department of Architecture Council shall have the power:
- to provide for the regulation and conduct of its meetings;
- to appoint such committees as it shall deem necessary and to confer on them powers to act for it.

Powers To Recommend – The Department of Architecture Council shall have power to make recommendations to the Head, or through the Head to appropriate persons or bodies, with respect to any matters of proper concern to the Council, and, notwithstanding the generality of the foregoing, may make recommendations concerning:
- curriculum and matters pertaining to instruction;
- conditions of admission, entrance and standing of students and all matters related thereto;
- the conditions on which candidates shall be received for examination and the conduct and results of examinations in the department;
- the allocation of resources;
- long range and short range planning for the department;
- the appointment of Professors Emeriti and Adjunct Professors;
- scholarships and other awards.

Meetings
- The Department Council shall hold at least two meetings during each academic year.
- Meetings of the Department Council shall be called by the Head, or upon written request to the head by three voting members of the Council.
- The agenda for regular meetings shall be circulated at least four working (4) days in advance of regular meetings. The agenda for special meetings shall be circulated with the notice.

Full Dept. Council Bylaws are posted online: http://umanitoba.ca/faculties/architecture/media/DoA_Bylaws_June_11_2013_FINAL.pdf

Department of Architecture Committees

Department Council has a number of Standing Committees, typically consisting of 2-4 full time academic staff, to manage particular areas of program administration: the Thesis Committee; Admissions Committee (Graduate and ED/AMP); and Student Awards. The MAA-DoA Strategic Committee helps foster communication and initiatives with the professional community; the Publications Committee creates and coordinates initiatives to disseminate Departmental research and teaching. Other ad-hoc committees are formed, as necessary, to discuss and strategize improvements to curriculum areas, including Technology, History & Theory, Comprehensive Design, Digital Design, etc. Committee members are either elected or volunteer to serve. Department Council approves appointments. (For distribution of committee duties within the Department, see above, section 3.5.3 HR: Administration).

FACULTY

A Faculty is the major organizational unit of the University, established by the Board of Governors, normally on the recommendation of Senate. Faculties are responsible for the development and offering of academic programs at the undergraduate and graduate levels (under the auspices of the Faculty of Graduate Studies), scholarship, research and creative work in fields and disciplines represented within the Faculty and for community service and outreach.

The head of a Faculty is a Dean, who reports to the Vice-President (Academic) and Provost and is the senior academic and administrative officer of the Faculty. Deans are responsible for general supervision over and direction of the work of the Faculty, including faculty, staff, students and budgets.

The academic affairs of a Faculty are governed by a Faculty Council that is established by Senate bylaw. Faculty Councils' powers to act and to recommend on matters are conferred by Senate.

Faculty Councils elect members to Senate and the Dean of a Faculty is a member of Senate, ex officio.

Academic staff are appointed as members of a Faculty and may also be members of Schools, Professional Colleges or Departments as appropriate.

Faculties may, as the Board of Governors determines, include Schools, Professional Colleges, Departments or Centres/Institutes, the heads of which shall report to the Dean. The academic affairs of such Schools, Professional Colleges, Departments or Centres/Institutes shall be governed by Councils established by the Faculty Council, in accordance with the powers of the Faculty Council and the regulations of Senate.

– http://umanitoba.ca/governance/media/Definitions_of_Academic_Units_Policy_-_2014_11_25_RF.pdf

Faculty Dean

The Dean shall be responsible to the University President in the administration of the Faculty. The Dean of a Faculty shall:

- exercise general supervision and direction over the Faculty, including its staff and the students registered in the Faculty;
- be the channel of official communication to and from the Faculty;
- have the right to call and chair all meetings of the Faculty Council and of department councils within the Faculty, subject to the right of the President to preside at any such meeting;
- have the right to call and chair all meetings of the Executive Committee, if any, of the Faculty Council;
- be a member ex-officio of all Department Councils within the Faculty and of all committees of the Faculty Council;
- have access to all records of the Faculty;
- deal appropriately with every complaint pertaining to the Faculty lodged with the Dean by any person;
- be responsible for the supervision, subject to the regulations and rulings of the Faculty Council and the Senate, of the program of studies for every student registered in the Faculty;
- recommend to the President the appointment, promotion, tenure, change of service, discipline, retirement, and dismissal, of the members of the staff of the Faculty;
- recommend to the President or to the Senate, or to both, any project which the Dean thinks advantageous to the Faculty;
- prepare and submit to the proper officer of the University all announcements of the Faculty to be included in the calendar or calendars of the University;
- prepare an annual budget for the Faculty with such assistance from the members of the staff or committees as the Dean may call for, and submit the budget to the President, or to such person, or persons, as the President may designate;
- present to the President at the end of each academic year a written report on the work of the Faculty during the preceding year, as well as the state and needs of the Faculty; and
- do such other things, exercise such other powers, and perform such other duties and services
- as may from time to time be properly prescribed or requested of the Dean by the appropriate authority.

The Dean may delegate any of the powers, duties and functions of the Dean as the Dean sees fit and prescribe conditions governing the exercise of any delegated power, duty and function, including the power of sub-delegation.

These responsibilities of Faculty Deans are cited from a University of Manitoba policy statement at:
http://umanitoba.ca/admin/governance/governing_documents/officers/220.html

The Faculty of Architecture currently has two appointed Associate Deans with delegated powers, duties, and functions in the following areas:

Associate Dean (Academic):
- Take a leadership role in the development and review of the faculty's undergraduate degree programs, in consultation with Department Heads;
- Represent the faculty on appropriate University committees;
- Advise the Dean's office of opportunities to enhance teaching and learning;
- Assist the Dean and Department Heads as required in the management of human resource issues, including performance and staff grievances;
- Develop, implement and oversee strategies to promote staff development in teaching and leaning;
- Develop risk management policies and procedures in relation to teaching and learning;
- Develop and implement strategies concerning academic integrity across the faculty;
- Develop, implement and oversee strategies to enhance student experience;
- Collaborate with student services and academic advisors to establish appropriate procedures to ensure efficient and professional management of student matters;
- Oversee academic administration matters, including:
    - academic standing;
    - academic dishonesty; and academic integrity programming;
    - student retention;
    - undergraduate student awards and recognition;
    - undergraduate admission and recruitment, with Department Heads;
    - undergraduate student facilities and space (including safety & health);
    - international studies and exchanges;
    - cooperative work programs, in consultation with the Associate Dean (Research)
    - course planning and programs (CPAC);
    - equity and diversity;

Associate Dean (Research)
- Take a leadership role in developing and supporting strategic research goals of the Faculty;
- Facilitate growth of research activity in the Faculty;
- Represent the Faculty to the Vice-President Research Office, associated meetings, and other University committees and external entities, as required;
- Advise the Dean's Office on research initiatives and opportunities;
- Chair the Faculty's Research Committee, and report to Faculty Council;
- Provide Faculty Council with strategic advice and information on research opportunities;
- Work with the Dean's Office and Faculty Partners Program to initiate and coordinate research meetings, faculty research seminars and presentations related to scholarship funding and application processes;
- Advise on the development of research infrastructure;
- Serve on the Faculty's C.A.S.T. Committee;
- Chair the Faculty's Ph.D. Program in Design and Planning, and report to Faculty Council;
- Serve as Academic Liaison for the Faculty's Cooperative Education/Integrated Work Program, in consultation with the Associate Dean (Academic).

Deans and Heads – Faculty of Architecture

Jonathan Beddoes, Ph.D., P.Eng.
Dean, Faculty of Architecture
Professor and Dean of Engineering
Bio: http://umanitoba.ca/faculties/architecture/facstaff/faclist/Beddoes_Jonathan.html

Karen Wilson Baptist, Ph.D.
Associate Dean (Academic)
Chair, Environmental Design Program
Associate Professor, Department of Landscape Architecture
Bio: http://umanitoba.ca/faculties/architecture/facstaff/faclist/wilson_baptist.html

Lisa Landrum, B.Arch., M.ArchII, Ph.D., MAA, MRAIC, RA (NY)
Associate Dean (Research)
Associate Head, Department of Architecture
Associate Professor, Department of Architecture
Bio: http://umanitoba.ca/faculties/architecture/facstaff/faclist/landruml.html

Carlos Rueda, B.Arch., M.ArchII, Ph.D., Architect (COPNIA, Colombia)
Head, Department of Architecture
Associate Professor, Department of Architecture
Bio: http://umanitoba.ca/faculties/architecture/facstaff/faclist/CarlosRueda.html

Kelley Beaverford, I.D.Dip., B.I.D., M.Arch.
Head, Department of Interior Design
Associate Professor, Department of Interior Design
Bio: http://umanitoba.ca/faculties/architecture/facstaff/faclist/beaverford.html

Richard Milgrom, B.E.S., M.Arch., Ph.D., MCIP, MAA
Head, Department of City Planning
Associate Professor, Department of City Planning
Bio: http://umanitoba.ca/faculties/architecture/facstaff/faclist/milgrom.html

Alan Tate, B.A.(Hons), Dip.L.D. (Manchester), Ph.D. (Edinburgh), FCSLA, PPLI
Head, Department of Landscape Architecture
Professor, Department of Landscape Architecture
Bio: http://umanitoba.ca/faculties/architecture/facstaff/faclist/tate.html

Operational management of the Faculty of Architecture is through the Deans and Heads Committee, Chaired by the Dean. The Deans and Heads Committee meets once every second week from September through to the end of June. Additional staff members are frequently invited to meetings of the Deans and Heads Committee as relevant agenda items arise.

Note: At this time Dr. Jonathan Beddoes is Dean of both the Faculty of Engineering and the Faculty of Architecture. Dr. Beddoes has been Dean of Engineering since 2011. Since September 1, 2015 he held the position of Interim Dean to the Faculty of Architecture. On March 22, 2017, following an internal search – which was announced on Sept. 6, 2016 and followed all University procedures for recruitment and hiring – Dr. Beddoes was appointed Dean of the Faculty of Architecture until June 30, 2021. The two Deanships are concurrent appointments. There is no plan within the Faculty of Architecture or within University of Manitoba to merge the Faculty of Architecture with any other entity at the University. The Faculty of Architecture will continue to operate as an autonomous Faculty, with its own Faculty Council.

Faculty of Architecture Council
Faculty Council is the governing body for the Faculty, responsible for providing overall direction and policies for the Faculty. Faculty Council is composed of the Dean or designate, as Chair; all full-time faculty members; all part-time academic staff on annual appointment; elected representatives of student councils; two elected representatives of administrative staff, and the Faculty Librarian. Faculty Council meets at least two times per term, more typically three-four times per term.

Faculty Council follows bylaws and standing rules, outlining membership, limitations on participation, meeting procedures, and rules of order.

Faculty Council has three standing committees approved by University Senate:
- Faculty of Architecture Executive Committee,
- Department Council General Bylaws
- Rules, Regulations Student Appeals & Discipline Committee

Faculty Council has a number of Standing Committees approved by Faculty Council, each comprised of elected members representing the four Departments and one Program:

Nominating Committee
Research Committee
Cultural Events Committee
Facilities Committee
Environmental Design Program Advisory Committee
Curriculum Committee
Doctoral Studies Committee
C.A.S.T. Committee

COMMITTEE DESCRIPTIONS:

Faculty Executive Committee
Faculty Executive reviews and makes recommendations concerning faculty business, including decisions of standing committees, prior to its presentation at Faculty Council; develops policy for administrative operation and for interdepartmental special projects; and performs such other functions as Faculty Council may specify from time to time. This committee includes the Dean or designate; the Department Heads; one full time academic staff member from each Department in the Faculty elected by and from the Department Council; one full time academic staff member from the Environmental Design Program; and the five students elected annually to Faculty Council from their respective programs.

Department Council General Bylaws
These general bylaws provide the basis from which individual Department Councils develop their own bylaws. (See Department of Architecture Council Bylaws above).

Rules, Regulations, Student Appeals and Discipline Committee
This committee addresses issues relating to rules, regulations, student appeals and discipline. Appeals reviewed at this level are ones that are unsuccessful at the first stage or Department level. The committee includes: the Dean or designate; the Department Heads and Environmental Design Program Chair, or designates; the Chair of the Student Affairs Committee; and two student representatives, one graduate and one undergraduate elected by their respective student organizations.

Nominating Committee
The Nominating Committee nominates candidates for all elections by the Faculty Council. This committee includes: one full time academic staff member from each department in the Faculty elected by and from the Department Council; one full time academic staff member from the Environmental Design Program; the Senior Stick or designate; and one graduate student elected by the graduate students of the Faculty.

Research Committee
The Research Committee facilitate scholarship to the highest academic and professional standards; serves as a resource for faculty members in seeking funding and recognition for their scholarship initiatives; assists the Dean's Office in disbursing funds earmarked for the stimulation of scholarship initiatives by faculty members; and reports to Faculty Council on matters referred to the committee. The committee includes: the Associate Dean (Research), as Chair; one faculty member from each Department in the Faculty, elected by and from the academic staff of the department; one full time academic staff member from the Environmental Design Program; and a representative of the Partners Program.

Cultural Events Committee
The Cultural Events Committee plans, implements and promotes event in the faculty, including visiting lecturers, exhibitions, and symposia. The committee includes: a chair, elected biennially by the committee from among its current members; one full-time academic staff member from each Department and Program, elected by the unit; one student representative from each program in the Faculty; and one communications support staff member.

Facilities Committee
The Facilities Committee advises the Dean on proposed renovations and repairs concerning facilities, space, furnishings and equipment. The committee includes the Dean or designate; one full-time academic staff member from each Department and Program in the Faculty elected by and from the unit; two student representatives, one graduate and one undergraduate, elected by their respective student organizations; and one support staff representative.

Environmental Design Program Advisory Committee (EDPAC)
(See above).

Curriculum Committee
The Curriculum Committee has the mandate to address issues of programs, admissions, curricula and degrees, with respect to the Tenets of the Faculty of Architecture and the Academic Plan of the University of Manitoba. This Committee is the body for receiving, reviewing, and recommending to Faculty Council curricula changes and inter-departmental curricula co-operation. This committee includes the Dean or designate; one full time academic staff member from each Department in the Faculty, elected by Faculty Council; one full time academic staff member from the Environmental Design Program; and two student representatives, one graduate and one undergraduate, elected by their respective student organizations.

Doctoral Studies Committee
The Doctoral Studies Committee is responsible for overseeing the Ph.D. in Design and Planning Program in the Faculty of Architecture, in accordance with the program's supplemental regulations. The committee acts as the Ph.D. Program Admissions Committee and reports to Faculty Council. Membership consists of: the Dean, or delegate (typically the Associate Dean Research), as Program Head and Chair; five full-time academic staff from the Faculty of Architecture, normally one from each of its units; and the Graduatea Student Advisor.

C.A.S.T. Committee
The mandate of the C.A.S.T Committee is to advance the goals and programming of the Centre, which seeks to promote both discipline-specific and cross-disciplinary research that advances knowledge, promotes creativity, and supports innovation in teaching benefiting students, faculty, researchers and industry Professionals.

All Faculty of Architecture Council governing documents are posted online:
– http://umanitoba.ca/faculties/architecture/facstaff/academic_handbook/BylawsStanding.html

In addition to standing committees, the Faculty of Architecture has a Gallery Committee, charged with programming and facilitating exhibitions in the Architecture2 Gallery. Other ad-hoc committees for particular initiatives may be formed at the direction of Faculty Council

The Faculty of Architecture and the University of Manitoba

The Faculty of Architecture is one of thirteen faculties (including the Faculty of Graduate Studies), three schools and several colleges at the University of Manitoba. The Faculty of Architecture is among the smaller to mid-sized faculties. With nearly 500 full-time students in 2016-17, it is half the size of the Faculty of Agriculture, and significantly smaller than the Faculties of Health Sciences (a conglomerate of five colleges and a school), Science, Arts, Engineering, and the School of Business. The Faculty of Architecture is somewhat larger than the Faculties of Music, Law, and the School of Art; and on par with the Faculties of Education, Environment Earth and Resources, Kinesiology, and Social Work.

Faculty of Graduate Studies (FGS)

The Faculty of Graduate Studies administers 135 graduate programs offered by 80 departments and units at the University of Manitoba. It facilitates graduate admissions, program regulations and changes, funding and awards, professional development, thesis submissions, Ph.D. defenses, etc. All forms pertaining to FGS Administration and regulations are posted online.

— http://umanitoba.ca/faculties/graduate_studies/admin/index.html

Graduate Program Chairs are accountable to FGS for all matters pertaining to graduate curriculum, course changes and student reporting. The Faculty of Architecture's Graduate Student Assistant serves as a liaison with the Faculty of Graduate Studies on day-to-day administration. In the Faculty of Architecture, the Department Head typically serves as Graduate Program Chair. In the Department of Architecture, the Thesis Coordinator has also played a significant role in graduate program administration, including review and oversight of the program's supplemental regulations, which detail all academic deadlines, criteria and procedures. The Architecture Program's supplemental regulations are posted on the FGS website.

— http://umanitoba.ca/faculties/graduate_studies/admin/supplemental_regulations.html

Faculty Deans, Associate Deans (Research), and Graduate Program Chairs serve on Graduate Studies Faculty Council. Associate Deans (Research) additionally serve on the FGS Executive Committee.

The Faculty of Graduate Studies periodically reviews Graduate Programs with the aim of identifying improvements where necessary and restructuring where appropriate. Somewhat less intensive than a CACB Accreditation Visit, a Graduate Program Review requires submission of a major report, as well as on site reviews by both external and internal assessors. The Master of Architecture Program was last reviewed in Spring 2015. Follow-up actions by the Department addressed minor concerns. On May 25, 2017 the Department of Architecture received word that all issues had been satisfactorily improved. (See above, 3.2.1 Program Self-Assessment: Faculty).

The University of Manitoba

The University of Manitoba is western Canada's first university. It is a member of the U15, a Group of Canadian Research Universities, and ranked one of the top 50 research-intensive universities in Canada. The University of Manitoba has nearly 30,000 students (close to 26,000 undergraduate and almost 4000 graduate students), and 1,185 full-time faculty members.

The University of Manitoba is a member of the Association of Universities and Colleges of Canada (AUCC). It is a provincially funded institution. The University of Manitoba Act, a statute of the Legislative Assembly of Manitoba, is the governing legislation of the University of Manitoba. The Act provides for a bicameral system of governance - with the Board of Governors as the corporate governing body and the Senate as the academic body.

Board of Governors

The Board of Governors is the governing body of the University and may exercise in the name of the University any powers conferred on the University as a body corporate (and which are not reserved to Senate).

The Board of Governors consists of 23 members: the Chancellor, the President, 12 members appointed by the Lieutenant-Governor in Council, three members elected by the graduates of the University, three members elected by the Senate of the University and three members appointed by the University of Manitoba Students' Union.

The Board, as the Corporate Governing Body of the University, is responsible for overseeing the administrative and business affairs of the University, including approving the annual budget and appointing and monitoring the performance of the President and Vice-Chancellor.

The Chair and Vice-Chair of the Board of Governors are elected annually by the Board of Governors. The Board of Governors meet seven times per year in January, March, April, May, June, September & November.

– http://umanitoba.ca/admin/governance/bog/index.html

Senate

The Senate is the University's senior academic governing body. Its membership includes: the Chancellor, the President and the Vice-Presidents of the University, Deans of Faculties, Directors of Schools, Faculty members elected by Faculty and School Councils, students elected by the students and representatives of the Board of Governors and the Alumni Association.

The Senate has authority to determine matters of an academic nature, as described in *The University of Manitoba Act*. The Senate also has the authority to recommend on certain matters to the Board of Governors. The President and Vice-Chancellor is the Chair of Senate, and the Provost and Vice-President (Academic) is the Vice Chair of Senate. The Senate meets monthly from September to June.

– http://umanitoba.ca/admin/governance/senate/index.html

OTHER PROFESSIONAL PROGRAMS IN THE FACULTY OF ARCHITECTURE

The Faculty of Architecture offers four professionally accredited programs: Architecture, Landscape Architecture, Interior Design and City Planning. In each Department, responsibility for delivering the professional curriculum and maintaining accreditation rests with the program Department Head, with Faculty support. The Department Head, or designate, prepares the accreditation report and serves as primary liaison with the national accrediting body.

Landscape Architecture

The program leading to the Master of Landscape Architecture degree (M.L.A.) explores the theory and practice of landscape architecture. Students entering the program are required to complete between 42 to 111 credit hours. Candidates for a MLA must possess a four-year degree from a recognized university. Depending on a student's academic background, s/he may be given advanced standing in the program. This is assessed on an individual basis. The three-year program (111 credit hours / full-time study) is designed to accommodate a broad diversity of undergraduate backgrounds. Students with a Bachelor degree in Landscape Architecture or a Bachelor in Environmental Design with a Landscape + Urbanism option may be eligible to complete their program of study over a four semester period (two years). The full curriculum is online: http://umanitoba.ca/faculties/architecture/programs/landarchitecture/LAcourses.html

The Landscape Architecture program at the University of Manitoba is an accredited program that has met the standards of the *Landscape Architecture Accreditation Council* (LAAC) http://www.csla-aapc.ca/csla-aapc. Programs accredited by the Canadian Society of Landscape Architecture (CSLA) through LAAC have reciprocal recognition from the Landscape Architecture Accreditation Board (LAAB) of the American Society of Landscape Architecture (ASLA). Successful completion of a program accredited by the CSLA/LAAB qualifies graduates to take the Landscape Architecture Registration Exam (LARE), the North America-wide qualification for professional registration. In Manitoba, having an accredited degree plus

two years in practice and passing required sections of the LARE is required for professional registration with the Manitoba Association of Landscape Architects (MALA).

In March 2015, the LAAC team reviewed the graduate program in Landscape Architecture and granted the program a full six-year accreditation until Winter 2021. The program was found to provide the required instruction, faculty, facilities and financial support to deliver a sound program as demanded by the profession and the public.

The Master of Landscape Architecture degree at the University of Manitoba was the first graduate program in Canada (established in 1972). The program graduates approximately 30 students per year and attracts applicants from all regions of Canada and other countries of the world.

– http://umanitoba.ca/faculties/architecture/programs/landarchitecture/LAaccreditation.html

Interior Design

The Professional Master Degree Program aims to graduate Interior Designers equipped to work nationally and internationally at the forefront of their profession, with a skill set that includes strategic thinking, a research orientation and an ethical and environmentally responsible frame of reference. The program focuses on Design Studio with the Technologies, History and Theory, and Research integrated through Design projects. The two-year Master Program requires 48 credit hours. Applicants holding a Bachelor of Environmental Design (Interior Environment Option) from UM's Faculty of Architecture or a similar Design degree are eligible for direct admission. Students holding a University Degree from a non-design related discipline would be required to successfully complete a pre-master year before applying. The full curriculum is provided online http://umanitoba.ca/faculties/architecture/programs/intdesign/ID_courses.html

The Interior Design professional program at the University of Manitoba is a recognized accredited program that has met the standards of the *Council for Interior Design Accreditation* (CIDA) https://accredit-id.org/. The normal accreditation cycle is six years. The next Accreditation visit by CIDA will take place in February 2018.

The Interior Design Department at the University of Manitoba has a long established reputation for excellence. It has offered a professional interior design education since 1974.

– http://umanitoba.ca/faculties/architecture/programs/intdesign/ID_accreditation.html

City Planning

The program leading to the Master of City Planning degree (MCP) at the University of Manitoba offers a two-year curriculum requiring between 39 to 51 credit hours. Students are required to complete three studios engaging local partners in urban and rural settings, five core courses in the theory and practice of planning, and two courses from a roster of option courses, allowing students to tailor the program to their interests. Students choose between two options to complete the degree: a 0 credit Thesis/Practicum (as part of the 39 credit hour curriculum); or a 6 credit Capstone Project with two 3 credit electives (as part of the 51 credit hour curriculum). Applicants to City Planning Program require a four-year undergraduate degree from a recognized university. Students come from varied academic backgrounds and the curriculum is structured to satisfy the requirements of professional accreditation. In collaboration with the Manitoba Professional Planners Institute (MPPI), the program includes a summer internship of planning work. An optional mentoring program links the student with a volunteer from MPPI for discussions on career strategies or other matters.

The City Planning program at the University of Manitoba is a recognized accredited program (2015-2019), which has met the standards of the *Canadian Institute of Planners* (CIP) http://www.cip-icu.ca/#. Through a reciprocal agreement with the American Institute of Certified Planners (AICP), the AICP recognizes Canadian planning programs that have been approved by CIP.

Established in 1949 as part of the national initiative to develop capabilities in planning and development in post-war Canada, the Department of City Planning at the University of Manitoba offers the oldest continuing planning program in the country, and one of the oldest in North America.

– http://umanitoba.ca/faculties/architecture/programs/cityplanning/accreditation.html

OTHER PROFESSIONAL PROGRAMS AT THE UNIVERSITY OF MANITOBA

The University of Manitoba offers numerous professionally accredited programs, including multiple programs in Agricultural & Food Sciences, Arts, Business, Dentistry, Engineering, Environment, Earth and Resources, Kinesiology and Recreation Management, Law, Medicine, Nursing, Pharmacy, Rehabilitation Sciences, Science, and Social Work. For a complete list of accredited programs and the corresponding national accrediting bodies, see the UM Academic Program Accreditation website.

- http://umanitoba.ca/admin/vp_academic/academic_programs/3730.html

The Faculty of Architecture's professional programs may be compared to those in the Faculty of Engineering, which offers five undergraduate programs professionally accredited by the Canadian Engineering Accreditation Board (CEAB) of Engineers Canada:

B.Sc. (Biosystems Engineering)
B.Sc. (Civil Engineering)
B.Sc. (Computer Engineering)
B.Sc. (Electrical Engineering)
B.Sc. (Mechanical Engineering)

Each program requires 150-163 credit hours, normally over 4 years: Biosystems 150-45 courses; Civil 163-46 courses; Computer 152-45 courses; Electrical 157-45 courses; Mechanical 159-45 courses.

Accreditation cycles are six years. Each Department Head is responsible for leading the preparation of the program report, and ensuring compliance with accreditation criteria with Faculty and University support. Coordination between department activities is done through the curriculum management committee (CMC), chaired by the Associate Dean (undergraduate programs). CMC is responsible for overseeing the flow and consistency of shared information across the departments.

Together with core curriculum and electives, the Faculty of Engineering offers a Co-operative Education and Industrial Internships Program (Co-op/IIP). Approximately 450 students take advantage of this optional, co-curricular program in a given year. Co-op/IIP participants include students enrolled in all of the undergraduate engineering programs, as well as the Internationally Educated Engineering Qualification program (IEEQ) and the Engineering Access Program for Indigenous engineering students (ENGAP). Completion of work experience through Co-op/IIP may facilitate pre-graduation credits toward professional internship with Engineers Geoscientists Manitoba.

Graduate programs in Engineering are not accredited. Graduate programs pursue advanced research. The Faculty of Engineering is recognized internationally for its research achievements in Biosystems, Civil, Computer, Electrical, and Mechanical Engineering. The Faculty is home to several Canada Research and Industrial Research Chairs, sponsored by the Natural Sciences and Engineering Research Council of Canada and private industry.

University Policy on Communication of External Accreditation Reviews

To increase the consistency in the communication of accreditation results as well as to increase transparency with respect to these reviews, UM Senate approved a set of guidelines on the communication of external accreditation reviews of academic programs in January 2013. The objective of the recommendations is to increase the consistency in broadcasting the results of external accreditation reviews across the University and to move towards an increased transparency with respect to these reviews.

Where appropriate, it is recommended that:

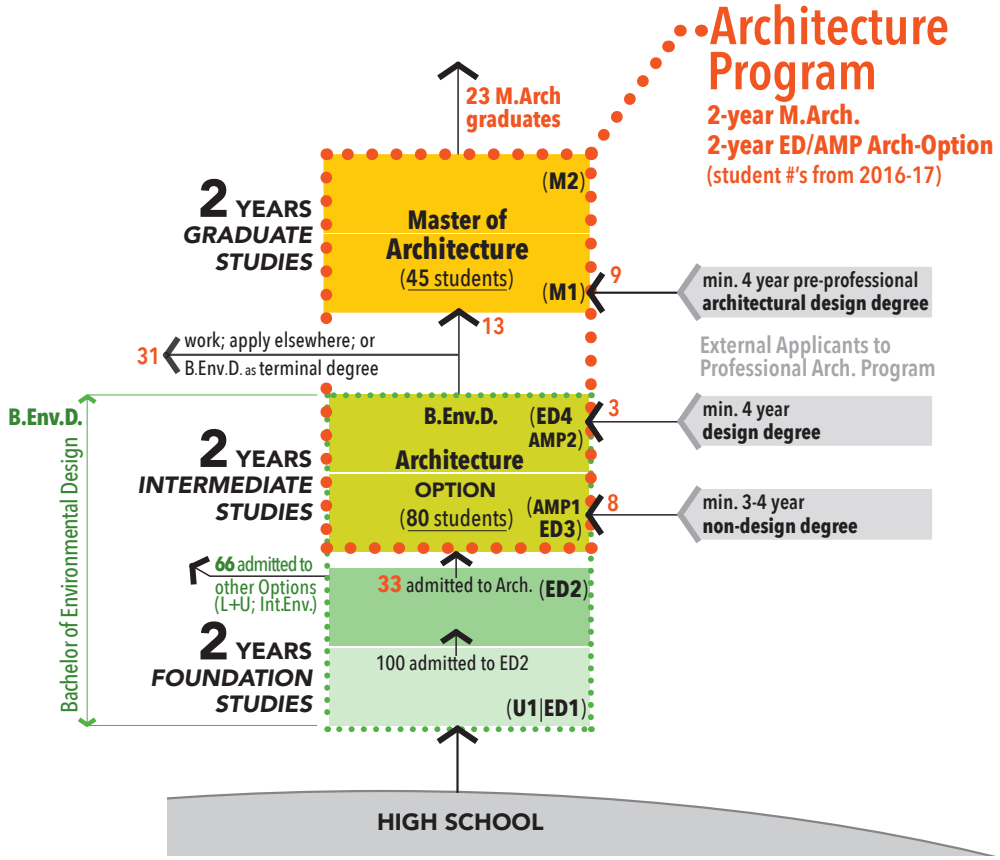
- All faculty, staff and students of the unit are notified through e-mail of accreditation results following their receipt.
- Information on program accreditation should be posted in a clear manner on the units' website, noting the accrediting body and years of accreditation.

- Details of the results should be discussed at the Departmental and Faculty councils, ensuring that students are included in these discussions (to take the information back to the respective student organizations where applicable). A public town hall forum to discuss results is encouraged.
- The accreditation certificate or letter should be clearly posted in the unit office.
- Where possible and when deemed appropriate, the accreditation report should be made available to all interested parties for review.* (* with personal information redacted)
- Accessibility of the report should be included in the accreditation information on the website and in the e-mail communications sent to faculty, staff and students.

– http://umanitoba.ca/admin/vp_academic/academic_programs/guidelines.html

3.11 Professional Degrees and Curriculum

Professional Architecture Program Degree Diagram
(see diagram on page 8 for the program relation to the Faculty of Architecture)



3.11 Professional Degrees and Curriculum

The CACB awards accreditation only to first-professional degree programs in architecture. These include:

- *Master of Architecture degree with a related pre-professional bachelor's degree; requirement typically amounting to five or six years of study;*
- *Master of Architecture degree without a pre-professional requirement, consisting of an undergraduate degree plus a minimum of three years of professional studies;*
- *Bachelor of Architecture degree requiring a minimum of five years of study, except in Quebec, where four years of professional studies follows two years of CEGEP studies.*

The curricular requirements for awarding these degrees must include three components: general studies, professional studies, and electives that respond to the needs of the institution, the architecture profession, and the students respectively. Together these three components comprise a liberal education in architecture and ensure that graduates will be technically competent and critical thinkers who are capable of defining multiple career paths within a changing societal context.

These components are defined as follows:

- *General studies: A professional degree must include general studies in the arts and sciences, either as an admission requirement or as part of the curriculum. The program must ensure that students have the prerequisite general studies to undertake professional studies.*
- *Professional studies: The core of a professional degree consists of the required courses that satisfy the CACB Student Performance Criteria. The program may require additional core courses to address its mission or institutional context, but no more than 60 percent of the student's required post-secondary education can be devoted to professional studies. For Master's students, this calculation includes course work taken for an undergraduate degree within or outside architecture.*
- *Electives: A professional degree must allow students to pursue special interests. The curriculum must have sufficient flexibility so that students can complete minors or develop areas of concentration, either within or outside the program.*

The APR must include:

- *Specification of the degree(s) offered;*
- *For each degree offered, an outline of the curriculum showing the distribution of general studies, professional studies (including their prerequisites), and electives;*
- *A summary description of how the stated CACB curricular requirements are reflected in student admission assessments concerning advanced placement within the program.*

DEGREES OFFERED

The Faculty of Architecture offers 2 degrees for those interested in pursuing a career path in architecture:

M.Arch – a two-year professional Master of Architecture degree
B.Env.D – a four-year pre-professional Bachelor of Environmental Design degree, with a 2-yr Arch. Option

M.Arch applicants typically have a four-year pre-professional degree with an emphasis in architectural design, comparable to our B.Env.D.-Architecture Option.

The B.Env.D. program comprises two years of general multidisciplinary foundation studies (U1/ED1 and ED2), followed by two years of disciplinary specific intermediate studies (ED3 and ED4). Years three and four are "option years," wherein students competitively elect into one of three options: Architecture; Interior Environments; or Landscape + Urbanism. Students intending to pursue a two-year professional M.Arch program must successfully complete the ED3 & ED4 Architecture-Option years. (See Program Diagram, p. 210). This structure, which has been in place since 2008, effectively makes the overall program structure 2+2+2: **two-years ED Foundation Studies + 2-years ED Architecture-Option studies + 2 years M.Arch studies**.

Students without a pre-professional undergraduate design degree must apply to the **Architecture Master Preparation** program (**AMP**). AMP students complete a minimum three years of professional studies to earn a first professional M.Arch degree. **AMP1** is for students holding a non-design degree and requires two years of study before applying to the 2-year M.Arch. Students holding a design, but non-architecture degree (such as Interior Design), may be admitted to **AMP2**, requiring one year of study before applying to the M.Arch. AMP1 and AMP2 students follow the ED3 and ED4 curriculum. (See Program Diagram, p. 210).

CURRICULUM OUTLINE – Organized by sequence of courses for each degree

Bachelor of Environmental Design (B.Env.D.)
FOUNDATION STUDIES (Years 1 and 2):

	Course No.	Course Name	Credit Hours	
ED1	EVDS 1600	Introduction to Environmental Design	3	
	EVDS 1602	Visual Literacy	3	
	EVDS 1660	History of Culture, Ideas and Environment 1	3	
Fall		Faculty of Arts/Science Elective(s)	6	
	EVDS 1670	History of Culture, Ideas and Environment 2	3	
		Faculty of Arts Elective(s)	6	
Winter		Faculty of Science Elective(s)	6	
ED2	EVDS 2100	Urban Media Lab (Pre-Fall)	3	
	EVDS 2400	Visual Media 1	3	
	EVDS 2500	Design Studio 1	6	
	EVDS 2600	Tectonic Precedent	3	
Fall	EVDS 2702	Natural and Human Systems	3	
	EVDS 2800	Visual Media 2	3	
	EVDS 2900	Design Studio 2	6	
	EVDS 2200	Ecology and Design	3	
Winter	EVDS 2300	Materials, Structures and Assemblies	3	subtotal: 63 cr.hr.

INTERMEDIATE STUDIES – ARCHITECTURE OPTION (Years 3 and 4):

ED3	EVAR 3012	Arch Tech Prep — pre term block course (for AMP1 students only)	(3)	
	EVAR 3014	Drawing: Freehand & Digital	3	
	EVAR 3008	Architecture Design Studio 1	9	
	EVAR 3004	Architectural Technology 1- Structural and Sustainable Use of Materials	3	
Fall	EVAR 3000	Pre-Modern Architectural History and Theory I	3	
	EVAR 3010	Architecture Design Studio 2	9	
	EVAR 3006	Architectural Technology 2 – Building Construction, Structures and Envelopes	3	
Winter	EVAR 3002	Pre-Modern Architectural History and Theory II	3	
ED4	EVAR 4004	Architecture Design Studio 3	9	
	EVAR 4002	Architectural Technology 3 - Building Systems	3	
Fall	EVAR 4000	Modern Architectural History and Theory I	3	
	EVAR 4010	Architecture Design Studio 4	9	
	EVAR 4008	Architectural Technology 4 – Comprehensive Design Technology Report	3	
Winter	EVAR 4006	Modern Architectural History and Theory II	3	
	Various	Elective (taken anytime)	3	subtotal: 66 cr.hr.

B.Env.D. TOTAL PROGRAM CREDIT HOURS: 129

Master of Architecture (M.Arch)

M1	ARCH 7050	Arch Studio 5 and Comprehensive Program Report	9	
	ARCH 7040	Professional Practice	3	
	ARCH 7000	Advanced Technology Topics 1	1.5	
Fall	ARCH 7020	Research Topics: History and Theory 1	1.5	
	ARCH 7060	Arch Studio 6	9	
	ARCH 7350	Legal Aspects of Architectural Practice	3	
	ARCH 7030	Research Topics: History and Theory 2	1.5	
Winter	ARCH 7010	Advanced Technology Topics 2	1.5	
M2	ARCH 7070	Design Research Studio	9	
Fall	Various	Elective (or 2 Topics Courses)	3	
	GRAD 7090	Design Thesis	0 (pass/fail)	
	ARCH 7080	Technology Thesis Report	3	
Winter	Various	Elective (or 2 Topics Courses)	3	

Students are expected to take courses in sequence. **M.Arch TOTAL PROGRAM CREDIT HOURS: 48**

CURRICULUM OUTLINE – Organized by type of studies: General – Professional - Electives

GENERAL STUDIES

ED1 + ED2

	EVDS 1600	Introduction to Environmental Design	3	
	EVDS 1602	Visual Literacy	3	
	EVDS 2400	Visual Media 1	3	
	EVDS 2800	Visual Media 2	3	
	EVDS 1660	History of Culture, Ideas and Environment 1	3	
	EVDS 1670	History of Culture, Ideas and Environment 2	3	
	EVDS 2100	Urban Media Lab (Pre-Fall)	3	
	EVDS 2500	Design Studio 1	6	
	EVDS 2900	Design Studio 2	6	
	EVDS 2702	Natural and Human Systems	3	
	EVDS 2200	Ecology and Design	3	
	EVDS 2600	Tectonic Precedent	3	
	EVDS 2300	Materials, Structures and Assemblies	3	subtotal: 45 cr.hr.

PROFESSIONAL STUDIES

ED3 + ED4

DRAWING	EVAR 3014	Drawing: Freehand & Digital	3	
DESIGN	EVAR 3008	Architecture Design Studio 1	9	
	EVAR 3010	Architecture Design Studio 2	9	
	EVAR 4004	Architecture Design Studio 3	9	
	EVAR 4010	Architecture Design Studio 4	9	
TECH-NOLOGY	EVAR 3012	Arch Tech Prep — pre term block course (for AMP1 students only)	(3)	
	EVAR 3004	Architectural Technology 1- Structural and Sustainable Use of Materials	3	
	EVAR 3006	Architectural Technology 2 – Building Construction, Structures and Envelopes	3	
	EVAR 4002	Architectural Technology 3 - Building Systems	3	
	EVAR 4008	Architectural Technology 4 – Comprehensive Design Technology Report	3	
HISTORY THEORY	EVAR 3000	Pre-Modern Architectural History and Theory I	3	
	EVAR 3002	Pre-Modern Architectural History and Theory II	3	
	EVAR 4000	Modern Architectural History and Theory I	3	
	EVAR 4006	Modern Architectural History and Theory II	3	subtotal: 63 cr.hr.

M1 + M2

PROF. PRACTICE	ARCH 7040	Professional Practice	3	
	ARCH 7350	Legal Aspects of Architectural Practice	3	
DESIGN	ARCH 7050	Arch Studio 5 and Comprehensive Program Report	9	
	ARCH 7060	Arch Studio 6 (Comprehensive Design Studio)	9	
	ARCH 7070	Design Research Studio	9	
	GRAD 7090	Design Thesis	0	
TECH-NOLOGY	ARCH 7080	Technology Thesis Report	3	
	ARCH 7000	Advanced Technology Topics 1	1.5	
	ARCH 7010	Advanced Technology Topics 2	1.5	
HISTORY THEORY	ARCH 7020	Research Topics: History and Theory 1	1.5	
	ARCH 7030	Research Topics: History and Theory 2	1.5	subtotal: 42 cr.hr.

ELECTIVES

ED1 + ED2

	Various	Elective(s) in the Faculty of Arts	6	
	Various	Elective(s) in the Faculty of Science	6	
	Various	Elective(s) in the Faculty of Arts and/or Science	6	

ED3 + ED4

	Various	Elective in the Faculty of Arts and/or Science	3	

M1 + M2

	Various	Electives (or Topics Courses)	6	subtotal: 27 cr.hr.

CURRICULUM OUTLINE – Overview

GENERAL STUDIES

45 credit hours (U1/ED1 & ED2) + 21 Undergraduate Elective credit hours

The two-year foundation studies of the Environmental Design program (U1/ED1 and ED2) satisfy the general studies requirements. These foundation studies cover a variety of introductory courses spanning arts and science: visual literacy and media; the history of cultural; environmental design; ecology; natural and human systems; tectonic precedent; materials and assemblies; and two general design studios. Oriented toward multidisciplinary design studies, these courses are sufficiently broad in scope and introductory in nature to expose students to many facets of the liberal arts. The pedagogy provides students opportunities to develop critical thinking and communication skills in relation to a variety of topics. The overall program curriculum requires 66 credit hours of general studies: 45 credit hours of foundation studies offered by the Faculty of Architecture's Environmental Design program; plus 18 credit hours of U1 electives (6 in Arts; 6 in Science; 6 in Arts or Science); plus 3 credit hours of open electives in the ED3 and ED4 years.

Students who enter the M.Arch program without having gone through the Environmental Design program will have already acquired an equivalent amount of general studies in other degree programs.

PROFESSIONAL STUDIES

63 credit hours (ED3 & ED4) + 42 credit hours (M1 & M2)

Professional Studies total 105 credit hours, distributed across the undergraduate and graduate curriculum: 63 credit hours in the ED3 and ED4 Architecture Option years of the Bachelor of Environmental Design program; and 42 credit hours in the M1 and M2 years of the Master of Architecture program. There are 177 credit hours required for the combined curriculum: 129 for the pre-professional B.Env.D.; plus 48 for the professional M.Arch. Thus, the 105 credit hours of Professional Studies equal 59% of the overall degree requirements, which is within the CACB's recommendation that "no more than 60% of the student's required post-secondary education can be devoted to professional studies."

Professional Studies are comprised of the following general areas: drawing; design; technology; history/theory; and professional practice. Each term has a balance of design, technology and history/theory. This mix is intended to cultivate cross-fertilization and to encourage students to recognize these pedagogical areas as thoroughly intertwined.

ELECTIVES

21 undergraduate credit hours + 6 graduate credit hours

In the U1/ED1 and ED2 years, students take 18 credit hours of electives: 6 in Arts; 6 in Science; and 6 in Arts or Science. Architecture-option students take an additional 3 credit hour open elective in the ED3 or ED4 year. For this, most students transfer an extra Arts or Science elective taken previously during their first two years of study. Others take courses in the School of Art or Faculty of Arts.

In the M.Arch curriculum, students take 6 credit hours of electives. These may consist of the following: any combination of 1.5 Topics Courses offered by the Department of Architecture – Advanced Technology (ARCH 7000/7010) and/or Research Topics in History and Theory (ARCH 7020/7030); any 3000 level or higher course within the Faculty of Architecture; any 3000 level or higher course within the University (or a special course of study at another recognized institution), with the approval of the Department Head; or any ARCG 7070 Topics in Environmental Process and Design course, offered as an open elective or independent study, as approved by the Instructor and Department Head.

ELECTIVE OFFERINGS (for M.Arch students in the last 3 years):

2016-17

Course No.	Course Name	Instructor	Term	Credit Hours
ARCG 7070 -T31	Topics in Environmental Process and Design *Rainbow Garden Community Build* (Elective with Instructor Approval: 10 students)	L. Veness	Summer 2017	3
IDES 7270	*Traveling Concepts in Photography* (Open Elective)	S. Close (Assoc.Prof. Int.Design)	Summer 2017	3
ARCG 7070 -T33	Topics in Environmental Process and Design *Cultural Sustainability: Hakka Traditions + Technologies* (Independent Study: 1 student)	L. Landrum	Summer 2017	3
ARCG 7070 -T29	Topics in Environmental Process and Design *Joinery: Mid-century Modern* (Elective: 7 students)	E. Epp	Winter 2017	3
ARCG 7070 -T30	Topics in Environmental Process and Design *Digitizing Physicality* (Independent Study: 1 student)	L. Coar	Fall 2016	3
EVIE 3012	*Interior Light and Color* (Interior Design Core Course/Open as Elective)	N. Maruca (Assoc.Prof. Int. Design)	Fall 2016	3

2015-16

ARCG 7070 -A01	Topics in Environmental Process and Design *Drawing Ecology: Translations of Place and Experience* (Independent Study: 1 student)	L. Landrum	Summer 2016	3
ARCG 7070 -T01	Topics in Environmental Process and Design *Diving in the Ordovician Seas* (Open Landscape Summer Studio Elective)	D. Straub (Assoc.Prof. Landscape Arch.)	Summer 2016	6
ARCG 7070 -T26	Topics in Environmental Process and Design *Here Contains Somewhere Else|The Act of Storytelling* (Independent Study: 1 student)	E. Epp	Fall 2015	3

2014-15

ARCG 7070 -T05	Topics in Environmental Process and Design *Architecture and Disability* (Independent Study: 1 student)	N. Subotincic	Summer 2015	3
ARCG 7070 -T06	Topics in Environmental Process and Design *Architecture Ex Machina* (Independent Study: 1 student)	N. Subotincic	Summer 2015	3
ARCG 7070 -T07	Topics in Environmental Process and Design *Atmosphere in Mediating Nature's Shift to Object* (Independent Study: 1 student)	N. Subotincic	Summer 2015	3
ARCG 7070 -T27	Topics in Environmental Process and Design *The Micro-Dwelling* (Independent Study: 1 student)	N. Subotincic	Summer 2015	3
ARCG 7070 -T08	Topics in Environmental Process and Design *Comprehensive Building Research Project* (Independent Study: 1 student)	T. Fuglem	Summer 2015	3
ARCG 7070 -T01	Topics in Environmental Process and Design *LEED Core Concepts and Strategies* (Open Elective)	S. Mallory-Hill (Assist.Prof. Int. Design)	Summer 2015	3
ARCG 7070 -T09	Topics in Environmental Process and Design *Hudson Bay Company Archives: Research & Exhibition* (Independent Study: 1 student)	H. Enns	Summer 2015	3

ARCG 7070 -T15	Topics in Environmental Process and Design *Strange Spaces: Cultural Invention in Iceland (Field Studies)* (Summer Studio: 10 students)	H. Enns	Summer 2015	3
ARCG 7070 -T23	Topics in Environmental Process and Design *Strange Spaces: Cultural Invention in Iceland (Field Studies)* (Summer Studio: 10 students)	H. Enns	Summer 2015	3
ARCG 7070 -T01	Topics in Environmental Process and Design *Future Studio* (Open Elective)	H. Enns	Winter 2015	3
ARCG 7070 -T14	Topics in Environmental Process and Design *Environmental Systems Integration & Sustainability* (Open Elective)	M.Araji (Assist.Prof Env. Design)	Winter 2015	3
ARCH 7020 -T01	Research Topic: History and Theory Anxiety and Space (Independent Study: 1 student)	N. Subotincic	Winter 2015	3

TOPICAL ELECTIVE OFFERINGS within PROFESSIONAL STUDIES

Students have many opportunities for pursuing their own interests within the parameters of professional architectural studies by being able to choose from a limited set of topical options for core courses. Topical offerings are available to M1 and M2 students for the Graduate Topics courses (ARCH 7000/7010; 7020/7030), and to M1 and ED4 students for Design Studios. M2 Design Thesis Students choose their primary advisor based on aligned research interests and/or the advisor's topical studio offering that year. Topical offerings for the last three years are listed below:

Advanced Technology Topics (ARCH 7000/7010) – 1.5 credits

2016-17

Lighting and Shadows	T. Landrum	Fall
Sustainability by Design	S. Ghosh	Fall
Integrated Project Delivery	L. Veness	Fall
Tell-the-Tale Detail	J. Hurme	Winter
Hands on Masonry	T. Landrum	Winter

2015-16

Joinery and Alchemy 1	E. Epp	Fall
Joinery and Alchemy 2	E. Epp	Fall
Materiality of Light	C. Burke	Fall
Folding Skins	L. Coar	Winter
Actuated Constructs	C. Burke	Winter
Hands on Masonry	T. Landrum	Winter

2014-15

Thinking Building Dwelling	E. Epp	Fall
More Thinking Making Sitting	E. Epp	Fall
Transindividual Making	P. Harrop	Fall
Prefabricated Systems/Housing	S. Radulovic	Winter
Frozen Structures/Fluid Forces	L. Coar	Winter
Hands on Masonry	T. Landrum	Winter

Research Topics: History and Theory (ARCH 7020/7030) – 1.5 credits

2016-17

Architecture Section	E. Aquino	Fall
Questions of Creative Method	C. Rueda	Fall
Digital Psychogeography	L. Bird	Fall
Varieties of Architectural Imagination	L. Landrum	Winter
Theories of Exchange	T. Fuglem	Winter

2015-16

Foundation Myths & Architecture of Astana	F.Albo	Fall
Earth or World: Google Earth & the Prosthetic Imagination	L. Bird	Fall
Pueblo: Mountain, Village, Dance	R. Stern	Fall
Questions of Creative Method	C. Rueda	Winter
Post-critical Theory: A New Architectural Pragmatism	M. Banman	Winter
Sectioning Architecture as the Revelation of Space	E. Aquino	Winter

2014-15

From the Steppe to Soho	J. Kalturnyk	Fall
Prank	S. Radulovic	Fall
Architecture of the Image	L. Bird	Fall
Architecture and Performance	L. Landrum	Winter
Architecture & Technics of Modulation	P. Harrop	Winter
Kairotic/Writing & Drawing in Architecture	N. Subotincic	Winter

Design Studio Options (ARCH 7050/60; EVAR 4004/10) – 9 credits

2016-17

M1 Radical Campus	L. Landrum	Fall & Winter
M1 Logic of the Limit: A Chair + A House + Housing	N. Minuk	Fall & Winter
M1 Force Fields: Technologies & Topographies for Social Change	L. Coar	Fall
M1 Light & Sound; Space & Span: Iceland's Creative Economy	H. Enns	Winter
ED4 Spatial Recall/Truth & Reconciliation: Indigenous Architecture	E. Epp	Fall & Winter
ED4 Analysis as Architecture	S. Kotoulas	Fall & Winter
ED4 Critical Path	J. Hurme; C. Neufeld S. Radulovic	Fall & Winter
ED4 Open City Studio	T. Landrum & C. Rueda	Fall
ED4 Berlin Studio	R. Stern	Winter

2015-16

M1 Phantasmagoria	L. Landrum	Fall & Winter
M1 Heavy Weather: A Meteorlogical Research Centre	H. Enns	Fall & Winter
M1 Next Urbanity	J. Hurme; C. Neufeld S. Radulovic	Fall & Winter
ED4 Here + Now: Architecture and the Humanitarian Imagery	L. Coar	Fall & Winter
ED4 Site/Wood/Building: Situating Architecture in Nature & Urbanity	E. Epp	Fall & Winter
ED4 Death Architecture	S. Kotoulas	Fall & Winter
ED4 Pirates and Farmers	N. Minuk	Fall & Winter

2014-15 – Vertical Studios

Archipelago (Berlin)	E. Aquino	Fall & Winter
Architecture *Oriented* Otherwise	L. Coar	Fall & Winter
Living with Water | The Manitoba Project	E. Epp	Fall & Winter
Kettling the Teapot: Architecture of Public Domain and Resistance	P. Harrop	Fall & Winter
Main Street Studio	L. Landrum	Fall & Winter
Crappy not Fancy	N. Minuk	Fall & Winter
Berlin Interdisciplinary Studio	R. Stern	Fall & Winter

M.ARCH STUDENT ADMISSION ASSESSMENTS and ADVANCED PLACEMENT

Admission to the M.Arch program is contingent on applicants having a minimum 4-year pre-professional degree with an architectural focus. Pre-professional degrees must cover the equivalent of two years of general studies, and two years of professional studies equivalent to that offered in our ED3 and ED4 Architecture Option years (4 architectural design studios; 4 technology courses of comparable content; 4 history/theory and/or humanities courses of comparable breadth; plus drawing and/or visual media).

Applications are screened for basic compliance by the Graduate Student Assistant prior to review by the Department of Architecture's Graduate Admissions Committee. Applicants not meeting the admissions curriculum requirements may be advised to apply to the Architecture Master Preparation (AMP) Option. AMP1 is for students with a 3-4 year non-design degree (in Arts, Science, Geography, Business, etc.), and requires two years of study in the ED3 and ED4-Arch Option curriculum before applying to the M.Arch program. AMP2 is for students with a min. 4 year design degree with a non-architectural focus (Interior Design, Landscape Architecture, etc.). AMP2 requires one year of study in the ED4 curriculum before applying to the M.Arch program. AMP1 and AMP2 are effectively pre-Masters qualifying years.

Since our program offers the AMP Options (and not a 3-year Master's Option) it is relatively rare for students admitted to the 2-year M.Arch program to gain advanced placement. In the last three years, two cases of advanced entry placement into the M2 year have been granted. In both cases, the student had successfully completed one year of graduate M.Arch course work, including a comprehensive design studio, at a CACB-accredited program in Canada (Dalhousie University and the University of British Colombia). In both cases, the student was required to take ARCH 7350 and ARCH 7040 (Legal Aspects and Professional Practice), since these core professional practice courses were not yet on their transcript.

Occasionally, a student's academic background warrants approval of individual transfer credits. In the last 3 years, 3 applications for transfer credits for M.Arch elective courses have been reviewed and approved.

In every case of transfer credits and advanced placement, a close review of transcripts, applicable course outlines, and course work from other institutions are reviewed in comparison with degree requirements and course outlines for our M.Arch program. If transfer credits are being accepted for core curriculum areas, then course outlines and course work are additionally reviewed for meeting the CACB Student Performance Criteria assigned to that course, according to our Program's SPC Matrix.

The Department Head, typically in consultation with the Department's Graduate Admission Committee, evaluates requests for transfer credits and advanced placement on a case-by-case basis in compliance with the Program's Faculty of Graduate Studies Supplemental Regulations and University policy (cited below in section 4.2).

3.12 Student Performance Criteria (SPC)

The CACB intends to maintain performance criteria that assist programs in preparing students for the broad requirements of the profession, while also encouraging educational practices suited to the circumstances of particular programs. While the CACB stipulates the student performance criteria that must be satisfied, it specifies neither the educational programs nor the forms of student work that may serve as evidence of having satisfied these criteria. Programs are therefore encouraged to develop unique learning and teaching strategies, methods, and materials to satisfy these criteria.

Each architecture program must ensure that all its graduates possess the skills and knowledge defined by the performance criteria set out below, which constitute the minimum requirements for meeting the demands of an internship leading to registration for practice. The program must provide evidence that all its graduates have satisfied each criterion through required course work.

The roster of 31 SPC's is organized according to four categories, intended to foster an integrated approach to learning that cuts across subject categories:
A: Critical Thinking and Communication [9 SPC]
B: Design and Technical Skills [12 SPC]
C: Comprehensive Design [4 SPC]
D: Leadership and Practice [6 SPC]

These criteria, in turn, encompass two levels of accomplishment:
***Understanding**: means the assimilation and comprehension of information without necessarily being able to see its full implication,*
***Ability**: means the skill in using specific information to accomplish a task, in correctly selecting the appropriate information, and in applying it to the solution of a specific problem. For the purposes of accreditation, graduating students must demonstrate understanding or ability in the above areas, according to an established sequence.*

The APR must include:
- *An overview of the program's curricular goals and content;*
- *A thematic summary of how the 31 Student Performance Criteria (SPC) are acknowledged in the structure and deployment of the curriculum;*
- *A graphic matrix that cross-references each required course with the performance criterion it fulfills.*

OVERVIEW OF CURRICULAR GOALS AND CONTENT

The professional architecture curriculum spans undergraduate and graduate levels:

- **ED3** & **ED4 Architecture Option** – the last two years of the four-year Bachelor of Environmental Design degree program (B.Env.D.). Students with non-design degrees who have been accepted into the Architecture Master Preparation program (AMP1 & AMP2), join the ED3 and/or ED4 curriculum before applying to the M.Arch.
- **M1** & **M2** – two year professional Master of Architecture program. Students entering this two-year M.Arch typically have a minimum four-year pre-professional undergraduate degree with an architecture focus equivalent to the curriculum of our ED Arch-Option program. Roughly 50% of the students in the M.Arch program have a B.Env.D. degree (architecture option). An additional 15% have entered through the AMP program, and have therefore benefited from the ED3 and/or ED4 architecture curriculum.

Some curricular goals are unique to either the undergraduate or graduate level. Some goals apply to both. Curricular goals are outlined on the next page, accompanied by an overview of important curriculum features and values. The thematic summary of how the SPCs are acknowledged in the structure and deployment of the curriculum follows.

CURRICULUM GOALS:

Undergraduate: ED3 & ED4 (Architecture Option) and AMP1 & AMP2 (Architecture Masters Prep.)

- to build on students' foundation studies in the Environmental Design program (U1/ED1 & ED2), and/or other diverse studies from prior degrees;
- to develop understanding and competency in the areas of architectural representation, design, technology, history and theory;
- to introduce students to architectural design as a mode of research;
- to involve students in establishing the direction of their individual projects and overall education by creating opportunities for informed discovery, risk-taking, experimentation, and choice;
- to develop understanding of the architectural profession through course work and opportunities to interact with architects and individuals with experience and expertise in the field;
- to prepare students for graduate-level professional studies in architecture;
- to prepare students to work effectively in architecture and related design fields (many students take time off to work in offices between their undergraduate and graduate degrees);
- to prepare students to pursue successful careers in a wide variety of related fields and/or alternative graduate studies, depending on student interests, such as arts and design; politics and public advocacy; art or architectural history; criticism and journalism; city planning and urban design; environmental science; construction and project management; etc.

Graduate: M1 and M2 – Master of Architecture Program

- to build on the pre-professional pedagogical objectives outlined above;
- to further develop understanding and competency in architectural representation, design, technology, history and theory, and to foster ability to synthesize diverse knowledge and criteria in the design of appropriate and compelling architectural projects;
- to develop ability to perform research in support of design and to undertake design as inquiry;
- to involve students in establishing the direction of their individual projects and overall education by creating opportunities for informed discovery, risk-taking, experimentation, and choice, and by requiring graduate students to pursue a Design Thesis;
- to develop leadership and advocacy skills;
- to develop detailed understanding of the architectural profession, including awareness of its ethical concerns, legal parameters, and internship process;
- to prepare students to work effectively in architectural firms, to pursue professional licensure, and/or to confidently initiate their own design practice;
- to prepare students to pursue post-graduate degrees and/or commence advanced research in areas of architectural design, technology, history and theory.

Curricular goals shared at both the undergraduate and graduate levels:

- to provide opportunities for hands-on learning in ways that intertwine making and thinking;
- to foster desire for life-long learning as vital to architectural endeavors;
- to cultivate both creativity and criticality in all areas of architectural knowledge and production;
- to embrace diverse media of representation – manual and digital, traditional and new – and to interpret their influence on design, society, and one another;
- to foster awareness of the breadth and diversity of the architectural discipline – including the many manifestations and modes of architectural work; and the collaborative and interdisciplinary nature of the discipline and profession;
- to understand architecture as interdependent with cultural, socio-political and environmental circumstances.

CURRICULUM CONTENT – UNIQUE FEATURES AND VALUES:

Interrelated Areas of Learning

The architecture curriculum is comprised of five areas: drawing, design, technology, history/theory, and professional practice. Although each area has particular learning objectives, core content and class format, their boundaries are overlapping and porous. Each learning area permeates the others. All areas are equally important and mutually supportive of a holistic and synthetic architectural pedagogy. Each term of every year has a balance of design, technology and history/theory. The ED3/AMP1 year has an additional dedicated drawing course (EVAR 3014); drawing remains integral to simultaneous and subsequent design studios. The M1 year has dedicated professional practice courses (ARCH 7040 and 7350), the content of which is implicit in undergraduate technology and design courses. The last term of the M2 year requires a Design Thesis and Technology Thesis Report, both of which are expected to incorporate historical depth, theoretical framing, and professional relevance.

Making + Thinking

Our program upholds the tradition of learning by making. This active mode of research is engaged via diverse hands-on opportunities in design studios, technology courses and advanced topics seminars, workshops and electives. The Department of Architecture regularly offers design-build studios, and the Faculty of Architecture provides world-class workshop facilities to enable making in any conceivable medium – analog and digital. The architecture program values craftsmanship, not only in drawings, models, and full-scale constructs, but also in arguments. In every course, making and thinking go hand in hand. Conceptual and technical developments are intertwined at every phase of design and realization. The program values constructive criticism, and encourages vigorous discourse and interpretive writing as productive modes of advancing architectural design and research.

Sequential + Topical

The curriculum follows a sequence of development, generally moving toward greater complexity in the graduate program. However, there is no fixed linear sequence to the kinds of design projects students confront. The program does not assume that complexity is proportionate to size, nor that beginning architecture students are incapable of tackling difficult projects. Each studio is framed by challenging questions and topics put forward by the instructor. Students are expected to develop independent inquiries in relation to studio themes. These pedagogical premises underlay the program's previous structure of vertical design studios. From 2008-2015, vertical studio groups were a mix of ED4, M1 and M2 students. Since Fall 2015, the program has separated ED4 and M1 studios to help ensure greater clarity and consistency of deliverables in the M1 comprehensive design studios (ARCH 7050/7060). In spite of this change, the program remains open to non-linear learning, to design studios that are framed topically, and to the conviction that each and every student – regardless of level – is capable of working with self-motivation, sophistication and rigor.

Diversity within Parameters

Within each studio level of ED4, M1 and M2, students have the opportunity to indicate their ranked preference for studio sections, based on the public presentations of topics by studio instructors at the start of term. Likewise, M1 and M2 students choose Advanced Technology Topics and History/Theory Research Topics based on their own research interests. While some measures are in place to help ensure diversity and equity among the groups (thus not everyone gets their first preference), enabling choice helps make students invested in their education and responsible for developing and pursuing individual interests. Similarly, within each studio and course, there are opportunities for students to choose design directions, building programs, sites and research topics, while operating within the parameters of a professionally accredited curriculum.

Topics Courses

Graduate topics courses are 1.5-credit 5-week offerings, with a 4-hour meeting session once per week. These intense half-term courses engage students in double the number of advanced research topics they may otherwise be exposed to. The intimate class size (typically 9-15 students) readily enables in-depth seminar-style discussions, individual student-led presentations, detailed analysis, and focused collaborative work. Students are required to take four topics courses: two history/theory topics, and two advanced technology topics. These courses, together with the instructor presentations of the different options at the beginning of each term, are helpful to M1 and M2 students as they develop their own focused research direction for their Design Thesis. Topics courses also provide a way for faculty and guest instructors to infuse the curriculum with their current research.

Studio Focus

All design studios in the program are 9 credits – three times the normal commitment of a 3-credit course. Design studios meet all day (8-hours) twice a week. Students are expected to be working on studio projects inside and outside of class time. Placing a high value on studio is typical of architecture programs across the country. In our curriculum, the 9 credits also reflect the nested learning experiences and expectations in studio, including field studies, special lectures, seminars, workshops and community meetings. At the graduate level, extra deliverables are required as part of studio: a Comprehensive Program Report for the M1 Arch Studio 5 (ARCH 7050); a technology binder and comprehensive construction drawing set for M1 Arch Studio 6 (ARCH 7060); and a well-researched Design Thesis proposal as part of the Design Research Studio (ARCH 7070). The high valuation acknowledges the significant investment of time, and supports the program's philosophy of design as inquiry, involving iterative processes of questioning, attempting, experimenting, researching, revising, testing and refining. The coordinated fall and winter studios, which are usually taught by the same instructor, reinforce the notion of design as a continuous process of development and reflection. Fall term studios tend to have exploratory research orientations, while still pursuing complete designs. Winter term studios typically involve advancing the fall research by transposing ideas to new contexts, programs or scales, as well as refining and resolving propositions.

Studio Portfolios

Students in design studios at all levels in the program are required to submit a final portfolio at the end of each term for grading purposes. The portfolio presents a reflective synthesis of the entire term's research, iterations and design development, as well as final designs, often refined in response to feedback from final reviews. This portfolio requirement instils the importance of graphic communication, together with providing clear, concise and compelling annotations. The portfolios are important as a cumulative record of each student's academic progress and are used by students for subsequent job interviews and applications. The portfolios are also important resources for faculty members. During the daylong grading sessions for each studio level, the instructor reviews each portfolio with teaching colleagues and proposes a grade. This collegial practice helps ensure consistency of grades across the different studio sections. By providing a succinct overview of all design work and pedagogical approaches in the program, the grading sessions also enable program self-assessment and improvement.

Building Leadership Capacity

The program aims to treat students as future leaders in their field and community. The program cultivates independent thought, self-motivation, self-direction, and the capacity for self-criticism, together with abilities to learn from others, to work with others, and to work on behalf of others. The Design Research Studio and Design Thesis in the final year of the program are especially important for cultivating ambitious, self-directed work. Keeping the comprehensive design requirements within the M1 studio liberates the M2 Design Thesis for more focused and speculative investigations.

THEMATIC SUMMARY

How the SPCs are acknowledged in the structure and deployment of the curriculum:

A1. Critical Thinking Skills

Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards.

Critical thinking skills are emphasized in all aspects of the curriculum. Every design studio requires critical thinking. Studios do not simply provide problems to solve, but establish multivalent topics and complex circumstances requiring interpretation and judgment. Students are expected to take a position and to develop independent lines of inquiry in relation to themes and circumstances. Students are obliged to regularly present their design work before critics and peers; to articulate design intentions in relation to contexts and precedents; and to explain the premises, aims and criteria orienting their work. They are also expected to respond to criticism by adjusting their design and/or refining and expanding the thinking that frames their work. Students in studio are required to perform technical and theoretical research, and to analyze cultural and environmental circumstances in order to make informed design decisions. These skills are elaborated most rigorously in the Design Research Studio (**ARCH 7070**) and Design Thesis (**GRAD 7090**), which demand a high level of self-motivation and self-criticality. Design Thesis requires a detailed written proposal, articulating intentions and processes, as well as a summary of how the work is being positioned in relation to intellectual and creative contexts. The process and results of Design Thesis, together with critical reflections, are posted online and compiled in a final book.

Critical thinking skills are also acquired in the history and theory curriculum. In the undergraduate courses (**EVAR 3000/3002**; **4000/4006**), lecturers model critical thinking by framing content around pertinent questions; by posing questions to the class; by generating discussion and debate; and by presenting different points of view on works and texts. Students are required to write concise summaries of each lecture, synthesizing the topics and examples discussed; to read and interpret difficult texts as part of an extensive research assignment; and to compose a major essay with sound argumentation, supporting footnotes and bibliography. The graduate History and Theory Research Topics courses (**ARCH 7020/ 7030**), elaborate on these skills in a more intimate seminar context. Here, students analyze and present critical texts, pose questions to themselves and the group, challenge assumptions, discern relevant connections, lead discussion among peers, and compose thoughtful papers.

Critical thinking is further developed in Professional Practice (**ARCH 7040**) and Legal Aspects (**ARCH 7350**). These courses require students to comprehend the complex realities of contemporary practice. In these courses, students develop both enthusiasm for – and a healthy skepticism of – the trends and troubles they will encounter as professionals.

Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
History & Theory curriculum:	EVAR 3000/3002; 4000/4006 | ARCH 7020/7030
Professional Practice courses:	ARCH 7040/7350

A2. Research Skills

Ability to employ basic methods of data collection and analysis to inform all aspects of the programming and design process.

Research is crucial to all areas of architectural pedagogy and practice. All design studios require students to perform research in order to orient individual design directions, contextualize interests, broader horizons, and deepen explorations. All design studio students submit portfolios at the end of each term that communicate design processes, experimentation and research in connection with design outcomes. The research aspect of design is most evident in the Design Research Studio (**ARCH 7070**) and subsequent Design Thesis (**GRAD 7090**), which require substantial analytical and reflective texts, as well as bibliographies and precedent research in coordination with graphic documentation of the work.

Academic research, understood as an element of creative inquiry, is introduced in the undergraduate history and theory lecture courses (**EVAR 3000/3002**; **4000/4006**). These courses include a major research project focused on a particular built work in the fall term (worth 40%). This project requires submission of a substantial bibliography, annotated summaries of key readings (including primary and secondary texts), analysis of existing scholarship (including images), understanding of the 'world of the work,' and an original proposal for studying the work in a subsequent essay. The findings of this fall research guide the winter term essay, which must demonstrate comprehension and critical analysis of existing scholarship, as well as original insights and cogent argumentation. Students benefit from a dedicated fall term research workshop, with introductions to several databases and library resources, as well as a winter term writing workshop, which reviews citation formats and issues of clarity and creative voice. Research skills are elaborated along similar lines in the graduate history/theory seminars (**ARCH 7020/7030**).

Research is also an element of the undergraduate technology curriculum (**EVAR 3004 / 3006 / 4002 / 4008**), and Technology Thesis Report (**ARCH 7080**). These courses require submission of a research binder, which synthesizes course notes and compiles related research: code information, technical data, precedent analysis, materials data and suppliers. Advanced Technology Topics courses combine hands-on research with in-depth academic research and presentations (**ARCH 7000/7010**).

Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
History & Theory curriculum:	EVAR 3000/3002; 4000/4006 | ARCH 7020/7030
Technology Courses:	EVAR 3004/3006; 4002/4008 | ARCH 7000/7010/7080

A3. Graphic Skills

Ability to employ appropriate representational media to convey essential formal elements at each stage of the programming and design process.

Graphic skills are advanced and honed in every design studio. This is reinforced by the requirement that every student in studio must submit a portfolio at the end of term for grading purposes. Design research and process work are represented together with final designs. Students invent compelling ways of communicating iterative and analytical work. A key premise of the program is that architectural ideation happens in the act of making drawings, and in revising and elaborating drawings. In studio, drawing develops alongside models, physical and digital, as well as photography. The program embraces diverse media and encourages experimentation and hybrid forms of representation.

As a complement to Arch Studio 1 students take a dedicated Freehand/Digital drawing course (**EVAR 3014**), which introduces drawing software, drawing conventions (including plans, sections, perspective and contour drawing), as well as techniques of hand sketching and collage, shade and shadow. In 2017-18, the digital component of this course will be augmented with faculty-wide Sunday software seminars and 'Tech Tuesdays,' being coordinated jointly by the CADLab and FABLab to help students learn and trouble-shoot software. The freehand component of the course will be augmented with lessons on geometry.

Most technology courses include assignments requiring the production and interpretation of technical drawings, all of which is evident in **EVAR 3004/4002/4008** and **ARCH 7080**.

The history and theory curriculum does not require drawing production; however, its lectures develop visual literacy and skills in graphic analysis via interpretive commentary on drawings, details, and photography. These lectures also impart the critical history and theory of architectural representation. Students in our architecture program learn not only how to draw with clarity for purposes of architectural production, but how drawing can be (and has been) used as a tool of inquiry, persuasion, and speculation.

Drawing Course:	EVAR 3014
Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
Technology Courses:	EVAR 3004/4002/4008 | ARCH 7080
History & Theory curriculum:	EVAR 3000/3002; 4000/4006 | ARCH 7020/7030

A4. Verbal and Writing Skills

Ability to speak and write effectively on subject matter contained in the professional curriculum.

Writing skills are most intensely developed in the history and theory undergraduate curriculum (**EVAR 3000/3002**; **4000/4006**). These courses require weekly one-page summaries of lectures, which are graded for coherence, concision and accuracy, as well as for imparting overall understanding of the lecture content and its value. The fall term research dossier requires interpretive annotations of existing scholarship and a detailed essay proposal. The winter term essay (3500 words) demands compelling and clear argumentation. Graduate history and theory seminars (**ARCH 7020/7030**) elaborate these skills with more advanced reading materials and more student-driven research and writing assignments.

In every studio, succinct and suggestive textual explanations of design processes and results are required for portfolios. In Design Thesis, a rigorous proposal, public website and book are further required. In all of these courses, writing and verbal skills are taught, in part, via recommended readings.

Verbal skills are developed in every class requiring public presentation, notably design studios, which frequently have a variety of outside guest critics. Students regularly present their work in concise and compelling ways, balancing planned comments with extemporaneous speech. Project statements are gradually clarified and integrated in final portfolios. Design Thesis (**GRAD 7090**) is the academic culmination of public presentation in the professional curriculum. Students craft thesis proposals and abstracts, which are posted online. External examiners (typically academics and/or practitioners teaching design thesis at other North American schools) serve on juries for final thesis presentations, engaging students with challenging questions and dialogue. Graduate topics courses also develop verbal skills (**ARCH 7000/7010**; **7020/7030**). In both the Advanced Technology Topics and the History and Theory Research Topics courses, students are required to prepare and deliver seminar presentations, to pose and respond to questions, and to teach their peers about material they have independently studied. Topics courses often require final booklets with concise descriptions arguments, and citations.

Students are obliged to speak and write knowledgeably and confidently in the professional practice courses. In Professional Practice (**ARCH 7040**) students not only submit writing assignments, but also interview with prospective employers, presenting their work and inquiring about the firm. In Legal Aspects (**ARCH 7350**) students participate in moot court debates, considering – from different points of view – various ethical matters affecting architecture and the responsibilities of architects.

Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
History & Theory lecture courses:	EVAR 3000/3002; 4000/4006
Graduate Topics courses	ARCH 7000/7010; 7020/7030
Professional Practice Courses:	ARCH 7040/7350

A5. Collaborative Skills

Ability to identify and assume divergent roles that maximize individual talents, and to cooperate with others when working as members of a design team and in other settings.

In **EVAR 4004** – *Arch Tech 1: Structural and Sustainable Use of Materials*, structural modeling and building survey assignments involve groups of two. The two subsequent undergraduate technology courses include elaborate group assignments. In **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes*, students form groups to manifest a design/build project and to analyze its sustainable performance. In 2016-17, the design/build project was an insulated wood-frame skating shelter, designed a sauna. It involved all 40 ED3/AMP1 students, built in conjunction with studio (EVAR 3010). In **EVAR 4002** – *Arch Tech 3: Building Systems*, students work independently at first on a series of cumulative drawing assignments, focused on zoning; structure; lighting; and HVAC. They subsequently form groups of four to collectively develop a complete drawing set for one of the design schemes. These assignments require collaboration and teamwork, and provide opportunities for leadership.

All studios entail collaboration to some degree by dealing with shared themes, methods, sites and/or programs. Students are encouraged to offer feedback to each other and contribute to mutually supportive interactions. Several studios require students perform collective research and site analysis, and/or construct group site models. Each year, certain studio sections require group work for a portion of term.

Two examples of intense collaboration can be cited from 2016-17. 1) The undergraduate Arch Studio 2 (**EVAR 3010**) involved all 40 ED3 and AMP1 students in a design-built project (in conjunction with EVAR 3006). The project involved construction of an insulated wood-framed skating shelter for Winnipeg's Red River, as part of an annual international Warming Hut design competition. The small shelter was built in C.A.S.T. and transported to the river site. It involved industry support in the form of donated equipment and materials. (See *Carbuncle*, DoA Press, 2017). 2) The Rainbow Gardens M1 studio (**ARCH 7050**) involved 8 students and multiple community members in a design-build project to manifest a series of small structures (tool shed and toilet) for a community garden near the University campus. The design was ultimately completed and installed as part of a spring elective in May 2017 (ARCG 7070).

Technology Courses:	EVAR 3006/4002
Design Studios, especially:	EVAR 3010 (all sections) | ARCH 7050 (Coar)

A6. Human Behavior

Understanding of the relationship between human behavior, the natural environment and the design of the built environment.

Human behavior is at the core of every design project in the program. Studio topics are often framed around social practices, ranging from individual dwelling habits to community rituals. Human practices are viewed as important cultural forces, often giving rise to urban and architectural form, as in the case of market places and theatres. Inhabitation is an important topic of many studio briefs and desk reviews. Students at all levels are expected to imagine how built environments participate in lived situations; to consider the people whose lives will be impacted by a design; and to understand how architecture mediates experience. Many studios emphasize public space, and design in anticipation of many different activities, taking into account social interaction and ergonomics. Students are introduced to classics, such as William H. Whyte's *The Social Life of Small Urban Spaces.* Frequent programs investigated in design studios include: schools, parks, museums, theatres, community centers, markets, mixed-use buildings, multi-family residences, and more intimate domestic projects, all celebrating activities of daily life.

Students are encouraged to observe and imagine how others relate to a space and well as to consider their own personal involvement with and perception of a place. Studio field trips introduce students to diverse settings and people, as well as cultural events, such as festivals and indigenous practices. Studios often involve visits to local sites, tours of facilities, and related engagements with diverse individuals and groups.

The undergraduate history and theory lecture courses (**EVAR 3000/3002**; **4000/4006**) expand students' understanding of human behavior, by introducing global architectural examples in relation to their human stories and cultural practices. In some cases this involves narration of religious practices, explanations of political systems, and descriptions of social hierarchies that may be very different from our own, but which are pertinent to the architectural work and its world.

At the graduate level, students are introduced to issues of human behavior and the designed environment in the context of the History and Theory Research Topics courses (**ARCH 7020/7030**). Particular offerings may cover such issues as human perception and imagination, cognitive science, phenomenology, psychoanalysis, urban navigation and narrative, and/or urban estrangement.

Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
History/Theory lecture courses:	EVAR 3000/3002; 4000/4006
History/Theory Research Topics:	ARCH 7020/7030

A7. Cultural Diversity

Understanding of the diverse needs, values, behavioral norms, and social/ spatial patterns that characterize different cultures and individuals, as well as the implications of this diversity on the societal roles and responsibilities of architects.

Cultural diversity is explored academically through course content and experientially through interactions with the global scope of our student body as well as through participation in the wide range of local and international field trips taken in undergraduate and graduate studios. Field trip locations for the past three years have included international destinations (Mexico City, Iceland, Copenhagen, Oslo, Stockholm, the Netherlands, Berlin, Athens and other regions of Greece); various urban centers and significant rural locations in the United States (Los Angeles, New York City, Chicago, Iowa, Illinois, Nebraska, South and North Dakota, New Orleans, Arizona, Utah, and New Mexico); major cities across Canada (Montreal, Ottawa, Toronto, and Vancouver); isolated communities in northern Manitoba (Lac Brochet, Tadoule Lake, Gillam); and rural communities and regional sites in southern Manitoba and northern Ontario (Clearwater, the Assiniboine River Basin, Keewatin, and Hay Island in Lake of the Woods). Field trip destinations are selected to relate to specific cultural, geographic and/or socio-political questions orienting design studios.

Studios often deal with needs and desires of particular community groups, including rural and Indigenous communities, as well as diverse immigrant communities. Studios addressing these topics typically organize community meetings and invite members of these groups to design reviews, thus reinforcing students' awareness of their obligations to diverse cultural needs and perspectives. In 2016-17 two studios merit highlighting: the ED4 studio led by Prof. Epp on *Indigenous architecture and a new Centre for Truth and Reconciliation* (**EVAR 4004/4010**); and the M1 fall studio of Prof. Coar on *Technologies and Topographies for Social Change*, involving immigrant families from the Immigrant Integration and Farming Community Co-op, in the design-build of ancillary structures for Rainbow Gardens (**ARCH 7050**).

The history/theory lectures (**EVAR 3000/3002**; **4000/4006**) teach cultural diversity by covering global architecture and world vernacular, including building practices of Indigenous peoples. In addition to the broad scope of western architectural history, the curriculum covers non-western topics, some presented by guest lecturers. These have included dedicated lectures on Mughal, Islamic, Balinese and Japanese architecture. About 20% of the building projects selected for individual study are non-western, including works from China, Japan, Africa and Indonesia. In every lecture, architectural works are presented as human settings motivated and manifested by people in a particular time and place to accommodate cultural practices, often having deep histories. Socio-political influences on architectural intentions, and settlement patterns throughout human history in different parts of the world, are part of the curriculum.

Select graduate level topics courses also impart knowledge about human behaviour and design. The history and theory research topics tend to emphasize social factors of architectural aesthetics, including individual perception and imagination. Certain Advanced Technology Topics examine building practices of different cultures in history (including *Hands on Masonry* and *Lighting and Shadows*).

Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
History & Theory curriculum:	EVAR 3000/3002; 4000/4006
Graduate Topics courses:	ARCH 7000/7010/7020/7030

A8. History and Theory

Understanding of diverse global and local traditions in architecture, landscape, and urban design, as well as the factors that have shaped them.

Students are introduced to history and theory via the Modern and Pre-modern History and Theory of Architecture lecture courses (**EVAR 3000/3002**; **4000/4006**). All ED3/AMP1 and ED4/AMP2 students take these courses together in one large class, as pre-modern and modern architecture are taught on alternate years. The four sequential courses cover: pre-history to the early Renaissance; the Renaissance to the

Enlightenment; the Enlightenment to the early 20th century; and the early 20th century to present day. Exemplary works and texts from both western and non-western traditions are presented in detail, and in relation to architectural intentions as well as to larger cultural contexts and worldviews. Historical material is presented in ways that illuminate how they were influential to modern and contemporary works, and trans-historical questions are raised throughout the course prompting ongoing class discussions. Occasionally, the large group of 80+ students is divided into 12 groups of 6-7 students to discuss topics then report back to class. The core history/theory instructors have advanced degrees in architectural history and theory. Lectures are informed by current faculty research, unique photography, and original insights.

At the graduate level, students are required to participate in at least two Research Topics in History and Theory (**ARCH 7020/7030**). The seminar format of these courses encourages students to delve into particular texts and topics in more detail. Topics tend to place architectural questions and particular works in relation to broad domains of knowledge, including philosophy, phenomenology, psychology, aesthetics, theories of imagination, literature, social sciences, cultural history, and global politics.

At a general level, all students in the program are encouraged to examine the historical underpinnings and theoretical framing of their design projects, particularly for their Design Thesis. The topical orientation of a particular studio models and fosters such breadth and depth.

Undergraduate History & Theory courses:	EVAR 3000/3002; 4000/4006
Graduate History & Theory seminars	ARCH 7020/7030

A9. Precedents

Ability to make a comprehensive analysis and evaluation of a building, building complex, or urban space.

In the undergraduate History and Theory of Architecture courses (**EVAR 3000/3002**; **4000/4006**), students independently study a selected pre-modern and modern built work as their major course assignment. They undertake rigorous research in the fall term, including a graphic analysis of the building plan and setting, and an organized compilation of representative images. In the winter term, students write detailed essays, accompanied by relevant and revealing graphics. This submission is expected to demonstrate students' ability to 'read' a building – to understand the interrelation of plans, sections, and siting, and how these spatial and material relationships participate in the work's larger intentions and cultural purpose.

Precedents are important to architectural study at all levels of design studio. Portfolios submitted at the end of each term are expected to include precedent research and analysis as a component of the design process. In graduate studios, precedent research is required as part of a separate submission. For the fall M1 Arch Studio 5 (**ARCH 7050**), students submit a Comprehensive Program Report, which must include a section on precedent research for the building program proposed. In the fall M2 Design Research Studio (**ARCH 7070**), students submit a detailed thesis proposal, which includes a section on context and relevant precedents that inform and frame the thesis inquiry. Critical analysis of technical precedents, building details and construction methods are also a significant component of the Thesis Technology Report (**ARCH 7080**), prepared in conjunction with the Design Thesis (**GRAD 7090**).

History & Theory curriculum:	EVAR 3000/3002; 4000/4006
Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)

B1. Design Skills

Ability to apply organizational, spatial, structural, and constructional principles to the conception and development of spaces, building elements, and tectonic components.

Studios at every level cultivate design skills. While particular techniques may be taught in each studio, students are also encouraged to develop their own creative and critical approaches to design composition in relation to the particularities of a project and its circumstances. The complexity of design projects

generally increases each term; expectations for resolution and relevance likewise amplify. However, there is no fixed linear sequence to the scale or kinds of buildings students design in each studio. The studios are framed topically: instructors set forth questions and themes, which often entail particular settings and human situations. Students develop spatial and structural abilities while responding to specific studio parameters. The goal is to help students understand that design development is not simply a problem of fitting spaces of a certain size onto a given plot of land, but is motivated by larger architectural intentions and cultural situations. Together with an overall conceptual framing, most studios introduce intermediate deadlines, specific analytical exercises, and/or focus sessions dedicated to developing specific tectonic components to help ensure design skills are operating at many levels and scales simultaneously.

Technology courses at both undergraduate and graduate level teach structural principles and construction methods, which students apply and synthesize in studio designs. History and Theory courses – both the undergraduate lectures and graduate seminars – impart knowledge about spatial composition and experience via numerous architectural examples across time. These courses supplement design studios, fueling students' design skills and imagination.

Studios, all levels: EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)

B2. Program Preparation

Ability to prepare a comprehensive program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws and standards, and site selection and design assessment criteria.

Students are introduced to program preparation in each studio. Students are expected to make some programing decisions at every level and to design in response to relevant criteria. Program preparation is treated most rigorously in the graduate M1 Arch Studio 5 (**ARCH 7050**), for which students prepare a Comprehensive Program Report describing in detail the scope of work and regulatory parameters that will guide their design in the subsequent term (**ARCH 7060**). This program report is expected to outline human needs in terms of spatial configuration, environmental characteristics, equipment, design precedents, and regulations pertaining to the particular program and site. The Comprehensive Program Report is worth 20% of the fall term. As the design project develops in the winter term, the program report is refined and expanded in support of ongoing design work. Design Thesis students, depending on their individual inquiry, may include program preparation as part of their thesis proposal submitted in advance of GRAD 7090. Some ED4 studios require program preparation as part of Arch Studio 3 and/or 4 (EVAR 4004/4010).

M1 Comprehensive Studio: ARCH 7050/7060

B3. Site Design

Ability to analyze and respond to context and site conditions in the development of a program and in the design of a project.

Studios examine a wide variety of site conditions: urban, rural, natural, liminal, post-industrial and historic. While many studios have projects sited in and around Winnipeg, some work with extremes, including extreme urbanity (such as New York City) or communities in the north. Students perform interpretive site analysis, becoming familiar with the setting's physical conditions, geography and geology, its climatic situation, and its social, cultural and historical significance. Students are encouraged wherever feasible to personally experience a site at different times of the day and season. Students are expected to develop exploratory drawings and models of qualitative conditions, such as a site's sensual, psychological, and temporal dimensions and potentials. Students learn that sites inspire as much as they constrain. In the undergraduate technology courses students are introduced to the regulatory aspects of site design, including zoning, setbacks, soils, foundations, and accessibility (**EVAR 3006/4002/4008**). Graduate students demonstrate their understanding of factors influencing site design in their Comprehensive

Program Reports. In the winter term ED4 and M1 studio (**EVAR 4010** and **ARCH 7060**) students are required to extend their designs well beyond building footprints and property lines.

Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
Undergraduate Tech courses:	EVAR 3006/4002/4008
Comprehensive Design Studios:	EVAR 4010 | ARCH 7060

B4. Sustainable Design

Ability to apply the principles of sustainable design to produce projects that conserve natural and built resources, provide healthy environments for occupants/users, and reduce the impacts of building construction and operations on future generations.

Sustainability is directly addressed in the undergraduate technology courses. In **EVAR 3004** – *Arch Tech 1: Structural and Sustainable Use of Materials* – lectures cover sustainable material selection and high efficiency structures, as well as sustainable systems, passive energy, and energy conservation. In **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes* – students are introduced to the LEED rating system; passive design strategies; material harvesting and life cycle costing; thermal insulation and building envelopes; and energy efficiency in small buildings, together with relevant sections of the Manitoba Energy Code for Buildings. Students are taught to interpret performance ratings of windows, and to do thermal calculations of wall assemblies. In 2016-17, students in EVAR 3006 carried out a sustainable analysis of the completed design-build project manifested in conjunction with Arch Studio 2 (**EVAR 3010**). This wood-framed sauna/skating shelter integrated a stove burning eco-friendly fuel pellets (made of readily available local plant material). All ED3 students participated in designing, building and evaluating this "Warm Hut," which was installed at the Forks, as part of an international design competition (see *Carbuncle*, DoA Press, 2017). In 2016-17, sustainability was the focus of an Advanced Technology Topics course, *Design: Passive Energy Systems* (**ARCH 7000**), which explored the principles, strategies and solutions for passive energy systems in contemporary architecture. Other Advanced Technology Topics provide opportunities for in-depth study and hands-on experimentation with sustainable lighting, building orientation, and envelope design (*Lighting & Shadows* and *Hands on Masonry*).

All design studios integrate sustainability in a holistic way by encouraging responsible building siting, adaptive reuse, intelligent material selection and reclamation, and integration of passive technologies. Integration of environmental systems is especially evident in the winter Arch Studio 4, with its supporting technology component (**EVAR 4010/4008**), and the M1 comprehensive design studio (**ARCH 7060**).

The history/theory curriculum imparts lessons in sustainability by emphasizing fundamental sympathies between architectural constructs, regional conditions and worldly phenomena. Such sympathy was definitive of pre-modern world views (covered by **EVAR 3000/3002**), and sought by some exemplary modern architects, such as those examined in *Lessons From Modernism: Environmental Design Considerations in 20th Century Architecture, 1925-1970* (Monacelli Press, 2013), which is part of the undergraduate syllabus (**EVAR 4000/4006**).

B5. Accessibility

Ability to design both sites & buildings to accommodate individuals with varying physical & cognitive abilities.

Barrier-free design is introduced in **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes*, where it is the focus of a special lecture and workshop. In this session students learn about universal design principals and concepts, and participate in an experiential lab deploying navigational exercises in a wheelchair and simulating impaired sight. Students design wheelchair accessible washrooms according to Section 3.8 of the National Building Code and map out a temporary full-scale mock up. Students 'use' this washroom, navigating it in a wheelchair to experience what the minimum requirements offer. This session is led by Dr. Shauna Mallory-Hill, Assistant Professor in Interior Design. Expanding on this introductory knowledge, in **EVAR 4002** – *Arch Tech 3: Building Systems*, students design universally

accessible washrooms and site access according to code as part of a drawing assignment for a mid-sized commercial building. Designing for accessibility is reinforced in **EVAR 4008** – *Arch Tech 4 Comprehensive Design Technology Report*, for which students prepare constructions drawings, including accessibility details, for their own projects in Design Studio 4 (**EVAR 4010**). The M1 Comprehensive Program Report (**ARCH 7050**) requires awareness of accessibility, and the Comprehensive Design Studio (**ARCH 7060**) requires accessibility be integrated with the design. Thesis students designing public buildings are expected to provide universal accommodations.

Undergraduate Technology Courses:	EVAR 3006/4002/4008
Undergraduate ED winter studio:	EVAR 4010
Graduate M1 Comprehensive Design Studio:	ARCH 7060

B6. Life Safety Systems, Building Codes and Standards

Understanding the principles that inform the design and selection of life- safety systems in buildings and their subsystems; the codes, regulations, and standards applicable to a given site and building design project, including occupancy classifications, allowable building heights and areas, allowable construction types, separation requirements, occupancy requirements, means of egress, fire protection, and structure.

Building codes, standards and life safety systems are taught in the undergraduate technology curriculum, and reinforced in the graduate M1 studios and Thesis Technology Report. Each technology course introduces building materials, assemblies and systems in conjunction with relevant codes and standards.

The sequence of four undergraduate tech courses are designed to cultivate progressive understanding of building regulations, moving from introductory lessons, to dedicated assignments, to integration of applicable codes and standards in the students' own design projects. In **EVAR 3004** – *Arch Tech 1: Structural and Sustainable Use of Materials,* students are introduced to regulatory agencies and guidelines for specific materials and assemblies, including fire-safety and engineering standards in structural steel design. In **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes,* students are introduced to Part 3 of the National Building Code (on fire protection, occupant safety and health requirements, accessibility), as well Part 9 (on housing and small buildings), including 9.36 on energy efficiency. Dedicated assignments and in-class workshops involving lectures, case studies, calculations and analysis cultivate understanding of the regulations covered in these sections, as well as the history and reasoning behind them. In **EVAR 4002** – *Arch Tech 3: Building Systems,* students apply their knowledge of regulations by working individually then in groups to design a mid-sized commercial building (with a given program and site) in compliance with all applicable codes, standards and life safety. Students perform a code analysis, calculate the occupant load of each floor, describe the egress system, locate fire safety features, and identify plumbing and accessibility requirements. In **EVAR 4008** – *Arch Tech 4 Comprehensive Design Technology Report,* students advance their understanding of codes, standards and life safety systems by resolving their own design studio project in compliance with applicable regulations.

In the graduate M1 fall studio (**ARCH 7050**), students prepare a Comprehensive Building Program Report, which describes a building proposal to be developed in the winter term and outlines the applicable regulations for the particular site, program, and anticipated construction assemblies and building systems. The report entails substantial research compiled into a binder. This document frames the comprehensive building design completed in the winter term studio (**ARCH 7060**), for which students complete a compliant set of construction drawings in addition to a design portfolio.

For the Thesis Technology Report (**ARCH 7080**), students focus on a particular technical aspect of their thesis project. They are expected to demonstrate knowledge of applicable regulations in this area.

Undergraduate Technology Courses:	EVAR 3004/3006/4002/4008 (in conjunction with 4010)
Graduate M1 Comprehensive Design Studios:	ARCH 7050/7060
Graduate M2 Thesis Technology Report:	ARCH 7080

B7. Structural Systems

Understanding of the principles of structural behavior in withstanding gravity and lateral forces, and the evolution, range and appropriate applications of structural systems.

The principles of structure are the focus of **EVAR 3004** – *Arch Tech 1: Structural and Sustainable Use of Materials*. Students are introduced to the structural behavior of different materials as well as the principles of statics. In **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes*, students study various construction assemblies, learning about both structural and thermal performance. In **EVAR 4002** – *Arch Tech 3: Building Systems,* students select a structural system and apply its principles in the course of designing a mid-sized building. Working individually, then in small groups, students learn to integrate structure with envelope assemblies and building systems. In **EVAR 4008** – *Arch Tech 4 Comprehensive Design Technology Report,* students design structural systems for their own studio projects (**EVAR 4010**).

Students gain awareness of structural systems in undergraduate studios (EVAR 3008, 3010, 4004). In Arch Studio 1 and 2, students typically engage hands-on experimentation with large-scale modeling and construction methods to learn about structure in relation to gravity, lateral forces and material behavior. Selecting and elaborating a structural system is a core component of the ED4 Arch Studio 4 and the M1 Arch Studios 5 and 6 (**ARCH 7050/7060**), as well as the M2 Design Thesis (**GRAD 7090**), in coordination with the Technology Thesis Report (**ARCH 7080**).

Undergraduate Technology Courses:	EVAR 3004/3006/4002/4008
Undergraduate Studios:	EVAR 3008/3010/4004/4010
Graduate M1 Comprehensive Design Studios:	ARCH 7050/7060
Graduate M2 Thesis & Technology Report:	GRAD 7090/ARCH 7080

B8. Environmental Systems

Understanding of the basic principles that inform the design of environmental systems, including acoustics, illumination and climate modification systems, building envelopes, and energy use with awareness of the appropriate performance assessment tools.

Students learn about environmental systems in the undergraduate technology curriculum. **EVAR 3004** – *Arch Tech 1: Structural and Sustainable Use of Materials* introduces passive energy systems and sustainability in material selection, and examines how design impacts thermal comfort and building energy performance. **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes* provides dedicated lectures on energy performance and acoustic ratings (STC) of wall assemblies and windows, with dedicated assignments on performance assessment tools. **EVAR 4002** – *Arch Tech 3: Building Systems* includes lectures on heating, cooling, and ventilation, as well as lighting systems, electrical, and plumbing. The main assignment requires students to integrate HVAC systems in the design of a basic mid-size building. **EVAR 4008** – *Arch Tech 4 Comprehensive Design Technology Report* advances student understanding of acoustics, illumination, climate, energy and building envelopes by requiring a comprehensive set of construction drawings for the project they are developing in their ED4 studio (**EVAR 4010**). The M1 Arch Studio 6 Comprehensive Design Studio (**ARCH 7060**) also requires students to integrate environmental systems with their design. Depending on the focus and inquiry of individual thesis students, understanding of environmental systems may also be demonstrated in the Thesis Technology Report (**ARCH 7070**).

Undergraduate Technology Courses:	EVAR 3004/3006/4002/4008 (in conjunction with 4010)
Graduate M1 Comprehensive Design Studio:	ARCH 7060

B9. Building Envelopes

Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

Undergraduate students are introduced to building envelopes, together with their materials, properties and performance, in **EVAR 3004** – *Arch Tech 1: Structural and Sustainable Use of Materials*. Students are further exposed to the specifics of building envelope systems through a series of lectures and assignments in **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes*. This course specifically addresses construction assemblies in relation to programmatic, climactic, and environmental conditions, introducing issues of dew point, thermal bridging, durability, insulation, humidity control, sound control, natural and artificial light, and other performance factors. In **EVAR 4002** – *Arch Tech 3: Building Systems*, students prepare a cumulative drawing assignment for which they apply their knowledge of building envelopes to the design of a mid-sized building. In **EVAR 4008** – *Arch Tech 4 Comprehensive Design Technology Report,* students develop the building envelope design for their own design studio project in Arch Studio 4 (**EVAR 4010**).

Every architecture studio fosters understanding of building envelopes. Some studios engage hands-on building to cultivate experiential understanding; others pursue research of advanced technologies to push the limits of envelopes as environmentally responsive skins and/or culturally reflexive surfaces. At the graduate level, the M1 Comprehensive Design Studio (**ARCH 7060**) and the Design Thesis Technology Report (**ARCH 7070**) set high expectations for students to apply knowledge of envelope performance to original designs.

Advanced Technology Topics courses (**ARCH 7000/7010**) also meet this criteria, by requiring in-depth research on particular envelop systems, including award-winning precedents, and in some cases hands-on full-scale building.

Undergraduate Tech Courses:	EVAR 3004/3006/4002/4008 (in conjunction with 4010)
Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
Advanced Technology Topics:	ARCH 7000/7010

B10. Building Service Systems

Understanding of the basic principles that inform the design of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection systems.

Building service systems are introduced in **EVAR 4002** – *Arch Tech 3: Building Systems*. There are dedicated lectures on fire protection, heating systems integration, electrical and plumbing systems, lighting and acoustics, and vertical transportation. Lectures are augmented with local site visits to see these systems in buildings that are under construction and/or recently completed. The major cumulative assignment in this class requires integration of systems into the design of a mid-sized building. In **EVAR 4008** – *Arch Tech 4: Comprehensive Design Technology Report,* students expand on this knowledge by integrating these systems with the design of their studio project for EVAR 4010.

M1 students in Arch Studio 5 (**ARCH 7050**) must demonstrate awareness of building service systems as part of their Comprehensive Program Report. In the Comprehensive Design Studio (**ARCH 7060**), these systems are integrated with their overall design.

Arch Tech 3 and 4:	EVAR 4002/4008
M1 studios	ARCH 7050/7060

B11. Building Materials and Assemblies

Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance.

The undergraduate technology courses foster understanding of building materials and assemblies in a cumulative manner. **EVAR 3004** – *Arch Tech 2: Structural and Sustainable Use of Materials* introduces the importance of appropriate material selection, application and assembly, as well as the structural behavior

of wood, steel, concrete, masonry and composite systems. In **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes*, material assemblies are studied for their weatherproofing properties, thermal, acoustic and sustainable performance. In **EVAR 4002** – *Arch Tech 3: Building Systems,* students make material and assembly choices in the design and evaluation of a mid-sized building. For **EVAR 4008** – *Arch Tech 4 Comprehensive Design Technology Report,* students choose materials and design assembly systems for their own design studio project in Arch Studio 4 (**EVAR 4010**).

The M1 and M2 graduate studios cultivate knowledge of building materials and assemblies, especially by encouraging more independent research and experimentation in relation to original designs. The most rigorous evidence of this may be found in the Comprehensive Design Studio, Arch Studio 6 (**ARCH 7060**), and Design Thesis (**GRAD 7090**) in conjunction with the Technology Thesis Report (**ARCH 7080**).

In the Advanced Technology Topics (**ARCH 7000/7010**) students have opportunities to explore new and traditional materials and assemblies in significant depth.

Design Studios, all levels:	EVAR 3008/3010; 4004/4010 | ARCH 7050/7060/7070/GRAD 7090 (Design Thesis)
Undergraduate Tech Courses:	EVAR 3004/3006/4002/4008 (in conjunction with 4010)
Advanced Technology Topics:	ARCH 7000/7010

B12. Building Economics and Cost Control

Understanding of the fundamentals of development financing, building economics, construction cost control, and life-cycle cost accounting.

All design studios discuss the efficient use of materials, the appropriateness and longevity of construction assemblies, the lasting value of buildings to communities who use them, and the economic effects and limiting parameters of architectural development with respect to urban and natural environments.

Students are introduced to building economics, cost control and life-cycle costing in the undergraduate course **EVAR 4008** - *Arch Tech 4 Comprehensive Design Technology Report.*

At the graduate level, this SPC is covered in detail in **ARCH 7040** Professional Practice. This M1 course has dedicated lectures on financial management; architecture services and fees; cost planning and control; development financing; building economics; construction cost control; and life cycle cost accounting. This course also has a construction cost estimation assignment (worth 25%) to cultivate and test student understanding of these areas.

Arch Tech 4:	EVAR 4008
Professional Practice:	ARCH 7040

C1. Detailed Design Development

Ability to assess and detail, as an integral part of the design, appropriate combinations of building materials, components, and assemblies.

Detailed design development begins in the Arch Studio 1 with small-scale building projects and building component designs. All subsequent studios cultivate ability to develop construction details as integral to and generative of design. At the undergraduate level, students demonstrate ability to bring their design projects to a high degree of detailed resolution in Arch Studio 4 (**EVAR 4010**), supported by Arch Tech 4 (**EVAR 4008**). At the graduate level, students meet this criteria in the M1 winter Comprehensive Design Studio (**ARCH 7060**) and the Design Thesis Technology Report (**ARCH 7080**). Advanced Technology Topics courses also develop understanding and, in some cases, ability in this area via in-depth research and/or hands-on experience building and designing construction details.

Arch Studio 4 & Arch Tech 4:	EVAR 4010/4008
M1 Comprehensive Studio:	ARCH 7060.
Design Thesis & Thesis Tech Report:	GRAD 7090/ARCH 7080

C2. Building Systems Integration

Ability to assess, select, and integrate structural systems, environmental systems, life safety systems, building envelopes, and building service systems into building design.

Building systems are introduced via lectures and site visits in **EVAR 4002** – *Arch Tech 3: Building Systems*, as well as through a cumulative set of drawing exercises requiring systems integration in the design of a mid-sized building, the site and program of which are given. Building systems are reviewed in **EVAR 4008** – *Arch Tech 4: Comprehensive Design Technology Report*. The major assignment for this course is designed to allow students to advance their understanding in this area by integrating structural, environmental, life safety, and service systems into their concurrent studio design (**EVAR 4010**).

At the graduate level, M1 students in **ARCH 7050** demonstrate understanding of building service systems as part of their Comprehensive Program Report. In the subsequent Comprehensive Design Studio (**ARCH 7060**), students are expected to integrate systems as part of their overall design. Ability of this is demonstrated through their design portfolio in combination with required construction drawings. Thesis Technology Reports may demonstrate building systems integration, depending on the student's technical focus and overall thesis inquiry.

Arch Tech 3 and 4:	EVAR 4002/4008
M1 studios	ARCH 7050/7060

C3. Technical Documentation

Ability to make technically precise descriptions and documentation of a proposed design for purposes of review and construction.

Technically precise representation skills and conventions of architectural drawing are introduced in the ED3/AMP1 Drawing Course (**EVAR 3014**) and Arch Studio 1. Students refine these skills throughout the program, to be most rigorously deployed in Design Thesis (**GRAD 7090**) and the corresponding Technology Thesis Report (**ARCH 7080**). For undergraduate studios, expectations for technical resolution are generally higher in the winter term. For graduate studios, technically precise documentation of design processes and resolutions are expected in both terms.

All undergraduate technology courses require technical drawings, as part of tests, assignments, and/or major submissions of complete construction document sets: **EVAR 3004/3006/4002/4008**. Assignments are designed to develop understanding of the importance of drawing clarity and to develop abilities in communicating constructability.

Advanced Technology Topics courses may require detailed analysis and/or production of technical documentation, including the study of building details from other cultures and climates.

Drawing Course:	EVAR 3014
Design Studios, all levels:	EVAR 3010; 4004/4010 | ARCH 7050/7060
Technology Courses:	EVAR 3004/4002/4008
Thesis and Thesis Tech	GRAD 7090/ARCH 7080

C4. Comprehensive Design

Ability to project a comprehensive design based on an architectural idea, a building program and a site. The design or designs should integrate structural and environmental systems, building envelopes, building assemblies, life-safety provisions, and environmental stewardship.

The M1 winter term studio – **ARCH 7060** satisfies comprehensive design. In this studio, students make use of their Comprehensive Program Report and other design research prepared in the fall (ARCH 7050). Students typically design a mixed-use cultural institution for a contextually complex site. The specific programmatic direction and scope are established in relation to the studio theme. To help ensure students

are proceeding in a logical sequence of design development and resolution, M1 studio instructors organize a series of pertinent lectures and site visits, shared across the three studio sections. These lectures address issues of site design, structure, building envelope, environmental systems, life-safety, and technical documentation. There is also a shared hand out, specifying deliverables and requirements for final drawing sets.

Arch Studio 4 (**EVAR 4010**), supported by Arch Tech 4: *Comprehensive Design Technology Report* (**EVAR 4008**) aims to also satisfy comprehensive design. For the Tech class, students detail their developing studio design. A full drawing set is required, including technical documentation of structure, the building envelop, environmental systems integration, life safety and accessibility.

M1 winter studio:	ARCH 7070
ED4 winter studio, w/ Arch Tech 4	EVAR 4010/4008

D1. Leadership and Advocacy

Understanding of the techniques and skills for architects to work collaboratively with allied disciplines, clients, consultants, builders, and the public in the building design and construction process, and to advocate on environmental, social, and aesthetic issues in their communities.

Leadership and advocacy is taught generally in studio, whereby students must present their designs publicly and advocate for particular decisions and design directions based on merits of the idea and the potential benefits to specific user groups and/or society at large. Students in Design Thesis (**GRAD 7090**) are especially expected to lead architectural discourse on matters of cultural relevance, not only among peers, but also within the broader design community. In recent years, the provocative ideas and research of Design Thesis students has been featured in local news media; in University-wide public speaking competitions; and in the Faculty's Cultural Events lecture series (see Aaron Pollock in "Reinventing the downtown Bay [Building]," *Winnipeg Free Press*, June 17, 2017; Sakshi Misra, "Architecture as Stage, Choreographer and Performer," UM 3-minute Thesis finalist, Feb. 2016; Food for Thought, Emily Bews and Erik Arnason, Nov. 24, 2016). Individual thesis advisors, the thesis coordinator, and the Department in general encourage and support such public presentations, leadership and advocacy initiatives.

Most specifically, students learn how to advocate for their profession in the **ARCH 7040** – Professional Practice. Specific lectures and assignments teach students the importance of a professional profile, not just as a marketing tool but also as a mechanism to communicate design values. This course cultivates a critical understanding of design culture. Students are taught that, as professionals, they will be called up to take a stand on social, environmental and global matters. Students further consider the legal, moral and philosophical grounds of public advocacy in **ARCH 7350** – Legal Aspects of Architectural Practice.

Design Thesis	GRAD 7090
Professional Practice Courses:	ARCH 7040/7350

D2. Ethics and Professional Judgment

Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

Issues of ethics are implicit in nearly every course of the curriculum, as most design contexts require responsible judgment based on careful deliberation of complex circumstances and conflicting interests. The ethical dimensions of architectural decision-making are specifically addressed in **ARCH 7350** – Legal Aspects of Architectural Practice. A portion of this course is devoted specifically to ethics, taught by a professor of Philosophy and member of the University's Centre for Professional and Applied Ethics. This instructor in 2017-18, Arthur Schafer, is also eminent spokesperson for ethics at the national level.

Professional Practice Courses:	ARCH 7040/7350

D3. Legal Responsibilities

Understanding of the architect's responsibility to the client and the public under the laws, codes, regulations and contracts common to the practice of architecture in a given jurisdiction.

Legal responsibilities of the architect are discussed and tested in **ARCH 7040** – Professional Practice and **ARCH 7350** – Legal Aspects of Architectural Practice. The Legal Aspects course has dedicated lectures on the Canadian legal system and principles of contract law; architect-client contracts; issues of negligence, professional liability, insurance and risk management; the Builders liens act; and the Architect's Act. General understanding of the architect's responsibilities with respect to Canadian law is tested in a final exam. A practicing lawyer with expertise in construction litigation teaches the Legal Aspects course. The Professional Practice course discusses numerous aspects of practice in relation to building regulations and authorities having jurisdiction. Questions concerning these areas are part of a final exam.

Building codes, regulatory measure, municipal policies and other legal parameters affecting architecture are aspects of several building technology courses. **EVAR 3006** – *Arch Tech 2: Building Construction, Structures and Envelopes* covers Part 9 of the National Building Code as well as the National Energy Code; **EVAR 4002** requires code analysis as part of a cumulative contract document drawing assignment for a mid-sized commercial building. The requirements for **EVAR 4008** – *Arch Tech 4: Comprehensive Design Technology Report*, as well **ARCH 7060** Arch Studio 6, the M1 Comprehensive Design Studio, foster understanding of building laws, codes and regulations in order to make appropriate design decisions.

Professional Practice Courses:	ARCH 7040/7350
Technology Courses:	EVAR 3006/4002/4008
M1 Arch Studio 5:	ARCH 7050

D4. Project Delivery

Understanding of the different methods of project delivery, the corresponding forms of service contracts, and the types of documentation required to render competent and responsible professional service.

Project delivery is primarily taught in **ARCH 7040** – Professional Practice and **ARCH 7350** – Legal Aspects of Architectural Practice. Professional Practice includes a dedicated lecture on types of project delivery, as well as a case study assignment examining different practice types. Several aspects of contracts and professional service are also covered in lectures and tested on a final exam. The Legal Aspects course covers project delivery, especially service contracts, conditional contracts, and principles of contract law. The architecture program expects a high degree of professionalism from all students and instructors, and thus aims to model the obligations for competent and responsible service throughout the curriculum.

Professional Practice Courses:	ARCH 7040/7350

D5. Practice Organization

Understanding of the basic principles of practice organization, including financial management, business planning, marketing, negotiation, project management, risk mitigation and as well as an understanding of trends that affect practice.

Students learn about practice organization primarily in **ARCH 7040** – Professional Practice. Course lectures are organized to address the various aspects of running a successful practice. Assignments are designed to familiarize students with the Canadian Handbook of Practice for Architects, and to encourage study of trends in the field. This course is taught by a licensed principle of an active architectural practice. In this course, students meet other architects and active practitioners in the context of guest presentations and via a mock interview assignment, for which students visit an architectural firm and discuss both their portfolio and the firm's work and structure.

Professional Practice:	ARCH 7040

D6. Professional Internship

Understanding of the role of internship in professional development, and the reciprocal rights and responsibilities of interns and employers.

Students become knowledgeable about the role of internship in **ARCH 7040** – Professional Practice. This topic is discussed in a number of lectures. As a required part of this course, students also visit the offices of the Manitoba Association of Architects, where they participate in a focused information session led by the MAA Executive Director. The session covers: regulatory issues, the Canadian Experience Record Book, as well as rights and responsibilities of interns, mentors and employers. Internship is also discussed in many forums outsides the required curriculum, including the annual Meet and Greet event between students and professionals, and in the context of design studio reviews, especially where professionals serve as guest critics.

Professional Practice:	ARCH 7040

Architecture Program

3.12 Matrix Student Performance Criteria

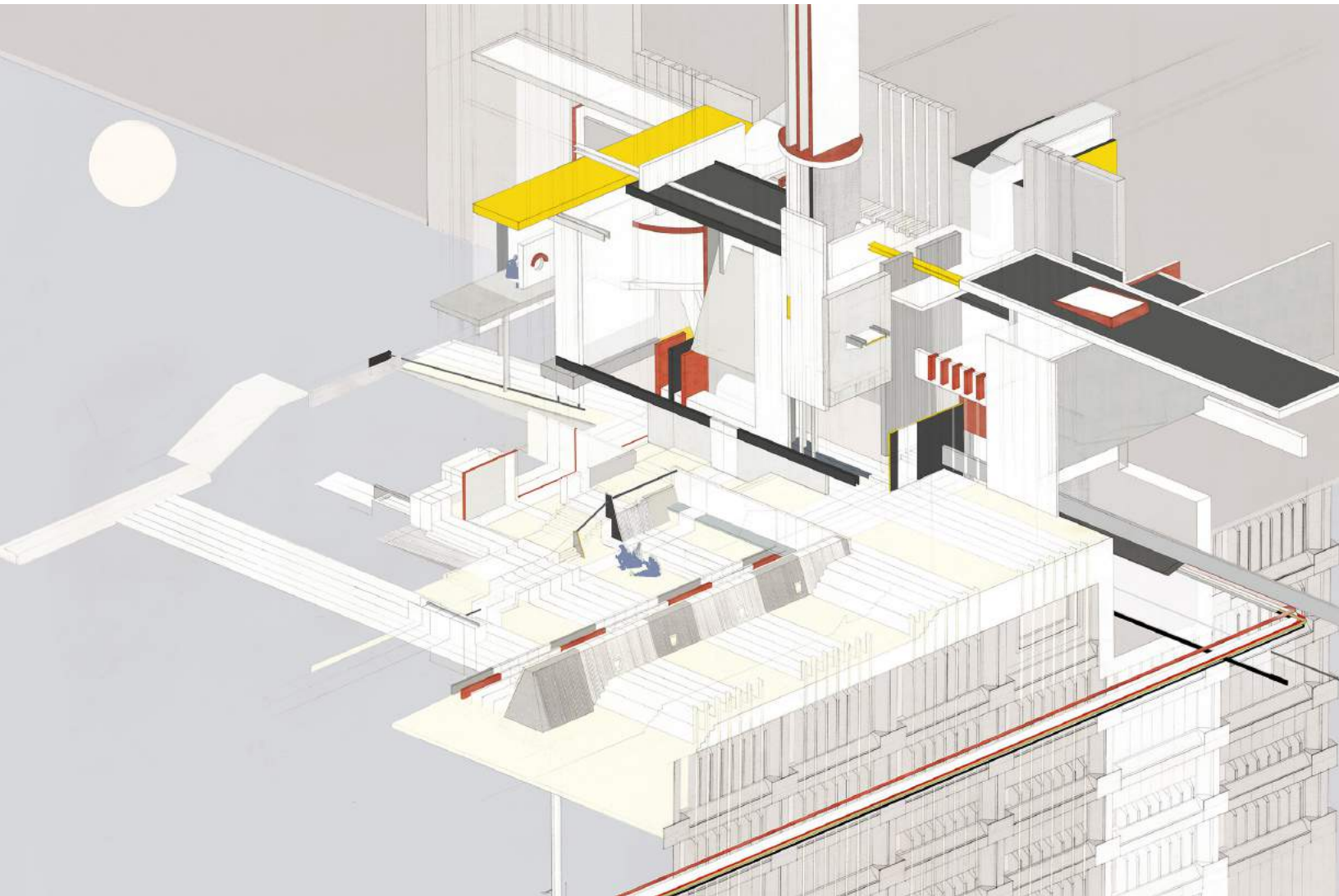
A = **A**bility
U = **U**nderstanding

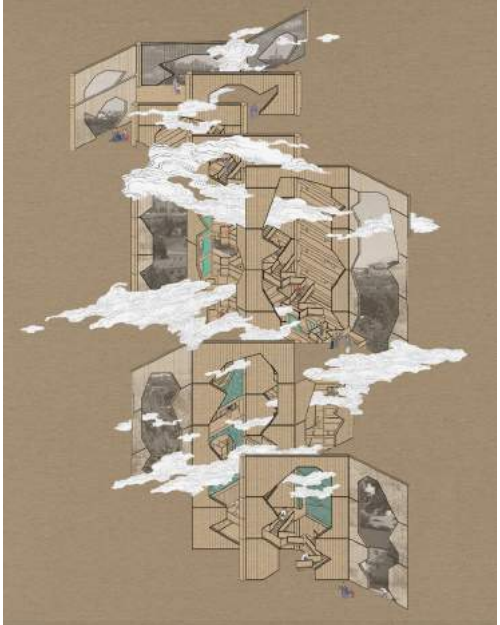
CURRICULUM AREAS:
- DRAWING
- DESIGN STUDIO
- TECHNOLOGY
- HISTORY & THEORY
- PROFESSIONAL PRACTICE
- ELECTIVES / GENERAL STUDIES

■ SPC met
□ SPC introduced/partially met

Level Required	Student Performance Criteria:	ED1/2 & ED2	ED3 – Architecture Option / AMP 1							ED4 – Architecture Option / AMP 2							M.Arch 1								M.Arch 2					
		2-years Foundation Studies (not applicable for SPCs)	Drawing - Freehand/Digital	Arch Studio 1	Arch Studio 2	Arch Tech Prep: Structural Concepts (AMP students only)	Arch Tech 1 - Structural & Sustainable Use of Materials	Arch Tech 2 - Building Construction, Structures, Envelopes	Pre-Modern Architecture History and Theory 1	Pre-Modern Architecture History and Theory 2	Arch Studio 3	Arch Studio 4	Arch Tech 3 - Building Systems	Arch Tech 4 - Comprehensive Design Technology Report	Modern Architecture History and Theory 1	Modern Architecture History and Theory 2	Arch Studio 5 & Comprehensive Program Reprt	Arch Studio 6 Comprehensive Design Studio	Advanced Technology Topics 1	Advanced Technology Topics 2	Research Topics: History and Theory 1	Research Topics: History and Theory 2	Professional Practice	Legal Aspects	Design Research Studio	Design Thesis	Technology Thesis Report	Elective, or Adv.Tech & Research Topics	Elective, or Adv.Tech & Research Topics	
		9cr.	3cr.	9cr.	9cr.	3cr.	3cr.	3cr.	3cr.	3cr.	9cr.	9cr.	3cr.	3cr.	3cr.	3cr.	9cr.	9cr.	1.5cr.	1.5cr.	1.5cr.	1.5cr.	3cr.	3cr.	9cr.	0cr.	3cr.	3cr.	3cr.	
		EVDS varies	EVAR 3014	EVAR 3008	EVAR 3010	EVAR 3012	EVAR 3004	EVAR 3006	EVAR 3000	EVAR 3002	EVAR 4004	EVAR 4010	EVAR 4002	EVAR 4008	EVAR 4000	EVAR 4006	Varios	ARCH 7050	ARCH 7060	ARCH 7000	ARCH 7010	ARCH 7020	ARCH 7030	ARCH 7040	ARCH 7350	ARCH 7070	GRAD 7090	ARCH 7080	Varies	Varies	
	A: CRITICAL THINKING & COMMUNICATION																													
A	A1: Critical Thinking Skills			□	■				■	■	■	■			■	■		■	■	■	■	■	■	■	■	■	■			A1
A	A2: Research Skills			□	□		□	□	■	■	■	■	□	□	■	■		■	■	□	□	■	■			■	■	■			A2
A	A3: Graphic Skills		■	■	■		■	■			■	■	■	■				■	■							■	■	■			A3
A	A4: Verbal and Writing Skills			□	■				■	■	■	■			■	■		■	■	■	■	■	■	■	■	■	■	■			A4
A	A5: Collaborative Skills				■		□	■					■																		A5
U	A6: Human Behaviour			□	■				■	■	□	■			■	■		■	■			■	■			■	■				A6
U	A7: Cultural Diversity								■	■	□	■			■	■		■	■			■	■			■	■				A7
U	A8: History and Theory								■	■					■	■						■	■								A8
A	A9: Precedents			□	□				■	■	□	□			■	■		■	■	■	■	■	■			■		■			A9
	B: DESIGN & TECHNICAL SKILLS																													
A	B1: Design Skills			□	■						■	■	□	■				■	■	□	□					■	■	■			B1
A	B2: Program Preparation			□	□						□	□						■	■							□	□				B2
A	B3: Site Design			□	□			□			□	■	□	■				□	■							■	■	□			B3
A	B4: Sustainable Design			□	□		□	■			□	■	■	■				■	■	□	□					■	■	■			B4
A	B5: Accessibility							□				□	□	■				□	■								□	□			B5
U	B6: Life-Safety Systems, Bldg.Codes & Standards						□	■				□	■	■				□	■	□	□						□	■			B6
U	B7: Structural Systems			□	□	□	■	■			□	■	■	■				□	■	□	□						■	■			B7
U	B8: Environmental Systems				□		□	■			□	■	■	■				□	■	□	□						□	□			B8
U	B9: Building Envelopes				□	□	□	■			□	■	■	■				□	■	□	□						■	■			B9
U	B10: Building Service Systems											□	■	■				□	■	□	□						□	□			B10
U	B11: Building Materials and Assemblies			■	■	□	■	■			■	■	■	■				■	■	■	■					■	■	■			B11
U	B12: Building Economics and Cost Control													□										■							B12
	C: COMPREHENSIVE DESIGN																													
A	C1: Detailed Design Development				□						□	■	□	■				□	■	□	□					□	■	■			C1
A	C2: Building Systems Integration											□	□	■				□	■	□	□						□	□			C2
A	C3: Technical Documentation				□		□	□				□	□	■				□	■	□	□						■	■			C3
A	C4: Comprehensive Design											□		□				□	■								□	□			C4
	D: LEADERSHIP & PRACTICE																													
U	D1: Leadership and Advocacy																							■	■	□	■				D1
U	D2: Ethics and Professional Judgment																							■	■						D2
U	D3: Legal Responsibilities																							■	■						D3
U	D4: Project Delivery																							■							D4
U	D5: Practice Organization and Management																							■							D5
U	D6: Professional Internship																							■							D6

4 Supplemental Information





4 Supplemental Information

4.1 Introduction to the Institution and Program History
4.2 Student Progress Evaluation
4.3 Current Course Descriptions
4.4 Current Faculty Resumes
4.5 Visiting Team Report from the Previous Visit
4.6 Annual Reports Appendix

4 Supplemental Information

4.1 Introduction to the Institution & Program History

The appendix of the APR must provide a brief history and description of the institution, in which the program exists, as well as the institution's current mission statement and the date of its adoption or last revision. This could be provided as a web link.

4.1.1 HISTORY, DESCRIPTION, AND MISSION OF THE INSTITUTION

Traditional Territories Acknowledgement

The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Métis Nation.

We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of reconciliation and collaboration.

– http://umanitoba.ca/admin/indigenous_connect/5728.html
(accessed June 24, 2017)

History of the University of Manitoba

The University of Manitoba was established in 1877 to confer degrees on students graduating from its three founding colleges - St. Boniface College, St. John's College, and Manitoba College. The University was the first to be established in western Canada.

In 1900 the Manitoba legislature changed the University Act so that the university could do its own teaching, and in 1904 a building in downtown Winnipeg became the first teaching facility with a staff of six professors, all of whom were scientists. By 1929, following the addition of more programs, schools, and faculties, the University had moved to its permanent home in Fort Garry.

From its founding until the present time, the University has added a number of colleges to its corporate and associative body. In 1882 the Manitoba Medical College, which had originally been founded by some practicing physicians and surgeons, became a part of the University. Other affiliations followed: Methodist Church's Wesley College in 1888; Manitoba College of Pharmacy in 1902; Manitoba Agriculture College in 1906; St. Paul's College in 1931; Brandon College in 1938; St. Andrew's College, established to train the ministry for the Ukrainian Greek Orthodox Church, became an affiliated College in 1981.

In 1967 two of the colleges that had been part of the University of Manitoba were given university status by the provincial government. United College, which had been formed by the merging of Wesley College and Manitoba College, became the University of Winnipeg, and Brandon College became Brandon University.

St. Boniface College and St. John's College, two of the founding colleges, are still part of the University of Manitoba. St. Boniface College, the Roman Catholic institution which traces its beginnings back to 1818 and the earliest days of the Red River settlement, is the University's only French-speaking college; it offers instruction in French and facilities for the training of teachers who expect to teach in the French language. St. John's College, which dates back to 1820, offers instruction in Arts and Science and amoung other special programs prepares men and women for the ordained ministry of the Anglican Church.

Thirty-three of the many buildings on the Fort Garry campus of the University of Manitoba are directly used for teaching. Four of these are the homes of colleges: St. John's College, St. Paul's College, St. Andrew`s College, and University College. The remaining buildings contain special laboratories, administrative and service offices, residences, or they belong to research agencies.

The second campus of the University comprises a complex of nine buildings located west of the Health Sciences Centre between McDermot Avenue and Bannatyne Avenue in Central Winnipeg. This complex houses the medical and dental instructional units of the University. The Faculty of Dentistry, the Faculty of

Medicine, the School of Medical Rehabilitation, and the School of Dental Hygiene are the major health sciences units located on this campus.

– http://www.umanitoba.ca/about/history.html (accessed June 24, 2017)

A chronological history of the University of Manitoba is provided on the UM Libraries website http://libguides.lib.umanitoba.ca/archives/umanitobahistory/timeline

About the University of Manitoba

Founded 140 years ago, and located in the heart of the country, we are the region's largest and only research intensive university offering over 100 academic programs, including professional disciplines such as medicine, law and engineering.

Our energetic university community is comprised of close to 30,000 students, over 8,900 faculty and staff, and 138,000 alumni in 137 countries. Over 16% of our current students are international, representing 115 countries.

The University of Manitoba is located on Anishinabe and Metis traditional land and is home to a thriving community of Indigenous researchers, staff and more than 2,000 First Nations, Metis and Inuit students, including over 3,580 graduate students — one of the largest Indigenous student bodies in the country.

Our university stimulates over $1.8 billion in economic activity in the province, and we are leaders in Manitoba's knowledge economy with groundbreaking research in areas such as nanotechnology, functional foods and nutraceuticals, HIV/AIDS, and climate change.

With a strong legacy of excellence to guide us, the University of Manitoba and its dynamic community of researchers, students, teachers and staff, are addressing the challenges facing Canada and the world in the 21st century.

The University of Manitoba is a coeducational, nondenominational, government-supported institution. It is a member of the Association of Commonwealth Universities and of the Association of Universities and Colleges of Canada.

– http://umanitoba.ca/about/
(accessed June 24, 2017)

Facts and Figures

STUDENTS (Winter term 2016)
29,919 total
25,676 undergraduate students
3,580 graduate students
16.2% international students, from 115 countries

STAFF (2015-16 Fiscal Year)
8,977 total
5,034 academic staff
3,953 support staff
1,185 full-time faculty

FACULTIES, COLLEGES AND SCHOOLS

Faculty of Agricultural and Food Sciences
Faculty of Architecture
School of Art
Faculty of Arts
Asper School of Business
Faculty of Education
Faculty of Engineering
Clayton H. Riddell Faculty of Environment, Earth, and Resources
Division of Extended Education
Faculty of Graduate Studies
Rady Faculty of Health Sciences:
+ College of Dentistry
School of Dental Hygiene
+ College of Rehabilitation Sciences
+ College of Nursing
+ College of Pharmacy
+ Max Rady College of Medicine
Faculty of Kinesiology and Recreation Management
Faculty of Law
Desautels Faculty of Music
Faculty of Science
Faculty of Social Work
University 1

– http://umanitoba.ca/about/factandfigures/
(accessed June 24, 2017)

Mission, Vision and Values
from: *Taking our Place: University of Manitoba Strategic Plan 2015-2020*, p.10 (adopted Nov. 2014).

MISSION
To create, preserve, communicate and apply knowledge, contributing to the cultural, social and economic well-being of the people of Manitoba, Canada and the world.

VISION
To take our place among leading universities through a commitment to transformative research and scholarship and innovative teaching and learning, uniquely strengthened by Indigenous knowledge and perspectives.

VALUES
To achieve our vision, we require a commitment to a common set of ideals.
The University of Manitoba values:

Academic Freedom	Equity and Inclusion	Innovation
Accountability	Excellence	Respect
Collegiality	Integrity	Sustainability

– https://umanitoba.ca/admin/president/media/PRE-00-018-StrategicPlan-WebPdf_FNL.pdf
(accessed June 24, 2017)

Strategic Priorities
from: *Taking our Place: University of Manitoba Strategic Plan 2015-2020*, p. 16 (adopted Nov. 2014).

1. **Inspiring minds** through innovative and quality teaching.
2. **Driving discovery** and insight through excellence in research, scholarly work and other creative activities.
3. **Creating pathways** to Indigenous achievement.
4. **Building community** that creates an outstanding learning and working environment.
5. **Forging connections** to foster high impact community engagement.

– https://umanitoba.ca/admin/president/media/PRE-00-018-StrategicPlan-WebPdf_FNL.pdf
(accessed June 24, 2017)

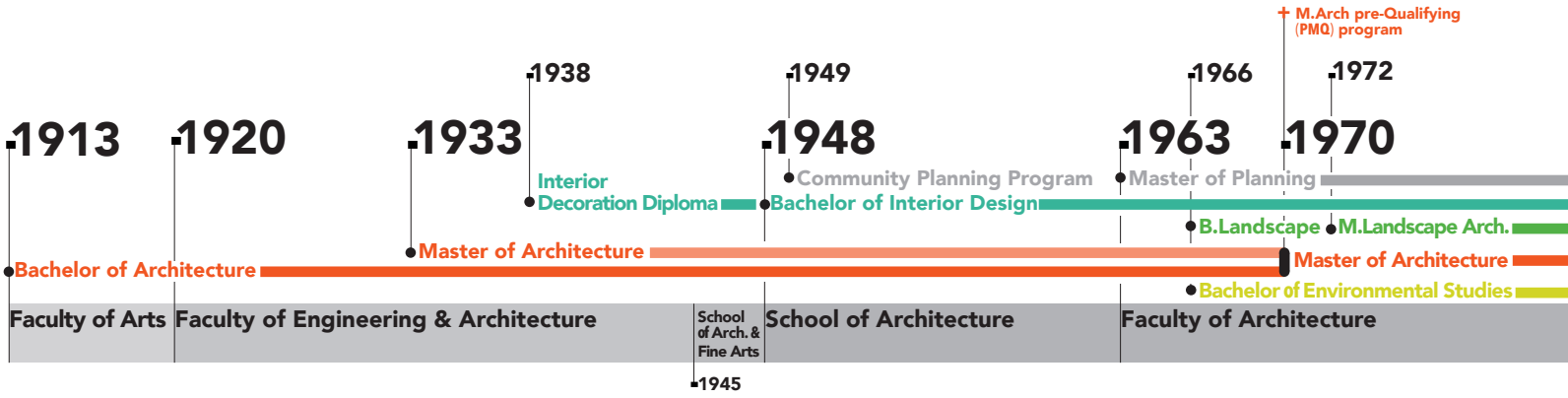
Strategic *Research* Priorities
from: *The University of Manitoba Strategic Research Plan 2015-2020*, pp. 1-5.

The Strategic Research Plan recognizes and supports the importance of a full spectrum of impactful research, scholarly activities and creative works. It also reflects a number of core thematic and signature areas for enhancement.

CORE STRATEGIC RESEARCH THEMES:
1. Arctic System Science and Technology
2. Culture and Creative Works
3. Fundamental Research
4. High Performance Materials, Structures and Processes
5. Human Rights and Social Justice
6. Integrative Research in Health and Well-Being
7. Safe, Healthy, Just and Sustainable Food Systems
8. Sustainable Water Management Systems

SIGNATURE AREAS (established areas of excellence):
1. Arctic System Science and Climate Change
2. Immunity, Inflammation and Infectious Disease
3. Population and Global Health
4. Immunity, Inflammation and Infectious Disease

– http://umanitoba.ca/research/media/Strategic_Research_Plan.pdf



4.1.2 PROGRAM HISTORY

- *The appendix of the APR must provide a brief program history.*

The architecture program at the University of Manitoba is the third oldest in Canada, after that of the University of Toronto (founded 1890), and McGill University (founded 1896).

1913: The teaching of architecture at the University of Manitoba begins as a four-year Bachelor of Architecture degree program offered by a Department of Architecture within the Faculty of Arts.

1920: The program becomes a part of the newly established Faculty of Engineering and Architecture.

1933: Post-graduate instruction in architecture is instituted with the degree of Master of Science in Architecture; in 1935 the graduate degree is changed to Master of Architecture.

1935: The graduate degree is changed to Master of Architecture.

1938: A three-year diploma program in Interior Decoration is established.

1945: The Departments of Architecture and Interior Decoration are combined in the School of Architecture and Fine Arts.

1948: The school is reorganized as the School of Architecture and the curriculum is revised. The professional architecture degree becomes a five-year program; a new four-year Bachelor of Interior Design degree replaces the former three-year diploma program.

1949: A one-year graduate program in Community Planning is established.

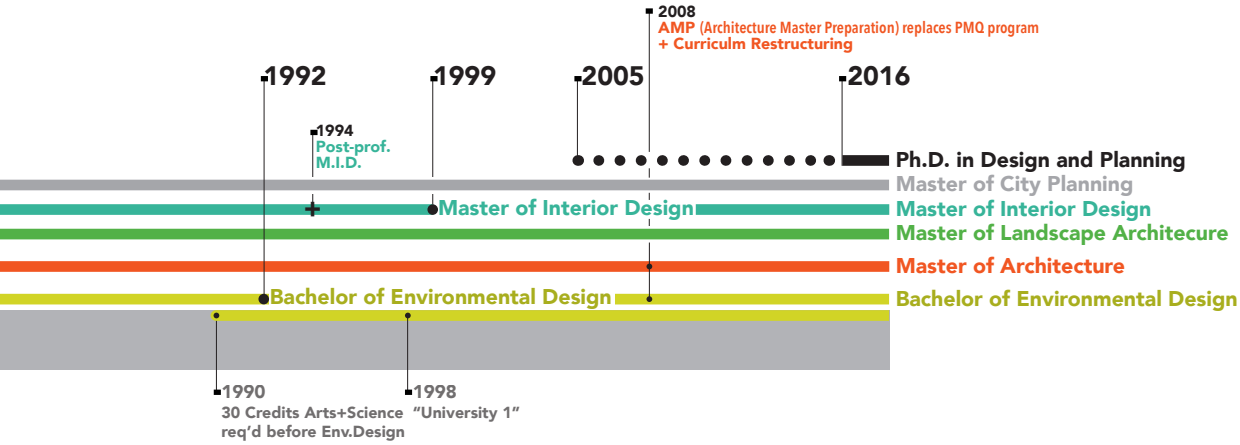
1957: Manitoba Legislature approves a grant for construction of a building for the School of Architecture.

1959: The John A. Russell building opens. It is the first curtain wall building in western Canada, and the first building in Canada to be designed exclusively for architecture education.

1963: The School of Architecture is reconstituted as the Faculty of Architecture with two undergraduate departments: Architecture and Interior Design. The postgraduate program in Community Planning is reorganized into a two-year postgraduate program leading to the degree, Master of City Planning.

1966: A three-year degree of Bachelor of Environmental Studies is introduced and becomes prerequisite for: a) a three-year professional program in Architecture, leading to a Bachelor of Architecture degree, and b) a two-year program leading to the degree of Bachelor of Landscape Architecture.

1970: Senate approves a new curriculum leading to the first professional degree, Master of Architecture, which replaces the three-year Bachelor of Architecture program. In the early 1970's a two-year Architecture pre-Masters Qualifying (PMQ) program is established, allowing students with non-design degrees (who also meet admission requirements of the Faculty of Graduate Studies) to enter two years of architectural studies in order to become eligible to apply to the Master of Architecture program. Students wishing to transfer to Architecture with backgrounds from different design disciplines (i.e. Interior Design, Landscape Architecture, etc.) complete one year of Architecture Pre-Master Regular (PMR) studies.



1972: A new curriculum leading to a Master of Landscape Architecture is approved.

1990: An admissions year of 30 credit hours of Arts and Sciences courses becomes prerequisite for entry into Environmental Design. New programs of study in Environmental Studies and Interior Design commence in September 1992.

1994: Senate approves the new curriculum leading to a post-professional degree, Master of Interior Design, a research based degree building upon the first-professional Bachelor of Interior Design.

1992: Senate approves a name change from the Department of Environmental Studies to Department of Environmental Design.

1998: Senate approves a revised program of study for the Master's Program in Architecture.

1998: Senate approves a structural reorganization of the Faculty of Architecture, converting the former Department of Environmental Design to the Faculty of Architecture Program in Environmental Design. The major difference between the old and new programs is the consolidation of ED1 and ED2 into a two-year foundation program of common multidisciplinary study, followed by one-year of specialized study in either Architecture, City Planning, Interior Design, or Landscape Architecture. Entrance requirements to the ED Program are also modified to harmonize with the newly introduced University 1 (U1) Program.

1999: the Master of Interior Design program is introduced, phasing out of the former four-year Bachelor of Interior Design degree program. All of the Faculty's professional programs are now Master level programs. Each Department is responsible for teaching both undergraduate and graduate level courses.

2005: Senate approves the Ph.D. in Design and Planning Program.

2008: The Faculty completes a major Senate-approved restructuring of the undergraduate Environmental Design Program (partially in response to issues raised in the 2004 CACB Visiting Team Report). The restructuring results in a four year ED program consisting of two years of common 'Foundation Studies' (ED1/U1 and ED2), followed by two years of pre-professional 'Intermediate Studies' (ED3 and ED4), or 'Option Years,' in which students choose one of three disciplinary streams: Architecture; Interior Environments; or Landscape + Urbanism (shared between Landscape Architecture and City Planning). Architecture students are now exposed to two undergraduate years of disciplinary studies, instead of one.

The Architecture Pre-Master Program was also replaced at this time with the Architecture Master Preparation (AMP) Program. Individuals with a previous degree who successfully complete this two-year AMP 1 undergraduate program now receive an Environmental Design degree and are eligible to apply to the Master of Architecture program. Those wishing to transfer to Architecture with backgrounds in different design disciplines (i.e. Interior Design, Landscape Architecture, etc.) complete only the second year of AMP studies (AMP 2) in order to become eligible to apply to graduate studies in architecture.

2016: The Ph.D. in Design & Planning is re-launched, with one student enrolled (after years with none).

4.2 Student Progress Evaluation

The APR must include:

- *The procedures for evaluating student transfer credit and advanced placement;*
- *The procedures for evaluating student progress, including the institutional and program policies and standards for evaluation, advancement, graduation, appeal and remedial measures.*

TRANSFER CREDIT AND ADVANCED PLACEMENT

The Department Head or designate evaluates requests for transfer credits and advanced placement on a case-by-case basis in compliance with the Faculty of Graduate Studies and University policy (cited below).

In the last 3 years, 5 cases have been reviewed and accepted. In 3 cases, courses from other recognized universities were accepted as transfer credits for Electives. Electives are not evaluated for SPC compliance. In 2 cases, core courses and studios were accepted for transfer, giving the student advanced entry placement into M2. In both of these cases, the student had successfully completed one year of graduate M.Arch course work at a CACB-accredited program in Canada (Dalhousie University and UBC).

In each case, a close review of transcripts, applicable course outlines, and course work are reviewed in comparison with degree requirements for the M.Arch program. If transfer credits are being accepted for core curriculum areas, then course outlines and course work are additionally reviewed for meeting SPCs assigned to that course, according to the Program's SPC Matrix and course descriptions.

M.Arch Program Policy on Transfer Credit

In some cases, course requirements may be transferred for students who have demonstrated evidence of competencies gained from previous education. Students who wish to apply for a course transfer based on previous education must provide the Department with course outlines and course descriptions from the educational institution.

Requests for course transfers must be made within the Registration Revision period in September (refer to the Graduate Calendar/Registration and Withdrawal Dates for exact dates each year). The Department Head decides on transferal requests.

– FGS Supplemental Regulations, 4.4.6 Transfer Credit
http://umanitoba.ca/faculties/graduate_studies/media/Architecture2016.pdf

UM/FGS Policies on Advanced and Transfer Credit

4.4.5 Advanced Credit

Advance credit for courses completed prior to admission to a Master's program will be considered on an individual basis. The student's unit makes the request to the Faculty of Graduate Studies by completing the "Recommendation for Advance Credit (Transfer of Courses)" http://umanitoba.ca/faculties/graduate_studies/forms/index.html.

- Application for advance credit must be made within the first year of the program (see Lapse of Credit of Courses in this section).
- No more than half of the required coursework for the program can be given advance credit.
- A course may not be used for credit toward more than one program.
- The student must register at The University of Manitoba for at least two terms within a single academic year and must also complete the thesis at The University of Manitoba.

Regardless of the extent of advanced credit received, all students are required to pay applicable program fees.

4.4.6 Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the unit and the Faculty of Graduate Studies before the student may register for them;

- are considered on an individual basis;
- cannot be used for credit towards another degree;
- may be taken at other universities while registered in a program at The University of Manitoba, provided that the credit does not exceed 50% of the minimum credit hours of coursework required.

Permission is granted in the form of a Letter of Permission, which may be obtained by making an application to the Registrar's Office (http://umanitoba.ca/student/records/leave_return/710.html); an original transcript and course equivalency must be provided.

– 2017-18 Graduate Calendar: Academic Guide, Section 4 Master's Degrees General Regulations
http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=320&chapterid=3790&topicgroupid=20419&loaduseredits=False

ED Program Policy on Transfer Credits (from the 2017-18 Application Bulletin):
Transfer Credit Information
At the University of Manitoba, all course work from a recognized prior post-secondary institution will be considered as part of the application for admission process for all undergraduate degree and diploma programs.

Courses are evaluated for advanced standing or transfer credit on a course-by-course basis and assigned a University of Manitoba equivalent, where applicable. Where a direct equivalent does not exist, students may receive general (unallocated) credit. The regulations regarding transfer credit are program specific and vary considerably depending on the faculty or school of application. Faculties and schools will only consider external courses completed within the last ten (or fewer) years.

Courses deemed acceptable for transfer credit will be awarded, subject to program approval, up to the maximum allowed under the program of admission, based on the Faculty or School's transfer credit policy and residency requirements (consult the section of the University's Academic Calendar at: www.umanitoba.ca/calendar for details).

Students may be asked to provide comprehensive and accurate course outlines or syllabi, as issued by their institution of study, for all courses lacking a current evaluation. Course outlines or syllabi should include information on: course objectives, outline of the units studied, textbook(s) used, assignments, and accompanying laboratory information, if applicable, to assist in the transfer credit assessment process.

The University of Manitoba maintains a Transfer Credit Equivalencies database for reference only [with minimal applicability for the Faculty of Architecture]. www.umanitoba.ca/admissions/tc

POLICIES FOR EVALUATION, ADVANCEMENT, GRADUATION, APPEAL & REMEDIAL MEASURES
The Architecture Program upholds all University of Manitoba policies concerning evaluation, advancement, graduation, appeal and remedial measures. The Program provides supplemental information on how these policies are applied with respect to the unique pedagogical nature of design studio and portfolio grading. This information is compiled in the **Department of Architecture's General Studio & Course Information**, which is reviewed annually and posted to the Department's website before the start of the fall term. Instructors and students are required to review the information together on the first day of studio.

The full Department of Architecture's General Studio and Course Information is posted online:
http://umanitoba.ca/faculties/architecture/programs/architecture/downloads.html
Excerpts are provided on the following pages.

Department of Architecture General Studio and Course Information (excerpts):

Studio and Technology Portfolios
A portfolio is the primary means of evaluation and assessment for studio and most technology courses. This document is used to indicate progress and determine grades. For studio, grades are based on ALL work shown in the portfolio and not simply the final project. Hard copies and digital copies must be submitted. Digital work must be presented in portfolios (for instance, videos must be shown with a series of representative still images). A portfolio is also required for studio interviews at the start of each year. For more information see the "Studio & Technology Portfolio Guidelines" on the department website:
http://umanitoba.ca/faculties/architecture/programs/architecture/downloads.html

Studio Interim Evaluation and Final Grading Process
Studios typically run for two distinct yet consecutive terms under the direction of a single studio instructor. Each term, following interim reviews and before the Voluntary Withdrawal date, students must be given interim evaluations on their performance and development. Final letter grade assessments will be determined at the end of each term in a Portfolio Review process

Interim evaluations will be ranked as follows:
High
Medium
Low
Unacceptable

There is no value in attempting to translate the above categories into the letter grade system. They are not 'marks' as such, but rather overall evaluations of a student's ongoing performance and development.

Studio Portfolio Review and Grading Process
At the end of each term, a Portfolio Review Grading Team reviews portfolios in a collegial grading process. This team is comprised of architecture studio instructors and provides a broader grading context and perspective, as well as a grading process that endeavours to ensure a fair and consistent treatment for grading student portfolios in all studios in the Department. The Portfolio Review Grading Team typically consists of the Department Head, a faculty member (appointed by the Head) who attends all Portfolio Review Grading sessions, and the studio instructors whose student portfolios are being evaluated that day. A proposed grade is put forward by the studio instructor and the Portfolio Review Grading Team discusses and ultimately decides on the final grade based on a comparison with portfolios from the same studio group, as well as a comparison with students at a similar level within the program.

All interim evaluations given during the term by the studio instructor are performance and development indicators, and not grades. The final grade is determined by the Portfolio Review Grading Team.. The Department Head and/or the appointed faculty member (who attends all sessions) will record and archive the Team's decisions; however, the studio instructor is responsible for submitting the final grade. In the majority of cases during grading discussions, the Portfolio Review Grading Team supports the grades proposed by the studio instructor, but there have been occasions when the Portfolio Review Grading Team has decided that the proposed grades for either an individual student or a whole studio are at an inconsistent level (either too high or too low) in comparison with those at a similar level across the Department. The objectives and requirements of each studio are fully taken into account in the portfolio review grading sessions. The Portfolio Review Grading Team values process work undertaken during the term, as well as the final resolution of the work. It is therefore possible that a student who might appear to be working at a satisfactory level up to and at the VW date (and therefore not receive a VW letter) may in the end not receive a passing grade due to the quality, quantity and standard of work between the VW date and the portfolio review.

Both interim evaluations and final letter grade assessments will be based on the following general criteria. The criteria relate to the objectives that are included with each studio or project outline:

Breadth: Range and extent of search through explorations, observations, research and analysis

Depth: Development, interpretation, evaluation, understanding, reflection and judgment of explorations, observations, research and analysis

Clarity: Organization, documentation, articulation, craft and completeness of work submitted, including quality of visual and verbal presentations

All criteria above will be scrutinized for a critical assessment of the issues involved and a thoughtful and disciplined process of development.

Based upon a comparison:
(1) With other students in the course and/or
(2) With students who have previously taken the course and/or
(3) With the instructor(s) expectations relative to the stated objectives of the course, based on his/her/their experience and expertise,

Final Letter Grades and ranking equivalents are as follows:

Grade	G.P.A.	Range	Percentage	Assessment
A+	4.5	4.26-4.50	90 - 100	Exceptional
A	4.0	3.76-4.25	80 – 89	Excellent
B+	3.5	3.26-3.75	75 – 79	Very Good
B	3.0	2.76-3.25	70 – 74	Good
C+	2.5	2.26-2.75	65 – 69	Satisfactory
C	2.0	1.90-2.25	60 – 64	Adequate (except graduate level courses)
D	1.0	1.00-1.89	50 – 59	Failure
F	0	0	0 – 49	Failure

In the Faculty of Architecture:
- C+ is the lowest passing grade in a Graduate faculty course
- C is the lowest passing grade in an undergraduate faculty course

Because a D requires the course to be repeated, some instructors may, on a cursory examination, think that D's and F's are the same and treat them all as F's. They are not. First, a D indicates to the student that he/she has performed marginally rather than an outright failure. Second, a successful appeal on a D-grade will normally result in a C and therefore passing the course. On the other hand, it would be an exceptional circumstance for an F to be changed to a C on appeal. Third, a D gives the student 1 grade point in calculating GPA whereas an F gives 0.

Any test or assignment with an aggregate value of more than 20% of the total value of the course, may not be scheduled to take place during the fourteen calendar days ending with the last day of class in either term during the regular academic session as defined in the University Calendar.

Late / Incomplete Submission
All assignments must be submitted at the time and date specified. If there are extenuating circumstances students must first speak to the Instructor in advance of the deadline, or as soon as possible (no later than seven days past the deadline). Medical notes for illnesses must be promptly handed-in to the instructor and to the General Office.

Late
An un-excused late submission, not received within 7 days of the due date, will result in an F. All course requests for deferrals are to be submitted to the General Office, J.A. Russell Building for circulation to the Course Instructor.

Incomplete
Students are responsible for initiating applications for Incomplete Status in a course. Students who are unable to complete the term's work prescribed in a course must contact the Instructor prior to the end of

lectures for consideration of an Incomplete Grade and a time extension. Approval of an incomplete grade classification is not automatic and will depend on the assessment of the circumstances by the Course Instructor. An incomplete grade will not be assigned except for medical reasons (with doctor's note) or for compassionate grounds (such as bereavement) at the discretion of the Course Instructor. All courses that have outstanding course work will be given a letter grade with an "I" to indicate an extension has been granted. If outstanding work is not submitted or a time frame of 3 months passes, the "I" will automatically be removed and the letter grade will stand as is.

The following maximum time extensions are allowed:

- August 1st for courses terminated in April.
- December 1st for courses terminated in May/August.
- April 1st for courses terminated in December.
-

All registration, and registration revisions, must be completed in Aurora by the student through the University of Manitoba website registration before the stipulated deadlines.

Appeals

Term Work: Students may formally appeal a grade received for term work provided the matter has been discussed with the instructor and Department Head in the first instance in an attempt to resolve the issue, without the need of formal appeal. Term work grades normally may be appealed up to ten working days after the grades for the term work have been made available to the student. Students may obtain the form "Application for Appealing a Grade Given for Term Work" from the general office in the J.A. Russell Bldg.

Final Grades: If a student has good reason to believe a mistake has been made in the assignment of a grade, an appeal may be made. Every effort must be made to discuss the matter with the instructor in an attempt to resolve the issue before resorting to the appeal process. Grade Appeal forms are available from the Registrar's Office. Deadlines to appeal a final grade are as follows:

Fall term: 15 working days after the University reopens in January
Winter term: 15 working days following Victoria Day
Summer term: 30 workings after the end of the applicable exam period

For both the Appeal for Term Work and Final Grade Appeals, there is a charge per appeal, which is refundable if the grade is raised. No grade may be lowered as a result of filing an appeal.

Voluntary Withdrawal for regular classes and studios

Term One: Friday, November 17, 2017
Term Two: Friday, March 16, 2018

Voluntary Withdrawal for irregular classes, including 5-week Graduate Topics Courses, the voluntary withdrawal date is BEFORE the 4th week of class, as per the University of Manitoba refund policy:
http://umanitoba.ca/student/records/media/One_Term_Irregular_VW_Refund.pdf

Instructors must provide written evaluative feedback to students of concern before the final date for voluntary withdrawal. Students who are concerned with their progress in any course and are considering voluntary withdrawal are advised to seek an appointment with the course instructor to discuss their individual performance prior to the withdrawal date. The onus for initiating Voluntary Withdrawal from a course rests solely with a student. Neither a verbal request nor discontinuance from class attendance will suffice. Graduate students may not VW from a course without the approval of their advisor, head or graduate chair and FGS. Students should refer to the General Calendar for procedures.

Attendance in Class and Studio Reviews

Attendance during the entire scheduled class time for both studio and lecture/topics courses is mandatory. A sign-in sheet or other form of attendance taking may be used. It is not enough to simply show up. Students must participate in questioning and discussing course work. Missing more than 10% of classes, except for medical reasons or compassionate grounds (at the discretion of the instructor) will result in a grade of F. All students must attend and participate in all Interim and Final studio reviews.

M1 Students – Progress Reports

In accordance with the University's Faculty of Graduate Studies (FGS) regulations, Graduate Advisors (studio instructors) are required to complete a Progress Report for each M1 student at the end of their first year, before they commence their final Design Thesis year. The Progress Report covers: the student's Program of Study Status; Progress (goals met, and goals to be met the following year); a Rating (satisfactory, or in need of improvement); Additional Information (if pertinent); and Signatures of the Advisor, Student, and Head. Completed forms are submitted to the Faculty of Architecture's Graduate Student Advisor, and forwarded to FGS no later than June 1. These Progress Reports are an important mechanism to identify outstanding course work and to maintain appropriate time-to-completion.

M2 Design Thesis Students – Evaluation

FGS Supplemental Regulations (updated March 2016) (excerpt):
Full regulations online: http://umanitoba.ca/faculties/graduate_studies/media/Architecture2016.pdf

4.8 Requirements for Graduation

To proceed with the Design Thesis, the Design Thesis Advisor must have approved the student's Design Thesis proposal. A review committee set up and chaired by the Department Head (including: Design Thesis Advisor, the Department Head or Design Thesis Chair and a FGS faculty member of the Department of Architecture) will review any disagreements regarding this approval process. If the proposal is unacceptable to this committee, a new proposal must be submitted and approved prior to the start of the following term. The decision of this committee will be final. Both student and Design Thesis advisor will be allowed to present to the committee. If the Design Thesis proposal is not approved, the student may not continue with the Design Thesis and will be required to submit a new proposal the following academic year. The student will have the option to identify a new Design Thesis advisor. If a student fails the second thesis proposal, then he/she will be required to withdraw from the program.

Reviews: The Design Thesis will be reviewed at two stages.
(1) In-progress Review: During the scheduled mid-term studio reviews, each Design Thesis student will have an in-progress review by the Design Thesis Advisor and a Design Thesis Chair (who will also attend the final exam and be part of the examining committee).
(2) Final Review: Normally, Final Reviews will take place in April, (See section 4.8.1.2 for the Examination Committee)

If a student fails the in-progress review they may retake it once, at the end of the same term during the Design Thesis Final reviews.

If a student fails the Final Review they will be allowed to resubmit at a date agreed by the exam committee. Since the external examiner must travel to the University to perform their role, a new external examiner may be assigned for the second attempt. If the student fails in April, this date will normally be in December. If they fail in December (due to being out of sync due to a previous failure) the retake will be in April with the other Design Thesis students.

If a student fails either the in-progress or final review twice they will be required to withdraw from the program.

The Final Review is the point at which the Design Thesis is assessed. The Design Thesis work is to be compiled in a Design Thesis Portfolio that fully documents the body of work that constitutes the Design Thesis.

Design Thesis Portfolios must include:

- Format: Minimum 10" x 10" (254 x 254 mm) and maximum 12" by 18" (305 x 457 mm) portfolio.
- Cover Page: minimally including students name, project title, the date, the Design Thesis advisor name, the University, Faculty and Department name.
- BINDING: at least one portfolio must be hard-bound (for the library); the second portfolio (for the Design Thesis advisor) may be spiral bound (or equivalent) with a clear front and solid back.
- Digital submission: A CD/DVD, including a digital PDF version of the Design Thesis Portfolio and large format selected images, must be durably attached to the interior of the back cover of each portfolio.

(On digital format requirements, see General Departmental "Studio and Archive Specifications" and "Portfolio Guidelines" on the Department of Architecture website). These two copies of the Design Thesis Portfolio must be handed into the department Graduate Student Advisor by May 15th.

Examining Committee:
Each student has a Design Thesis Examining Committee, comprised of the following three individuals: the Design Thesis advisor, a Design Thesis Chair (who is a member of the Design Thesis Committee), and an External Examiner.

The External Examiner will normally be an architect in practice, an architectural educator from another university, an educator from the University of Manitoba with a background in an allied subject or someone with specialist knowledge relevant to the particular Design Thesis. Examiners must have a professionally accredited degree in architecture, or a related field.

The Final Review in which the student presents the whole of their Design Thesis constitutes his/her Oral Examination and is scheduled by the department. The review is an open, public event. The deliberation by the Design Thesis Examining Committee takes place in private.

The Advisor or Department Head communicates a failure report and feedback to the student, both verbally and in writing. Feedback would include reasoning for the failure and options for continuing the thesis. Normally, a failure would entail the Department of Architecture recommending to the Faculty of Graduate Studies that the student retake the Design Thesis (Grad 7090).

University of Manitoba 2017-18 Academic Calendar:
General Academic Regulations http://umanitoba.ca/calendar (pertinent excerpts):

ACADEMIC EVALUATION
1. Methods of Evaluation
Students shall be informed of the method of evaluation to be used in each course, as specified in the Responsibilities of Academic Staff with Regard to Students Policy, found in the University Policies section of the Academic Calendar.

In departments where a course is offered in more than one section, the department offering the course endeavours to provide instruction so that all sections cover similar topics and that all students achieve a similar level of competency in the topic. However, there will be differences in evaluation as well as in teaching style, readings and assignments from one section to another. Students may contact the department for additional information before registration.

1.1 Credit for Term Work
In subjects involving written examinations, laboratories, and term assignments, a student may be required to pass each component separately. If no final examination is scheduled in a course, the student's final grade will be determined on the basis of the method of evaluation as announced in the first week of lectures.

If credit is not given for term work, the student's final grade will be determined entirely by the results of the final written examination. Where the final grade is determined from the results of both term work and final examinations, the method of computing the final grade will be as announced within the first week of classes. Should a student write a deferred examination, term grades earned will normally be taken into account as set out in the immediately preceding paragraph.

1.2 Repeating a Course
A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Elective courses graded "F" may either be repeated or another elective substituted. All electives in a program must be approved by the faculty or school.

1.3 Probation and Academic Suspension

Failure to meet minimum levels of performance as specified in the regulations of the faculty or school will result in a student being placed either on probation or academic suspension in accordance with the faculty or school regulations.

A student's status is determined, following final examinations, at the end of each term (Fall, Winter or Summer terms) or at the end of an academic session as specified in faculty regulations. A student placed on probation is advised to discuss his/her program prior to the next registration with a representative of the dean or director to determine which courses, if any, should be repeated.

A student placed on academic suspension will normally be permitted to apply for re-entry to the faculty or school after one year has elapsed, but reinstatement is not automatic and individual faculty or school regulations must always be consulted.

While on suspension, students are not normally admissible to another faculty or school.

2. Other Forms of Earning Degree Credit

2.1 Letter of Permission for Transfer of Credit

Students in degree programs at this university may take courses at other recognized colleges or universities for transfer of credit provided such courses are approved at least one month prior to the commencement of classes at the other institution by the faculty or school in which they are currently registered. The approval is subject to individual faculty/school regulations and is granted in the form of a Letter of Permission. The student must obtain a Letter of Permission whether or not the course/s being taken are for transfer of credit to the University of Manitoba. Failure to obtain a Letter of Permission may have serious academic implications.

To obtain a Letter of Permission, application must be made to the Registrar's Office as early as possible and at least one month prior to when required at the other institution.

Each application must be accompanied by the appropriate fee. The fees are for each application and a separate application is required for each session and institution regardless of the number of courses being considered. Students planning to seek permission to take courses elsewhere for transfer of credit to the University of Manitoba are cautioned to check the current Academic Calendar for the residence and degree requirements of the degree programs in which they are enrolled.

Transferred courses will be given assigned credit hour values and grades. The transferred grade will be included in the student's degree and cumulative GPA.

2.2 Challenge for Credit

The purpose of Challenge for Credit is to provide students of the university with some means of obtaining academic credit in University of Manitoba courses (not otherwise obtainable as a transfer of credit from other institutions) for practical training and experience, or reading and study previously completed. Students who have registered to challenge would normally not attend classes or laboratories. Courses which have previously been taken at the University of Manitoba may not be challenged for credit.

To be eligible to challenge for credit a student must first be admitted to a faculty or school of the University of Manitoba. Eligible students will be required to demonstrate their competence in the courses which they are challenging for credit. Where formal, written examinations are required, these will be generally scheduled during the regular examination sessions in April/May, June, August, or December.

For information regarding requirements, procedures, applications and fees a student should contact the office of the faculty or school in which the student is enrolled, or in the case of new students, the faculty or school to which the new student has been admitted.

2.3 Application of Course Credit when transferring between Programs within the University of Manitoba

When students transfer into program from another faculty or school within the University of Manitoba, some course credits previously earned may be applied to the new program. The credit hour value

assigned by the faculty or school that offers the course is used. That is, there can only be one credit weight designated for a course with a particular course number.

3. Academic Appeals
With the exception of decisions on admissions or disciplinary matters, all academic appeals from decisions of faculty or school appeals committees at the University of Manitoba or by the Comiteé d'appels at Université de Saint-Boniface shall be heard by the Senate Appeals Committee regardless of the institute of registration of the student concerned.

The complete terms of reference for the Senate Committee on Appeals as well as an Appeal Form may be obtained from the Office of the University Secretary, 312 Administration Building or Student Advocacy/Student Resource Services, 519 University Centre.

APPEALS OF GRADES
These regulations expand on the Final Grades Procedures found in the University Policies section of this publication.

1. Appeal of Term Work
Students may formally appeal a grade received for term work provided that the matter has been discussed with the instructor in the first instance in an attempt to resolve the issue without the need of formal appeal. Term work grades normally may be appealed up to ten (10) working days after the grades for the term work have been made available to the student.

The fee which is charged for each appealed term work grade will be refunded for any grade which is changed as a result of the appeal.

2. Appeal of Final Grades
Final grades are not released to students who are on "Hold Status"; the deadline for appeal of assigned grades will not be extended for students who were unable to access their final grades due to a hold.

M.Arch Program Requirements for Graduation
Minimum program requirements of the Faculty of Graduate Studies are found in the Graduate Studies Regulations Section of the Calendar.

Degree Requirements: 48 credit hours.
Second language reading requirement: none.
Expected time to graduation: 2 years full-time study.

[All students must maintain a minimum degree grade point average of 3.0 with no grade below C+]

http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=320&chapterid=3851&loaduseredits=True

ED-Arch Option Program Requirements for Graduation
(from the 2017-18 Undergraduate Calendar: Faculty of Architecture: Section 3: Faculty Academic Regulations)

A Grade Point Average (GPA) of 2.00 is required as an acceptable standard of performance.
A minimum grade of 'C' is required to pass all courses offered by the Environmental Design Program and by the Departments within the Faculty. All courses offered by the Environmental Design Program stipulate a grade of "C" in the prerequisite course(s).

To be eligible for the degree of Bachelor of Environmental Design a student is required to complete a minimum of two full academic years of studies in the Environmental Design Program including Years 3 & 4.

http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=320&chapterid=3913&topicgroupid=21039&loaduseredits=True

4.3 Current Course Descriptions

The appendix of the APR must include a one or two-page description with an overview, learning objectives, course requirements, prerequisites, date(s) offered, and faculty for each required and elective course in the program.

One page course outlines are provided for architecture program core courses and electives in the Master of Architecture (M1 + M2) and the Bachelor of Environmental Design Architecture Option years (ED3 + ED4 /AMP1 + AMP2). Course calendar descriptions are provided for the general foundations studies (U1/ED1 + ED2), as these are not offered by the Department of Architecture and do not cover SPCs.

B.Env.D. – FOUNDATION STUDIES (U1/ED1 + ED2)

Course No.	Course Name	Credit Hours
EVDS 1600	Introduction to Environmental Design	3
EVDS 1602	Visual Literacy	3
EVDS 1660	History of Culture, Ideas and Environment 1	3
EVDS 1670	History of Culture, Ideas and Environment 2	3
EVDS 2100	Urban Media Lab (Pre-Fall)	3
EVDS 2400	Visual Media 1	3
EVDS 2800	Visual Media 2	3
EVDS 2500	Design Studio 1	6
EVDS 2900	Design Studio 2	6
EVDS 2702	Natural and Human Systems	3
EVDS 2200	Ecology and Design	3
EVDS 2600	Tectonic Precedent	3
EVDS 2300	Materials, Structures and Assemblies	3

B.Env.D. – INTERMEDIATE STUDIES – ARCHITECTURE OPTION (ED3 + ED4)

DRAWING	EVAR 3014	Drawing: Freehand & Digital	3
DESIGN	EVAR 3008	Architecture Design Studio 1	9
	EVAR 3010	Architecture Design Studio 2	9
	EVAR 4004	Architecture Design Studio 3	9
	EVAR 4010	Architecture Design Studio 4	9
TECH-NOLOGY	EVAR 3012	Arch Tech Prep — pre term block course (for AMP1 students only)	(3)
	EVAR 3004	Architectural Technology 1- Structural and Sustainable Use of Materials	3
	EVAR 3006	Architectural Technology 2 – Building Construction, Structures and Envelopes	3
	EVAR 4002	Architectural Technology 3 - Building Systems	3
	EVAR 4008	Architectural Technology 4 – Comprehensive Design Technology Report	3
HISTORY THEORY	EVAR 3000	Pre-Modern Architectural History and Theory 1	3
	EVAR 3002	Pre-Modern Architectural History and Theory 2	3
	EVAR 4000	Modern Architectural History and Theory 1	3
	EVAR 4006	Modern Architectural History and Theory 2	3

M.Arch – GRADUATE STUDIES – MASTER OF ARCHITECTURE (M1 + M2)

PROF. PRACTICE	ARCH 7040	Professional Practice	3
	ARCH 7350	Legal Aspects of Architectural Practice	3
DESIGN	ARCH 7050	Architecture Design Studio 5 and Comprehensive Program Report	9
	ARCH 7060	Architecture Design Studio 6 (Comprehensive Design Studio)	9
	ARCH 7070	Design Research Studio	9
	GRAD 7090	Design Thesis	0
TECH-NOLOGY	ARCH 7080	Technology Thesis Report	3
	ARCH 7000	Advanced Technology Topics 1	1.5
	ARCH 7010	Advanced Technology Topics 2	1.5
HISTORY THEORY	ARCH 7020	Research Topics: History and Theory 1	1.5
	ARCH 7030	Research Topics: History and Theory 2	1.5
	Various	Electives	6

B.Env.D. – FOUNDATION STUDIES (ED1 + ED2)

The first two years of the Bachelor of Environmental Design Program (ED1 + ED2) are Foundation Studies, intended to introduce students to a broad variety of topics in arts and science, while also preparing them for disciplinary specific studies in the ED3 + ED4 years. ED1 + ED2 courses do not satisfy CACB Student Performance Criteria. The calendar descriptions are provided as context for the overall B.Env.D. program.

ED1:

EVDS 1600 – Introduction to Environmental Design

An introduction to the philosophy and pragmatics of design and designing processes and methods. The focus will be on design as a creative, aesthetic and scientific endeavor, and will examine the challenges and roles of environmental designers in society. Available to non-Environmental Design students only.

3 Credit hours | Fall

EVDS 1602 – Visual Literacy

This course examines the contemporary visual environment, its critical historical influences, and more recent cultural impacts. Optics, the structure of images, and the importance of materiality will be examined through various modes of cultural production including emerging media and information networks.

3 Credit hours | Fall

EVDS 1660 – History of Culture, Ideas and Environment 1

A brief history of the western creative imagination, part 1. Interdisciplinary survey of cultural periods and key works from the foundations of civilization to the Enlightenment, including literary readings, film screenings, and illustrated lectures and discussions. Available to non-Environmental Design students only.

3 Credit hours | Fall

EVDS 1670 – History of Culture, Ideas and Environment 2

A brief history of the western creative imagination, part 2. Interdisciplinary survey of cultural periods and key works from the 19th to the 21st centuries, including literary readings, film screenings, and illustrated lectures and discussion. Prerequisite: EVDS 1660. Available to non-Environmental Design students only.

3 Credit hours | Winter

Elective(s), Faculty of Arts, 6 credits
Elective(s), Faculty of Science, 6 credits
Elective(s), Faculty of Arts or Science, 6 credits

ED2:

EVDS 2100 – Urban Media Lab

An introduction to visual methods of representation and related media including drawing, photography and video. The intention is to critically engage the urban and suburban contexts as a laboratory for investigating cultural values, aesthetic issues, design principles, and representational techniques, 'prerequisite' to undertaking design studio work.

3 Credit hours | Pre-Fall

EVDS 2702 – Natural and Human Systems

An application of the scientific principles embodied in the natural laws which govern environmental design. Aspects of the bio-physical factors, energy, human physiology and perception, comfort, and resource management are reviewed in the context of sustainable planning and design practices.

3 Credit hours | Fall

EVDS 2400 – Visual Media 1
An introduction to technical and free-hand drawing processes and techniques, and in various media - to develop, to express, and to communicate design intentions. The focus will be directed to abstract and concrete methods of representation. Emphasis will be placed on the integral relationship between thinking, drawing, and making in relation to critically observing the world at large, and in relation to design studio work.

3 Credit hours | Fall

EVDS 2500 – Design Studio 1
Introduction to the elements and principles of visual and spatial design, design process and techniques, requisite methods of representation and communication, and design intentions. Studio work will explore different ways of space and form-making, beginning at the site of the body, in both abstract and environmental contexts.

6 Credit hours | Fall

EVDS 2600 – Tectonic Precedent
An examination of seminal built works of environmental design, at a range of scales, from the 19th and 20th centuries, with an emphasis on examples that are representative of diverse positions of key issues in contemporary design practice. Methodologically, this course endeavors to critically evaluate the relationships between perception, intention, and making through the exploration of the material and tectonic nature of the work(s).

3 Credit hours | Fall

EVDS 2200 – Ecology and Design
An examination of principles of Ecology and Design works in which these tenets are considered, engaged, and/or demonstrated. Topics fundamental to the science of Ecology will theoretically structure the course content. Emphasis will be placed on understanding the forces and systems working within and between natural, social and human environments.

3 Credit hours | Winter

EVDS 2800 – Visual Media 2
This course bridges technical and freehand drawing introduced in Visual Media 1, with computer/digital media. This course advances contemporary digital media in relation to emerging modes of 2, 3, and 4 dimensional modes of representation, in the context of design studio work, and in relation to graphic standards associated with professional design practice.

3 Credit hours | Winter

EVDS 2900 – Design Studio 2
An exploration of the fundamental relationships between space, form and order in the context of the built environment, from body to place. Pedagogical emphasis will be directed towards design process, cultural intentions, and environmental accountability.

6 Credit hours | Winter

EVDS 2300 – Materials, Structures and Assemblies
This course provides an introduction to applied statics, construction materials and construction system assemblies for landscape, building, and interior constructions. Construction material properties and applications, including impacts on resource depletion and on sustainable building practices will be introduced along with basic strategies and methods to analyze and calculate forces in simple structures.

3 Credit hours | Winter

DRAWING **EVAR 3014**

Drawing: Freehand and Digital

Credit Hours: **3**
Instructors: D. Leith (digital); E. Aquino, C. Connery, T. Fuglem, L. Veness (freehand)
Level: Undergraduate, Arch. Option (ED3, AMP1)
Format: Lecture and lab; one 3-hour class per week
Offered: Fall
Prerequisites: None

COURSE CALENDAR DESCRIPTION:
An introduction to drawing skills that allows students to become articulate in proposing and studying architecture through drawing. The course covers a range of media.

OVERVIEW:
Architectural ideation happens in the act of making drawings, and in revising and elaborating drawings. This course introduces students to a variety of drawing media and methods, and provides students opportunities to experiment with each through a series of exercises. The goal is to understand how architectural representation can be a tool of communication, interpretation & investigation. Students learn how drawing helps architects to describe and discover reality, and to imaginatively generate design.

LEARNING OBJECTIVES:
Digital:
- Gain skills in a variety of digital drawing programs;
- Develop an understanding of the possibilities and limitations of digital drawing;
- Embrace digital drawing for exploration, communication and representation purposes in collaboration with analog drawing techniques and methods;
- Produce accurate measured architectural drawings;
- Develop abilities in graphically communicating architectural space and constructs;
- Develop competence in visual literacies that support design ideas;

Freehand:
- Gain skills in a variety of drawing media, using freehand techniques;
- Explore and articulate a variety of architectural qualities through various drawing media;
- Develop observational, analytical, and interpretive abilities;
- Carry this out in a critical manner involving rigorous and disciplined reflection, assessment, and judgment
- Develop an understanding of the interdependence of visual, tactile and imaginary observations;
- Gain experience in coordinating eye/hand/body relations with drawing instruments;
- Produce all work at a high level of attention, care and skill.

COURSE REQUIREMENTS / EVALUATION
30% Digital Exercises (2) & Assignments (2)
70% Freehand (sketchbook and folio)

CACB SPC: **EVAR 3014**

A: CRITICAL THINKING & COMMUNICATION

A	A1: Critical Thinking Skills	
A	A2: Research Skills	
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	
A	A5: Collaborative Skills	
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	

B: DESIGN & TECHNICAL SKILLS

A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	

C: COMPREHENSIVE DESIGN

A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

D: LEADERSHIP & PRACTICE

U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

DESIGN **EVAR 3008**

Architecture Design Studio 1

COURSE CALENDAR DESCRIPTION:

An architectural study of the human condition in relation to the natural and built environment through design oriented research exploration, analysis, evaluation and interpretation of a selected subject of inquiry. Various ways of seeing and making are applied as tools for critical thinking to align content with modes of representation.

OVERVIEW:

This studio is framed by a thematic subject area, presented by the instructor at the start of term. Individual instructors typically provide particular sites, precedents, programs and/or design methodologies that encourage students to develop their own individual inquiries. This first architecture design studio aims to develop students' understanding of basic design principles, materials and construction methods, spatial relationships and dwelling practices, as well as exposure to contextual circumstances influencing design. This studio gives emphasis to learning by making. The term is structured by cumulative stages of development, and milestone deadlines, with a design resolution presented by the end of term.

LEARNING OBJECTIVES:

To develop:

- Observational, analytical, and interpretive abilities in relation to design explorations;
- Research tools for understanding the complexities of site and context (social, cultural, physical, spatial, geographical, perceptual, etc.);
- Knowledge of basic design principles, strategies, and processes;
- Ability to acquire and apply design knowledge through a variety of visual and material investigations;
- Understanding and ability to employ architectural conventions in drawing and modeling;
- Critical thinking skills, involving rigorous and disciplined reflection, assessment, and judgment;
- Awareness of design issues at various scales;
- Visual and verbal communication skills;
- Ability to produce work with a high level of craft.

COURSE REQUIREMENTS / EVALUATION

100% Portfolio of cumulative work: design research, process work, and final design

Credit Hours: **9**
Instructors: E. Aquino, C. Connery, T. Fuglem, L. Veness
Level: Undergraduate, Arch. Option (ED3, AMP1)
Format: Studio, with related site visits, field studies, seminars, reviews, and lectures; two 8-hour sessions per week;
Offered: Fall
Prerequisites: None

CACB SPC: **EVAR 3008**

A: CRITICAL THINKING & COMMUNICATION

A	A1: Critical Thinking Skills	☐
A	A2: Research Skills	☐
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	☐
A	A5: Collaborative Skills	
U	A6: Human Behaviour	☐
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	☐

B: DESIGN & TECHNICAL SKILLS

A	B1: Design Skills	☐
A	B2: Program Preparation	☐
A	B3: Site Design	☐
A	B4: Sustainable Design	☐
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	☐
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

C: COMPREHENSIVE DESIGN

A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

D: LEADERSHIP & PRACTICE

U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required

SPC met ■
SPC introduced/partially met ☐

DESIGN **EVAR 3010**
Architecture Design Studio 2

Credit Hours: **9**
Instructors: E. Aquino, C. Connery, T. Fuglem, L. Veness
Level: Undergraduate, Arch. Option (ED3, AMP1)
Format: Studio, with related site visits, seminars, reviews, and lectures; two 8-hour sessions per week;
Offered: Winter
Prerequisites: EVAR 3008

COURSE CALENDAR DESCRIPTION:
Building upon first term explorations, architectural propositions are developed that seek to clarify relations between human inhabitation and the physical environment in a regional context. Design principles influenced by programmatic, theoretical, historical, technological material and environmental criteria are examined.

OVERVIEW:
This studio builds on the theoretical and technical skills established in Arch Studio 1 through a more complex series of architectural investigations. Design problems increase in complexity by introducing simultaneous manipulations of different scales, and programmatic parameters for a particular site. This term further develops a design process by balancing pragmatic requirements with poetic intentions. Design explorations are developed at various scales throughout the term, culminating in an architectural design proposal, which consolidates the term's explorations.

LEARNING OBJECTIVES:
Further development of:
- Observational, analytical, and interpretive abilities in relation to design explorations;
- Research tools for understanding the complexities of site and context (social, cultural, physical, spatial, geographical, perceptual, etc.);
- Knowledge of basic design principles, strategies, and processes;
- Ability to apply design knowledge through a variety of visual and material investigations;
- Understanding and ability to employ architectural conventions in drawing and modeling;
- Critical thinking skills, involving rigorous and disciplined reflection, assessment, and judgment;
- Awareness of design issues at various scales;
- Visual and verbal communication skills;
- Ability to produce work with a high level of craft.

COURSE REQUIREMENTS / EVALUATION
100% Portfolio of cumulative work: design research, process work, and final design

CACB SPC: **EVAR 3010**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	□
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	■
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	□

	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	□
A	B3: Site Design	□
A	B4: Sustainable Design	□
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	□
U	B8: Environmental Systems	□
U	B9: Building Envelopes	□
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	□
A	C2: Building Systems Integration	
A	C3: Technical Documentation	□
A	C4: Comprehensive Design	

	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

DESIGN **EVAR 4004**
Architecture Design Studio 3

COURSE CALENDAR DESCRIPTION:
This studio focuses on the broader cultural implications of social interaction and the collective inhabitation of the built and natural environments. Architecture design explorations are influenced by a thorough examination of programmatic, theoretical, historical, technological, material and environmental criteria.

OVERVIEW:
This studio is framed by a thematic subject area, presented by the instructor at the start of term. Students develop an individual research focus and design inquiry within this topical area. Individual instructors may provide particular sites, precedents, programs and/or design methodologies. The term is typically structured by cumulative stages of development, and milestone deadlines, with a design resolution and/or schematic designs presented by the end of term.

LEARNING OBJECTIVES:
To develop and demonstrate:
- Research skills, including observation & interpretation of references, resources, site conditions & design data;
- Investigative strategies informed by collective and/or individual studio initiatives;
- Awareness of ethical, social and cultural implications of architecture within urban and/or natural environments;
- A design approach incorporating knowledge of complex design principles, strategies, and processes;
- Design explorations, engaging careful examination of programmatic, theoretical, historical, technological, material, environmental and socio-political criteria;
- Awareness of construction materials and methods;
- Ability to engage a design process through continuity of critical thinking and skilful making;
- Ability to communicate design intentions in words, drawings, models and other media;
- Ability to conceive of architectural ideas in relation to physical and cultural contexts;
- Ability to produce all work at a high level of attention, care and skill.

COURSE REQUIREMENTS / EVALUATION
100% Portfolio of cumulative work: design research, process work, and final design

Credit Hours: **9**
Instructors: C. Rueda (coordinator), E. Epp, L.Coar, S. Kotoulas, T. Landrum, and others
Level: Undergraduate, Arch. Option (ED4, AMP2)
Format: Studio, with related site visits, field studies, seminars, reviews, and lectures;
two 8-hour sessions per week;
Offered: Fall
Prerequisites: None

CACB SPC: **EVAR 4004**

A: CRITICAL THINKING & COMMUNICATION

A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	☐
U	A7: Cultural Diversity	☐
U	A8: History and Theory	
A	A9: Precedents	☐

B: DESIGN & TECHNICAL SKILLS

A	B1: Design Skills	■
A	B2: Program Preparation	☐
A	B3: Site Design	☐
A	B4: Sustainable Design	☐
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	☐
U	B8: Environmental Systems	☐
U	B9: Building Envelopes	☐
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

C: COMPREHENSIVE DESIGN

A	C1: Detailed Design Development	☐
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

D: LEADERSHIP & PRACTICE

U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met ☐

DESIGN **EVAR 4010**
Architecture Design Studio 4

Credit Hours: **9**
Instructors: C. Rueda (coordinator), E. Epp, L.Coar, S. Kotoulas, T. Landrum, and others
Level: Undergraduate, Arch. Option (ED4, AMP2)
Format: Studio, with related site visits, field studies, seminars, reviews, and lectures;
two 8-hour sessions per week;
Offered: Winter
Prerequisites: EVAR 4004

COURSE CALENDAR DESCRIPTION:
The previous terms investigations are further developed and synthesized into a comprehensively designed environment. Architectural propositions seek to clarify specific relations between details and the overall design, through the integration of complex social, cultural, programmatic, theoretical, historical, technological, material and environmental principles, systems and criteria.

OVERVIEW:
Based on investigations of the previous term, students commence building design and/or elaborate schematic design propositions into a comprehensive architectural design proposal. The term is organized into cumulative stages of development, synchronized with Arch Tech 4, and is to be supported by a consistent mode of inquiry.

LEARNING OBJECTIVES:
To develop and demonstrate:
- Investigative strategies informed by collective and/or individual studio initiatives;
- Ability to design in relation to cultural conditions in an urban and/or natural environment;
- A design approach that incorporates knowledge of design principles, strategies, and processes
- Design resolution, engaging careful examination of programmatic, theoretical, historical, technological, material, environmental and socio-political criteria;
- Ability to evaluate and select construction materials and methods for a particular context and design.
- Ability to engage a design process through continuity of critical thinking and skilful making;
- An ability to communicate design intentions both visually and verbally;
- An ability to produce all work at a high level of attention, care and skill.

COURSE REQUIREMENTS / EVALUATION
100% Portfolio of cumulative work: design research, process work, and final design

CACB SPC: **EVAR 4010**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	
A	A9: Precedents	□
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	□
A	B3: Site Design	■
A	B4: Sustainable Design	■
A	B5: Accessibility	□
U	B6: Life-Safety Systems, Codes & Standards	□
U	B7: Structural Systems	■
U	B8: Environmental Systems	■
U	B9: Building Envelopes	■
U	B10: Building Service Systems	□
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	■
A	C2: Building Systems Integration	□
A	C3: Technical Documentation	□
A	C4: Comprehensive Design	□
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

TECH-NOLOGY

EVAR 3012

Arch Tech Prep (for AMP1 students only)

COURSE CALENDAR DESCRIPTION:

A preparatory block course introducing the fundamentals of structural concepts in architecture that prepares students for the foundation technology courses in architecture.

OVERVIEW:

This course provides an introduction to applied statics and basic strategies and methods to analyze and calculate forces in simple structures. Also introduced are construction materials and system assemblies, including basic construction material properties, applications and their impact on sustainability. This introductory course covers structural concepts for a building design and construction. Aspects of the structural design of a building such as site geotechnical information, civil / structural engineering materials and structural analysis are introduced and discussed at a fundamental level.

LEARNING OBJECTIVES:

- Introduce students to the principles and characteristics of various construction materials and systems;
- Develop an understanding of why various construction materials are selected for specific applications;
- Introduce students to various structural design strategies;
- Develop an ability to describe and analyze simple static structures;
- Develop the ability to calculate horizontal and lateral forces in simple static structures.

COURSE REQUIREMENTS / EVALUATION:

70% Technology Portfolio, including all course notes, research materials and final project;
15% Attendance
15% Participation

Credit Hours: 3
Instructors: Colin Gibbs
Level: undergraduate (AMP1)
Format: Lecture/block course: 8:45am - 4:15pm each day, for 5 days
Offered: Fall (pre-term), last week of August
Prerequisites: None

CACB SPC: **EVAR 3012**

A: CRITICAL THINKING & COMMUNICATION

A	A1: Critical Thinking Skills	
A	A2: Research Skills	
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	
A	A5: Collaborative Skills	
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	

B: DESIGN & TECHNICAL SKILLS

A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	☐
U	B8: Environmental Systems	
U	B9: Building Envelopes	☐
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	☐
U	B12: Building Economics & Cost Control	

C: COMPREHENSIVE DESIGN

A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

D: LEADERSHIP & PRACTICE

U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required

SPC met ■
SPC introduced/partially met ☐

TECH-NOLOGY

EVAR 3004
Architectural Technology 1
Structural and Sustainable Use of Materials

Credit Hours: 3
Instructors: L. Coar
Level: undergraduate (ED3, AMP1)
Format: Lecture, with guest lecturers, tutorials, and local site visits one 3-hour class per week
Offered: Fall
Prerequisites: None

COURSE CALENDAR DESCRIPTION:

Construction materials and structural theory in the analysis and design of simple wood-frame, masonry and light steel construction; fundamental passive energy systems and design strategies for material and energy reduction.

OVERVIEW:

This course explores the principles of construction detail and assembly, through lecture, drawing exercises, case studies and site visits. The intent is to provide an introduction to the architectural and technical aspects of construction by focusing on low-rise wood, steel, and masonry construction from foundation to roof. While construction assembly is a focus of the course, another emphasis is the value of construction drawings as a critical form of communication in the building industry. Topics covered include:

Statics: structural concepts, types, sizing & beam theory; force path and lines of stress; elastic/plastic behaviour; strategies for material reduction: force-active shaping, bending moment, inertia, diaphragm & shell structures.

Materials: properties (isotropic/non-isotropic, strength, stiffness, elasticity); structural applications (steel, wood, masonry, concrete, composites, FRP); structural analysis calculations (beams, simple steel, wood, and masonry).

Energy: Heat storage, transmission through matter, latent energy, and phase change. Energy analysis and design projects for passive energy systems.

LEARNING OBJECTIVES:

To develop:

- An ability to respond to natural and built site characteristics in the development of an architectural program and design of a project with respect to passive energy systems.
- An ability to understand and select appropriate construction materials and design strategies for sound and sustainable designs that utilize material and energy reduction strategies.
- An understanding of the principles of structural behaviour in withstanding gravity and lateral forces.
- An ability to carry out basic analysis and design of efficiently shaped structures.
- An understanding of the principles of light wood frame, masonry and small steel frame construction.

COURSE REQUIREMENTS / EVALUATION:

45% 3 Assignments @ 15% (Forces/Matter/Geometry; Beam Calculations; Structural Sizing);
35% Major Drawing Assignment
20% Technology Reference Binder

CACB SPC: **EVAR 3004**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	
A	A2: Research Skills	☐
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	
A	A5: Collaborative Skills	☐
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	☐
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	☐
U	B7: Structural Systems	■
U	B8: Environmental Systems	☐
U	B9: Building Envelopes	☐
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	☐
A	C4: Comprehensive Design	
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met ☐

TECH-NOLOGY

EVAR 3006
Architectural Technology 2
Building Construction, Structures and Envelopes

COURSE CALENDAR DESCRIPTION:

Architectural, environmental and technical aspects of construction focusing on low-rise and medium sized wood, steel and masonry construction including issues of material production/manufacturing, soils, foundation, envelope systems, basic mechanical systems and their integration and acoustic concerns.

OVERVIEW:

Arch Tech 2 introduces the following topics:

- Building assemblies (low rise wood, steel and masonry);
- Construction material production (source extraction, industrial production, effects on embodied energy and construction techniques);
- Soils/foundations, waterproofing and damp-proofing;
- Site evaluation and land-use bylaws;
- Integration of foundations, structure and envelope in wood & steel frame, concrete, masonry and ICF const.;
- Exterior wall roof types: construction logic, material performance properties, thermal bridging;
- Building envelope & moisture migration: vapour barrier and insulation assemblies; condensation/dew points;
- Water penetration and migration: flashing principles, sheathing, wall openings;
- Interior wall types: bearing & non-bearing, and finishes;
- Basic active energy /mechanical systems;
- Sustainable Design: LEED, passive systems, life cycle analysis, material recycling, energy efficiency in houses and small buildings (NCB 9.36);
- Fire and life safety and barrier free (NBC Part 9);
- Acoustics: principles of sound transfer and mitigation.

LEARNING OBJECTIVES:

To develop an understanding of:

- The impact material qualities & production methods have on architectural, technical, & sustainable performance.
- The technical and design considerations for small to medium scale wood, steel and masonry structures.
- The basic parameters for building materials & envelope design w/respect to thermal, moisture & energy concerns;
- How foundations, building envelope, & environmental control systems are integrated into small buildings.
- Ability to evaluate a building & site and understand how zoning and bylaws affect urban development.

COURSE REQUIREMENTS / EVALUATION:

60% 3 Assignments @ 20% (Group Design/Build Project & Sustainable Analysis; Design & Zoning; Acoustics & Code Analysis)
20% Mid-Term Test
15% Technology Reference Binder
5% Attendance & Participation

Credit Hours: 3
Instructors: L. Veness
Level: undergraduate (ED3, AMP1)
Format: Lecture, with guest lecturers, tutorials, and local site visits one 3-hour class per week
Offered: Winter
Prerequisites: EVAR 3004

CACB SPC: **EVAR 3006**

A: CRITICAL THINKING & COMMUNICATION

A	A1: Critical Thinking Skills	
A	A2: Research Skills	☐
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	
A	A5: Collaborative Skills	■
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	

B: DESIGN & TECHNICAL SKILLS

A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	☐
A	B4: Sustainable Design	■
A	B5: Accessibility	☐
U	B6: Life-Safety Systems, Codes & Standards	■
U	B7: Structural Systems	■
U	B8: Environmental Systems	■
U	B9: Building Envelopes	■
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

C: COMPREHENSIVE DESIGN

A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	☐
A	C4: Comprehensive Design	

D: LEADERSHIP & PRACTICE

U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required

SPC met ■
SPC introduced/partially met ☐

TECH-NOLOGY

EVAR 4002
Architectural Technology 3 – Building Systems

Credit Hours: 3
Instructors: N. Minuk
Level: undergraduate (ED4, AMP2)
Format: Lecture, with guest lecturers, tutorials, and local site visits one 3-hour class per week
Offered: Fall
Prerequisites: none

COURSE CALENDAR DESCRIPTION:
Integrated building systems, focusing on multi-story steel and concrete construction, including: passive and active heating, cooling, and ventilation methods, strategies and designs, electrical, water, communication, security, fire protection, and vertical transportation systems; and building code constraints.

OVERVIEW:
Arch Tech 3 introduces the following topics:
Steel: including details in framing; construction process, fireproofing; long spans; composite columns; and industrialized systems;
Reinforced Concrete: basic design concerns for walls (bearing, non-bearing, shear walls, & retaining walls); slabs (one way & two way); and frames;
Building Systems Integration, including the following:
- Heating / cooling systems (passive and active);
- Electrical systems: AC, DC;
- Plumbing systems: water supply and waste strategies;
- Fire protection systems;
- Basic strategies for low energy / positive energy systems integration;
- Accessibility;
- Daylight and artificial lighting systems;
- Vertical transportation, communication, and security;
- Building code issues: occupancy classes, allowable heights/areas, construction types, separation, occupancy requirements, egress, and fire protection;
- Acoustic concerns in architectural design: including materials, and geometry.

LEARNING OBJECTIVES:
To develop an understanding of:
- Basic reinforced concrete & steel design & construction;
- The design parameters for basic building systems;
- How these systems are integrated into multi-story constructions;
- Architectural design constraints of systems integration.

COURSE REQUIREMENTS / EVALUATION:
15% Assignment A.1 Code Assessment
15% Assignment A.2 Structural System & Design
15% Assignment A.3 Lighting Design Daylight & RCP
15% Assignment A.4 HVAC System and Layout
30% Assignment B.1 Group Detail Design Project
10% Technology Binder, compiling all class work

CACB SPC: **EVAR 4002**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	
A	A2: Research Skills	☐
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	
A	A5: Collaborative Skills	■
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	☐
A	B2: Program Preparation	
A	B3: Site Design	☐
A	B4: Sustainable Design	■
A	B5: Accessibility	☐
U	B6: Life-Safety Systems, Codes & Standards	■
U	B7: Structural Systems	■
U	B8: Environmental Systems	■
U	B9: Building Envelopes	■
U	B10: Building Service Systems	■
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	☐
A	C2: Building Systems Integration	☐
A	C3: Technical Documentation	☐
A	C4: Comprehensive Design	
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met ☐

TECH-NOLOGY

EVAR 4008
Architectural Technology 4
Comprehensive Design Technology Report

Credit Hours: 3
Instructors: N. Minuk
Level: undergraduate (ED4, AMP2)
Format: Lecture, with tutorials, and reviews w/ technical consultants one 3-hour class per week
Offered: Winter
Prerequisites: Corequisite EVAR 4010 (Studio 4)

COURSE CALENDAR DESCRIPTION:
A technical knowledge project-based course integrated with Arch Studio 4. Comprehensive technology issues include: site; material; energy; structures; construction; sustainability; environmental factors; building code; and life safety. Student's work will include analysis, technical drawings and calculations.

OVERVIEW:
The Comprehensive Design Technology Report is done in parallel with the Arch Studio 4 design project. The intent is to develop clear links between technology principles and their application in design. The course builds on knowledge and ability in Arch Tech 1, 2 & 3, and synthesizes this knowledge within a fully resolved design project. Arch Tech 4 and Arch Studio 4 together aim to satisfy CACB's Comprehensive Design requirements.

LEARNING OBJECTIVES:
To develop and demonstrate:
- Understanding of architectural technology in relation to design development
- Ability to respond to natural & built site conditions in developing an architectural program and design;
- Ability to develop appropriate structural solutions for a given context and design direction;
- Understanding of the principles of environmental control in buildings, including acoustics, lighting & climate modification systems, & energy use (passive & active);
- Understanding of the principles of life-safety systems in buildings and their subsystems;
- Understanding of the principles of building envelope systems and construction processes, construction materials, components, and assemblies;
- Understanding of the principles of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection;
- Understanding of building code compliance applicable to a given site and design project;
- Ability to prepare technical drawings for an original design – to assess, select and integrate structural, building envelope, environmental, life-safety, and building service systems.

COURSE REQUIREMENTS / EVALUATION:
15% Assignment A.1 Code Assessment
30% Assignment A.2 Structural System & Design
40% Assignment A.3 Lighting Design Daylight & RCP
15% Technology Binder, compiling all class work

CACB SPC: **EVAR 4008**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	
A	A2: Research Skills	☐
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	
A	A5: Collaborative Skills	
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	
A	B3: Site Design	■
A	B4: Sustainable Design	■
A	B5: Accessibility	■
U	B6: Life-Safety Systems, Codes & Standards	■
U	B7: Structural Systems	■
U	B8: Environmental Systems	■
U	B9: Building Envelopes	■
U	B10: Building Service Systems	■
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	■
A	C2: Building Systems Integration	■
A	C3: Technical Documentation	■
A	C4: Comprehensive Design	☐
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met ☐

HISTORY THEORY

EVAR 3000
Pre-Modern Architectural History and Theory 1

COURSE CALENDAR DESCRIPTION:
Provides a historical and theoretical understanding of early Greek, Roman, Gothic & non-western architectural topics and their influence. Content is explored using primary texts where possible, and through critical analysis of selected topics.

OVERVIEW:
This course covers pre-history to the early Renaissance, with examples from around the world. It is taught as a lecture series, with contributions by a primary instructor as well as academic guests. Loosely chronological, each lecture presents a particular set of pre-modern built works and key texts framed by theoretical topics and questions. The format aims to model architectural inquiry and thinking in action, as well as the nature of history itself, which does not unfold in an easy linear trajectory. Over-arching concerns run throughout course, generating an evolving in-class discussion, and opening a variety of questions having relevance for present-day practice.

LEARNING OBJECTIVES:
To develop:

- understanding of history as an active, ongoing, interpretive and creative inquiry;
- understanding of architectural intentions;
- understanding of architecture's cultural context, including the epistemological, socio-political, technological and ecological factors that shape the design and production of architecture in different times and places around the world;
- detailed awareness and in-depth understanding of a particular architectural work and the "world of the work" through individual research;
- ability to 'read' buildings and settings through analysis of their drawings and images;
- ability to listen and observe attentively, take accurate notes, think critically, ask questions and write coherently on pre-modern architectural topics;
- ability to perform research, involving analytic and communication skills—oral, visual and written;

COURSE REQUIREMENTS / EVALUATION

60% Weekly Assignments: a *précis* (written summary of the lecture), in-class quiz, or equivalent (each graded out of 10, and aggregated to 60%);

40% Major Assignment: individual research dossier on a selected work (incl. literature reviews, bibliography, and a research summary), in preparation for writing a major essay next term.

Credit Hours: 3
Instructors: L. Landrum (Primary); T.Fuglem, C. Rueda (lecturers)
Level: Undergraduate, Arch. Option (ED3, ED4, AMP1, AMP2)
Format: Lecture, one 3-hour class per week
Offered: Fall, offered every other year: 2017-18, 2015-16, etc.
Prerequisites: None

CACB SPC: **EVAR 3000**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	■
A	A9: Precedents	■
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

HISTORY
THEORY

EVAR 3002
Pre-Modern Architectural History and Theory 2

COURSE CALENDAR DESCRIPTION:
Provides a historical and theoretical understanding of Gothic and Renaissance architectural topics and their influence, up to the work of Claude Perrault. Content is explored using primary texts where possible, and through critical analysis of selected topics.

OVERVIEW:
This course covers the Renaissance to the Enlightenment, with examples from around the world. It is taught as a lecture series, with contributions by a primary instructor as well as academic guests. Loosely chronological, each lecture presents a particular set of pre-modern built works and key texts framed by theoretical topics and questions. The format aims to model architectural inquiry and thinking in action, as well as the nature of history itself, which does not unfold in an easy linear trajectory. Over-arching concerns run throughout the course, generating an evolving in-class discussion, and opening a variety of questions having relevance for present-day practice.

LEARNING OBJECTIVES:
To develop:

- understanding of history as an active, ongoing, interpretive and creative inquiry;
- understanding of architectural intentions;
- understanding of architecture's cultural context, including the epistemological, socio-political, technological and ecological factors that shape the design and production of architecture in different times and places around the world;
- detailed awareness and in-depth understanding of a particular architectural work and the "world of the work" through individual research;
- ability to 'read' buildings and settings through analysis of their drawings and images;
- ability to listen and observe attentively, take accurate notes, think critically, ask questions and write coherently on pre-modern architectural topics;
- ability to perform practical research skills, analytic skills, and communication skills—oral, visual and written;

COURSE REQUIREMENTS / EVALUATION

60% Weekly Assignments: a *précis* (written summary of the lecture), in-class quiz, or equivalent (each graded out of 10, and aggregated to 60%);

40% Major Assignment: individual research paper on a selected work (3500-word essay, with a clear argument and supporting material).

Credit Hours: 3
Instructors: L. Landrum/T.Fuglem (Primary); C. Rueda, E. Aquino (lecturers)
Level: Undergraduate, Arch. Option (ED3, ED4, AMP1, AMP2)
Format: Lecture, one 3-hour class per week
Offered: Winter, offered every other year: 2018, 2015, 2013, etc.
Prerequisites: None

CACB SPC: **EVAR 3002**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	■
A	A9: Precedents	■
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required

SPC met ■
SPC introduced/partially met □

HISTORY THEORY

EVAR 4000
Modern Architectural History and Theory 1

COURSE CALENDAR DESCRIPTION:
Provides a historical and theoretical understanding of the origins of modernity in architecture. Content is explored using primary texts where possible, and through critical analysis of selected topics.

OVERVIEW:
This course covers the Enlightenment to the early 20th century, with examples from around the world. It is taught as a lecture series, with contributions by a primary instructor and academic guests. Loosely chronological, each lecture presents a particular set of modern works and key texts framed by theoretical topics and questions. The format aims to model architectural inquiry and thinking in action, as well as the nature of history itself, which does not unfold in an easy linear trajectory. Over-arching concerns run throughout course, generating an evolving in-class discussion, and opening a variety of questions having relevance for present-day practice.

LEARNING OBJECTIVES:
To develop:
- understanding of history as an active, ongoing, interpretive and creative inquiry;
- understanding of modernity in relation to architecture and its differences and continuities with pre-modernity;
- understanding of architectural intentions;
- understanding of architecture's cultural context, including the epistemological, socio-political, technological and ecological factors that shape the design and production of architecture in different times and places around the world;
- detailed awareness and in-depth understanding of a particular architectural work and the "world of the work" through individual research;
- ability to 'read' buildings and settings through analysis of their drawings and images;
- ability to listen and observe attentively, take accurate notes, think critically, ask questions and write coherently on pre-modern architectural topics;
- ability to perform practical research skills, analytic skills, and communication skills—oral, visual and written;

COURSE REQUIREMENTS / EVALUATION
60% Weekly Assignments: a *précis* (written summary of the lecture), in-class quiz, or equivalent (each graded out of 10, and aggregated to 60%);
40% Major Assignment: individual research dossier on a selected work (incl. literature reviews, bibliography, and a research summary), in preparation for writing a major essay next term.

Credit Hours: 3
Instructors: T.Fuglem (Primary); E. Aquino, L. Landrum C. Rueda (lecturers)
Level: Undergraduate, Arch. Option (ED3, ED4, AMP1, AMP2)
Format: Lecture, one 3-hour class per week
Offered: Fall, offered every other year: 2016-17, 2014-15, etc.
Prerequisites: None

CACB SPC: **EVAR 4000**

A: CRITICAL THINKING & COMMUNICATION

A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	■
A	A9: Precedents	■

B: DESIGN & TECHNICAL SKILLS

A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	

C: COMPREHENSIVE DESIGN

A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

D: LEADERSHIP & PRACTICE

U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

HISTORY
THEORY

EVAR 4006
Modern Architectural History and Theory 2

COURSE CALENDAR DESCRIPTION:
Provides a historical and theoretical understanding of 20th century topics in architecture (western and non-western). Content is explored using primary texts where possible, and through critical analysis of selected topics.

OVERVIEW:
This course covers the early 20th century to present day, with examples from around the world. It is taught as a lecture series, with contributions by a primary instructor and academic guests. Loosely chronological, each lecture presents a particular set of modern works and key texts framed by theoretical topics and questions. The format aims to model architectural inquiry and thinking in action, as well as the nature of history itself, which does not unfold in an easy linear trajectory. Over-arching concerns run throughout course, generating an evolving in-class discussion, and opening a variety of questions having relevance for present-day practice.

LEARNING OBJECTIVES:
To develop:

- understanding of history as an active, ongoing, interpretive and creative inquiry;
- understanding of modernity as an unfinished project, and its relation to contemporary architectural design;
- understanding of architectural intentions;
- understanding of architecture's cultural context, including the epistemological, socio-political, technological and ecological factors that have shaped the design and production of architecture in different times and places around the world;
- detailed awareness and in-depth understanding of a particular architectural work and the "world of the work" through individual research;
- ability to 'read' buildings and settings through analysis of their drawings and images;
- ability to listen and observe attentively, take accurate notes, think critically, ask questions and write coherently on pre-modern architectural topics;
- ability to perform practical research skills, analytic skills, and communication skills—oral, visual and written;

COURSE REQUIREMENTS / EVALUATION

60% Weekly Assignments: a *précis* (written summary of the lecture), in-class quiz, or equivalent (each graded out of 10, and aggregated to 60%);

40% Major Assignment: individual research paper on a selected work (3500-word essay, with a clear argument and supporting material).

Credit Hours: 3
Instructors: E. Aquino (Primary); T.Fuglem, L. Landrum, C. Rueda (lecturers)
Level: Undergraduate, Arch. Option (ED3, ED4, AMP1, AMP2)
Format: Lecture, one 3-hour class per week
Offered: Winter, offered every other year: 2016-17, 2014-15, etc.
Prerequisites: None

CACB SPC: **EVAR 4006**

A: CRITICAL THINKING & COMMUNICATION

A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	■
A	A9: Precedents	■

B: DESIGN & TECHNICAL SKILLS

A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	

C: COMPREHENSIVE DESIGN

A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

D: LEADERSHIP & PRACTICE

U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

PROF. PRACTICE

ARCH 7040
Professional Practice

Credit Hours: **3**
Instructors: Dean Syverson, MAA
Level: Graduate, M1
Format: Lecture, plus local visits to the MAA and architecture firms, one 3-hour class per week;
Offered: Fall (in 2016-17 the course was offered in the Winter due to instructor availability)
Prerequisites: None

COURSE CALENDAR DESCRIPTION:
This course is concerned with the duties and responsibilities of an architectural practice; its divisions, office organization and administration, in Manitoba and Canada. The lectures relate in scope and standard to current models of practice and their requirements, including issues of building economics and construction cost control.

OVERVIEW:
This course exposes students to diverse issues involved in professional practice by combining the discussion of practice in theory with the actual experience of architects and other professionals. The course provides students with the information that will allow them to develop an awareness of the architect's professional ethics, legal responsibilities and the organization and administration of an architect's office. The course introduces the notion of architectural practice as both a discipline and a profession.

LEARNING OBJECTIVES:
- to understand the fundamental nature of what constitutes being a professional;
- to be aware of the basic principles of office organization as they apply to the practice of architecture;
- to be aware of different methods of project delivery, the corresponding forms of service contracts and the types of documentation required to render competent and responsible professional service;
- to understand the codes, regulations, and standards applicable to a building design project;
- to understand the fundamentals of building economics, construction cost control & life-cycle cost accounting;
- to be aware of architects' leadership roles from project inception to facility management;
- to be aware of ethical issues involved in forming professional judgments, including social, political and cultural issues.

COURSE REQUIREMENTS / EVALUATION
10% Personal Branding/Professional Profile
10% Interview & Interview Assessment
20% Practice Types Case Studies
25% Construction Cost Estimate
20% Seeing Patterns (750-word critical analysis of practice trends and the future of practice)
15% Final Exam

CACB SPC: **ARCH 7040**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	■
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	■
U	D2: Ethics and Professional Judgment	■
U	D3: Legal Responsibilities	■
U	D4: Project Delivery	■
U	D5: Practice Organization & Management	■
U	D6: Professional Internship	■

A = **A**bility required
U = **U**nderstanding required
SPC met ■
SPC introduced/partially met □

PROF. PRACTICE

ARCH 7350
Legal Aspects of Architectural Practice

COURSE CALENDAR DESCRIPTION:
This course discusses the importance of the knowledge of law as it relates to professional practice of architecture, including a discussion of the historical development of legal responsibilities of a practicing professional generally and of architects specifically. There is also discussion of trends in the development of professional responsibility and liability.

OVERVIEW:
Lectures, in-class discussion, group focused sessions and assignments, cover the following topics:

Legal Aspects:
- the Canadian legal system & principles of contract law;
- the responsibilities of an architect
- architect-client contracts;
- negligence;
- professional liability;
- insurance and risk management;
- bid and performance security
- the Builders Liens Act;
- business organization, and the Architect Act
- dispute resolution;

Ethics:
- What ethics is; what ethics is not;
- approaches to moral decision-making
- the ideal of professionalism
- environmental ethics: "the tragedy of the commons" and how to avoid it;
- architectural ethics: an analysis of some ethical issues facing architects

LEARNING OBJECTIVES:
- to understand the legal and ethical responsibilities of an architect;
- to become aware of the historical background of how an architect's responsibilities have changed over time;
- to understand the laws, codes, and regulations having jurisdiction over architectural work at civic, provincial and federal levels;
- to understand philosophical, moral and cultural issues surrounding ethics and professional judgment.

COURSE REQUIREMENTS / EVALUATION
75% Legal Exam
25% Ethics Exam

Credit Hours: 3
Instructors: Mark O'Neil; Neil McArthur
New instructor in 2017-18: Kelsey Desjardine (due to Mark's 2017 retirement).
Level: Graduate, M1
Format: Lecture, one 3-hour class per week;
Offered: Winter (in 2016-17 the course was offered in the Fall due to instructor availability)
Prerequisites: None

CACB SPC: **ARCH 7350**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	

	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	

	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	■
U	D2: Ethics and Professional Judgment	■
U	D3: Legal Responsibilities	■
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

DESIGN **ARCH 7050**

Arch Studio 5 and Comprehensive Program Report

COURSE CALENDAR DESCRIPTION:

Develop design explorations and seek to clarify relations between architectural criteria and the urban/natural environments in national or international contexts. Conceptual, programmatic, material, technological, economic, and political principles and systems employed are to be evident in the Comprehensive Program Report.

OVERVIEW:

This studio is framed by a thematic subject area of cultural significance, presented by the instructor at the start of term. Students develop an individual research focus and an exploratory mode of design inquiry within this topical area. Students in Arch Studio 5 typically resolve a particular design problem for a complex site and circumstances, while also establishing a direction for the development of a comprehensive building design in the Winter term. As part of Arch Studio 5, students prepare a Comprehensive Program Report outlining the detailed design criteria that normally guides and frames their work in Arch Studio 6. The bound report compiles: documentation on the proposed program, precedents, site, environmental conditions, construction systems, materials, and applicable regulations.

LEARNING OBJECTIVES:

To develop and demonstrate the following:

- design research skills, including critical interpretation of contextual conditions, building program requirements, design & construction methods;
- investigative and evaluative design strategies informed by collective and/or individual studio initiatives;
- critical skills in assessing and improving complex urban, cultural and natural environments;
- appropriate design development processes, including exploratory drawings and models, incorporating knowledge of design principles and strategies;
- ability to develop and sustain a design process through a continuity of critical thinking and skillful making;
- ability to effectively and evocatively communicate design intentions, visually, physically and verbally;
- ability to produce creative and compelling design work at a high level of attention, care and skill.

COURSE REQUIREMENTS / EVALUATION

80% Portfolio of cumulative work, including research, design process, and final design;
20% Comprehensive Program Report

Credit Hours: **9**
Instructors: L.Coar, H.Enns
L.Landrum, N.Minuk
Level: Graduate (M1)
Format: Design Studio, with related site visits, field studies, seminars, reviews, and lectures;
two 8-hour sessions per week;
Offered: Fall
Prerequisites: None

CACB SPC: **ARCH 7050**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	
A	A9: Precedents	■

	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	■
A	B3: Site Design	□
A	B4: Sustainable Design	■
A	B5: Accessibility	□
U	B6: Life-Safety Systems, Codes & Standards	□
U	B7: Structural Systems	□
U	B8: Environmental Systems	□
U	B9: Building Envelopes	□
U	B10: Building Service Systems	□
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	□
A	C2: Building Systems Integration	□
A	C3: Technical Documentation	□
A	C4: Comprehensive Design	□

	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required

SPC met ■
SPC introduced/partially met □

DESIGN **ARCH 7060**

Arch Studio 6 (Comprehensive Design Studio)

COURSE CALENDAR DESCRIPTION:
The previous term's investigations are further developed into a comprehensive architectural design proposal. The thorough integration of design and programming criteria, with building and environmental systems and assemblies are examined.

OVERVIEW:
This studio elaborates on topics, processes and settings explored in Arch Studio 5 and draws on design criteria students compile in the Comprehensive Program Report. In Arch Studio 6 students produce a comprehensive building design – typically a multi-story mixed-use cultural institution for a contextually complex site. This studio is structured in synchronicity with a series of lectures and local site visits providing immersive learning sessions with various experts. Sessions are sequenced to support the phases of design development and focus on key criteria pertinent to comprehensive design, including sustainable design; site design, environmental systems, life-safety, building service systems, materials and assemblies, building envelopes and detailed design development. External technical consultants and guest critics meet with students and review work during the term.

LEARNING OBJECTIVES:
To develop and demonstrate the following:

- ability to apply design research in the development and resolution of a comprehensive building design, including critical interpretation of contextual conditions, building program requirements, design and construction methods;
- ability to integrate building services and environmental systems with structure and enclosure;
- ability to produce technically resolved drawings and models of an original design;
- ability to engage an appropriate design development processes, including exploratory drawings and models, incorporating knowledge of design principles and strategies;
- ability to effectively and evocatively communicate design intentions both visually, physically and verbally;
- ability to produce a creative and compelling architectural proposal at a comprehensive level of attention, care and skill.

COURSE REQUIREMENTS / EVALUATION
100% Portfolio of cumulative work: research, design process, final design, and technical drawings.

Credit Hours: 9
Instructors: H.Enns, L.Landrum, N.Minuk
Level: Graduate (M1)
Format: Design Studio, with related site visits, seminars, reviews, lectures and technical consultations; two 8-hour sessions per week;
Offered: Winter
Prerequisites: None

CACB SPC: **ARCH 7060**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	
A	A9: Precedents	■
	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	■
A	B3: Site Design	■
A	B4: Sustainable Design	■
A	B5: Accessibility	■
U	B6: Life-Safety Systems, Codes & Standards	■
U	B7: Structural Systems	■
U	B8: Environmental Systems	■
U	B9: Building Envelopes	■
U	B10: Building Service Systems	■
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	
	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	■
A	C2: Building Systems Integration	■
A	C3: Technical Documentation	■
A	C4: Comprehensive Design	■
	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required

SPC met ■
SPC introduced/partially met □

DESIGN **ARCH 7070**
Design Research Studio

Credit Hours: **9**
Instructors: E.Aquino, L. Coar, H. Enns, T.Fuglem, J. Hurme, L.Landrum, N.Minuk, C.Rueda
Level: Graduate (M2)
Format: Design Studio, with related site visits, field studies, seminars, reviews, and lectures; two 8-hour sessions per week;
Offered: Fall
Prerequisites: None

COURSE CALENDAR DESCRIPTION:
This final design studio involves concerted research and design explorations of an individually defined subject of inquiry, within a selected studio thematic focus. These investigations are intended to prepare students for their final Design Thesis.

OVERVIEW:
Design Research Studio is a confluence of a student's interests and an advisor's research and guidance. The term's work involves articulating architectural questions and attempting responses; defining topics of fascination and concern; identifying particular conditions, programs, sites, and/or phenomena to ground the design work; developing exploratory strategies and appropriate manners of making; and positioning the thesis inquiry in relation to research precedents, and relevant theoretical and cultural contexts. The first term culminates with preliminary designs, advanced design strategies, and presentations of on-going creative research in the form of diverse models, drawings, and/or full-scale installations and supplementary videos and digital projections.

LEARNING OBJECTIVES:
To develop and demonstrate the following:
- ability to formulate architectural questions; to articulate design intentions and processes that explore those questions; and to pursue a design project that elaborates and responds to the stated thesis inquiry;
- ability to engage design as research and to perform research pertinent to the thesis inquiry;
- ability to devise appropriate design development processes, incorporating knowledge of complex design principles and strategies;
- critical skills in assessing complex urban, cultural and natural environments;
- ability to develop and sustain a design process through a continuity of critical thinking and skillful making;
- ability to effectively and evocatively communicate design intentions both visually and verbally;
- ability to produce design work at a high level of attention, care and skill.

COURSE REQUIREMENTS / EVALUATION
100% Portfolio of cumulative work, including research, design process, and design development;
A Design Thesis Proposal must be submitted and approved at the end of the Fall term in order to proceed to GRAD 7090.

CACB SPC: **ARCH 7070**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	
A	A9: Precedents	■

	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	□
A	B3: Site Design	■
A	B4: Sustainable Design	■
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	□
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	□
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

DESIGN **GRAD 7090**
Design Thesis

COURSE CALENDAR DESCRIPTION:
The Design Thesis is an independently driven creative work developed within a focused subject of inquiry and directed by architectural questions. It is carried out through intensive research, study, and design explorations that culminate in a thoroughly developed architectural proposition. It is to be fully recorded in a final document.

OVERVIEW:
Design Thesis requires students to structure their method of study, establish their work within a theoretical context, and develop an architectural project as a creative and eloquent proposition. Students work with an advisor. Projects are publicly presented and evaluated by a committee, including an internal chair (secondary advisor) and external examiner. Students produce a substantive architectural design project and a book documenting all design research, processes, and final resolutions. A required text describes and frames the inquiry, and provides interpretive annotations and critical reflections. Design Thesis is open to more speculative manifestations, as comprehensive design requirements are met in the M1 studio. Building design resolution varies by project. All students are required to achieve a high level of technical resolution within their specified area of inquiry.

LEARNING OBJECTIVES:
To develop and demonstrate the following:
- ability to resolve a design project in response to an independently defined thesis inquiry;
- ability to engage design as research and to perform research pertinent to the thesis inquiry;
- ability to devise appropriate design development processes, incorporating knowledge of complex design principles and strategies;
- critical skills in assessing complex urban, cultural and natural environments;
- ability to develop and sustain a design process through a continuity of critical thinking and skillful making;
- ability to effectively and evocatively communicate design intentions both visually and verbally;
- ability to produce design work at a high level of attention, care and skill.

COURSE REQUIREMENTS / EVALUATION
Design Thesis is evaluated as pass/fail. There is a required interim presentation, final presentation with an external examiner, and submission of a final book.

Credit Hours: **0**
Instructors: E.Aquino, L.Coar, H.Enns, T.Fuglem, J.Hurme, L.Landrum, N.Minuk, C.Rueda, R.Stern
Level: Graduate (M2)
Format: Design Studio, with related site visits, seminars, reviews, lectures, and technical consultations; two 8-hour sessions per week;
Offered: Winter
Prerequisites: None

CACB SPC: **GRAD 7090**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	
A	A9: Precedents	■

	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	□
A	B3: Site Design	■
A	B4: Sustainable Design	■
A	B5: Accessibility	□
U	B6: Life-Safety Systems, Codes & Standards	□
U	B7: Structural Systems	■
U	B8: Environmental Systems	■
U	B9: Building Envelopes	■
U	B10: Building Service Systems	□
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	■
A	C2: Building Systems Integration	□
A	C3: Technical Documentation	■
A	C4: Comprehensive Design	□

	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	■
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

TECH-NOLOGY

ARCH 7080
Technology Thesis Report

Credit Hours: 3
Instructors: varies
H. Enn & C. Rueda in 2017
Level: Graduate (M2)
Format: Lecture & studio consultations; one 3-hour class per week
Offered: Winter
Prerequisites: None

COURSE CALENDAR DESCRIPTION:
Technology Thesis Report is an advanced project-based course done in conjunction with the Design Thesis project. The report is related to an individual student's design thesis topic, focusing on specific aspects of technology and applied technology research. Advisor supervision and external engineering consultancy or agreed equivalent are required.

OVERVIEW:
This course fosters appreciation for the interdependence of architectural technology, design and research. The course provides students with methodological tools and resources, as well as individual advice to facilitate the successful development of one or more technological aspects of their Design Thesis. Lectures and workshops are augmented with individual technical consultations focused on student projects, as well as public design reviews with external guests and the student's thesis advisor and chair.

LEARNING OBJECTIVES:
- to develop research skills oriented toward identifying appropriate technologies and systems for particular architectural projects and contexts;
- to develop an understanding of technical principles in relation to design development;
- to enhance student understanding of the ethical and aesthetic possibilities of technical decision making;
- to demonstrate ability in applying appropriate technologies to specific design projects;
- to foster an ability to engage technical consultants in productive dialogue to advance design resolutions in view of design intentions;
- to develop ability for technical analysis and synthesis, including aspects of site, material, structures, environmental systems, and life safety systems.

COURSE REQUIREMENTS / EVALUATION:
30% Interim Review;
30% Technical Report – a portfolio of cumulative detailed design work, including process and final drawings, and a 1500-word articulation of technical design intentions;
40% Binder – a record of research, sketches, relevant technical data, and analysis of precedents.

CACB SPC: **ARCH 7080**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	■
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	
U	A7: Cultural Diversity	
U	A8: History and Theory	
A	A9: Precedents	■

	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	■
A	B2: Program Preparation	
A	B3: Site Design	□
A	B4: Sustainable Design	■
A	B5: Accessibility	□
U	B6: Life-Safety Systems, Codes & Standards	■
U	B7: Structural Systems	■
U	B8: Environmental Systems	■
U	B9: Building Envelopes	■
U	B10: Building Service Systems	□
U	B11: Building Materials and Assemblies	■
U	B12: Building Economics & Cost Control	

	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	■
A	C2: Building Systems Integration	□
A	C3: Technical Documentation	■
A	C4: Comprehensive Design	□

	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

TECH-NOLOGY

ARCH 7000/7010
Advanced Technology Topics 1 & 2

COURSE CALENDAR DESCRIPTION:
One five-week seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms. Min. two Tech Topics are required.

OVERVIEW:
These courses are short and intense, intended to introduce students to a variety of advanced technology topics. They are designed to cultivate students' individual interests in ways that initiate and/or complement their Design Thesis Technology Reports (ARCH 7080) and/or spark interest in pursuing further research. Tech Topics change and/or develop each year, inflected by current research of faculty and guest instructors. Academic in nature, Tech Topics also provide hands-on learning opportunities, and may include industry support. Tech Topics foster an understanding of many CACB design & technical SPCs, but these vary by specific course topic and requirements. Instructors present topics before the start of term. Students choose based on research interest & availability.

LEARNING OBJECTIVES:
Instructors develop specific learning objectives related to course content and topics of investigation (listed on the next page). General learning objectives, shared by all Advanced Technology Topics courses, include:

- to broaden awareness of technology through in-depth study of particular works, materials and/or processes;
- to offer students an opportunity to develop their own interests in building technology, systems and methods;
- to develop:
  - practical research skills and tools of critical analysis, experimentation and presentation;
  - communication skills, including the ability to speak and write effectively on assigned and selected topics;
  - ability to pose pertinent and probing architectural questions and to invest oneself in self-directed inquiry.

COURSE REQUIREMENTS / EVALUATION:
Requirements and weightings are assigned according to specific topical objectives. All courses typically require:

- presentations based on individual or group research;
- individual or group projects;
- individual documentation of project (and related research) in the form of a portfolio or booklet, with critical annotations and reflections;

Credit Hours: **1.5**
Instructors: (varies) L. Coar, H. Enns, E. Epp, T.Landrum, S. Ghosh, J. Hurme, L. Veness.
Level: Graduate (M1 and M2)
Format: Seminar and/or Studio/Lab; one 4-hour class per week for five weeks (1st or 2nd half of term)
Offered: Fall and Winter – different topics each term, 2016-17 options listed below
Prerequisites: None

CACB SPC:		ARCH 7000	ARCH 7010
	A: CRITICAL THINKING & COMMUNICATION		
A	A1: Critical Thinking Skills	■	
A	A2: Research Skills	☐	
A	A3: Graphic Skills		
A	A4: Verbal and Writing Skills	■	
A	A5: Collaborative Skills		
U	A6: Human Behaviour		
U	A7: Cultural Diversity		
U	A8: History and Theory		
A	A9: Precedents	■	
	B: DESIGN & TECHNICAL SKILLS		
A	B1: Design Skills	☐	
A	B2: Program Preparation		
A	B3: Site Design		
A	B4: Sustainable Design	☐	
A	B5: Accessibility		
U	B6: Life-Safety Systems, Codes & Standards	☐	
U	B7: Structural Systems	☐	
U	B8: Environmental Systems	☐	
U	B9: Building Envelopes	☐	
U	B10: Building Service Systems	☐	
U	B11: Building Materials and Assemblies	■	
U	B12: Building Economics & Cost Control		
	C: COMPREHENSIVE DESIGN		
A	C1: Detailed Design Development	☐	
A	C2: Building Systems Integration	☐	
A	C3: Technical Documentation	☐	
A	C4: Comprehensive Design		
	D: LEADERSHIP & PRACTICE		
U	D1: Leadership and Advocacy		
U	D2: Ethics and Professional Judgment		
U	D3: Legal Responsibilities		
U	D4: Project Delivery		
U	D5: Practice Organization & Management		
U	D6: Professional Internship		

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met ☐

TECH-NOLOGY **ARCH 7000/7010**
Advanced Technology Topics 1 and 2

Tech. Topics Options
Fall 2016

Architectural Lighting & Shadows

Instructor: **Ted Landrum**
Offered: **Fall 2016** / first half

TECHNOLOGY TOPIC OVERVIEW:
This course examines how and why architects integrate natural and artificial lighting in design. Diverse lighting strategies, precedents, equipment, factors, and concerns are explored. Coursework involves: instructor and student presentations; presentations on required and selected readings; field trips to see exemplary lighting conditions and equipment; meeting with experts; discussion; and student lighting experiments and documentation.

LEARNING OBJECTIVES specific to this technology topic:
- to understand how architectural qualities of space, materiality, time, movement, texture, color & experience are perceived through the subtle cooperation of light and shadow;
- to encourage responsible and effective design of natural and artificial lighting in architecture.

COURSE REQUIREMENTS / EVALUATION
10% Quality of class participation
10% Solar Shadow Documentation
10% Light Metering within campus buildings
20% Seminar Presentation on assigned readings & independent research
20% Light & Shadow Models and photography
30% Lighting & Shadows Book – compilation of all assignments, with further annotations, reflections and research.

Sustainability by Design: Passive Energy Systems

Instructor: **Suchita Ghosh**
Offered: **Fall 2016** / first half

TECHNOLOGY TOPIC OVERVIEW:
This course introduces passive energy systems, their theories and applications to contemporary architecture. Topics include: solar orientation, natural ventilation and thermo-dynamic properties of building envelopes. Students study salient literature, current design issues, precedents, and potential for creative expression and interpretation.

LEARNING OBJECTIVES specific to this technology topic:
- to understand passive energy principles, systems, technologies and methods;
- to develop ability to respond to diverse and changing climatic characteristics through sustainable architectural design;
- to comprehend the optimal synergy between natural and built environments;
- to develop ability to apply technical knowledge of passive systems to design.

COURSE REQUIREMENTS / EVALUATION
10% Quality of class participation
30% Group presentations on assigned topics (3x10%)
60% Individual presentation on passive energy system and written submission

Integrated Project Delivery in Practice

Instructor: **Liane Veness**
Offered: **Fall 2016** / second half

TECHNOLOGY TOPIC OVERVIEW:
This course introduces methodologies used in practice for integrated project management. The course covers production of architectural details, drawing coordination, integrated design and production processes, phases of project delivery, and time management. The goal is to provide students tools to successfully manage their design thesis.

LEARNING OBJECTIVES specific to this technology topic:
- to understand how and when to integrate building systems and technical information as an integral part of design processes;

COURSE REQUIREMENTS / EVALUATION
80% Course Assignment
15% Presentation
5% Attendance and Participation

TECH-NOLOGY

ARCH 7000/7010
Advanced Technology Topics 1 and 2

Tell the Tale Detail

Instructor: **Johanna Hurme**
Offered: **Winter 2017** / first half

TECHNOLOGY TOPIC OVERVIEW:
This course examines building construction details as generators of design and as key elements of architecture's overall economy and ecology. The course introduces important texts on tectonics, including Marco Frascari's 1984 article, "The Tell-the-Tale Detail." Students perform research on selected building assemblies; create a set of construction detail drawings informed by current design studio projects; and build one detail at full scale.

LEARNING OBJECTIVES specific to this technology topic:
- to understand the relationship of part to whole in an architectural work;
- to understand the communicative role of construction details in relaying cultural meaning, and design logic;
- to allow students to develop at full scale a particular detail of their design studio or thesis project;

COURSE REQUIREMENTS / EVALUATION
60% Portfolio of drawings (10 details of the student's studio design project)
40% 1:1 Mock-up of one detail represented in the portfolio

Tech. Topics Options
Winter 2017

Hands on Masonry

Instructor: **Ted Landrum**
Offered: **Winter 2017** / second half

TECHNOLOGY TOPIC OVERVIEW:
This course covers the global history and future of masonry, together with its wide-ranging principles and approaches, precedents and concerns in architecture. The course includes a hands-on masonry workshop and a field trip to a stone quarry shop. Students meet industry experts; lay bricks; and inspect mock-ups, samples and shop drawings. Students present on assigned readings, covering detailed examples, concepts, technical documentation and nomenclature; and assemble research into a final book.

LEARNING OBJECTIVES specific to this technology topic:
- to understand the wide diversity of masonry in history and contemporary architecture;
- to discover new and old technologies in the developing field and tradition of masonry;
- to gain hands-on experience, and appreciate the detailed complexities and artistry of masonry;
- to study award-winning contemporary projects incorporating masonry;
- to learn masonry concepts, terminologies and best practices for durable construction;
- to appreciate masonry as a sustainable building envelop, for its longevity and performance.

COURSE REQUIREMENTS / EVALUATION
10% Quality of class participation
10% Workshop and Field Trip Participation
10% On Campus Research Expedition
30% Seminar Presentation on selected masonry precedents and research
40% Masonry Booklet – compilation of all assignments, with further annotations, and research.

HISTORY THEORY

ARCH 7020/7030
Research Topics: History and Theory 1 & 2

COURSE CALENDAR DESCRIPTION:

One 5-week lecture, seminar and/or project-based topics, offering an in-depth study of an historical and/or theoretical subject. Options are grounded in faculty research & build upon foundation history/theory courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms. Min. two History Theory Research Topics are required.

RESEARCH TOPIC:

These courses are short and intense, intended to introduce students to a variety of History/Theory Research topics. They are designed to cultivate students' individual research interests in ways that initiate and/or complement their Design Thesis, open broad cultural questions, and/or spark interest in further post-professional studies. Topics typically change each term and year, inflected by current research of faculty and guest instructors having expertise in architectural history and theory. Students are expected to perform with a high degree of academic, intellectual and creative rigour. Course outlines provide extensive bibliographies and resources from which students select areas of study. Instructors present topics offerings before the start of term. Students choose based on research interest and availability.

LEARNING OBJECTIVES:

Instructors develop specific learning objectives related to course content and topics of investigation (listed on the next page). General learning objectives, shared by all History and Theory Research Topics courses, include:

- to offer students an opportunity to develop their own historical and theoretical interests;
- to broaden cultural awareness through in-depth study of primary & secondary texts, typically together with the study of relevant built works;
- to develop:
  - practical research skills, including methods of organization, analysis, and presentation;
  - communication skills, including the ability to speak and write effectively on assigned and selected topics;
  - critical thinking skills, including capability to interpret architecture in relation to philosophical themes;
  - ability to pose pertinent and probing architectural questions and to invest oneself in self-directed inquiry.

COURSE REQUIREMENTS / EVALUATION:

Requirements and weightings are assigned according to specific topical objectives. All courses typically require:

- seminar presentation on assigned and/or selective readings and individual research;
- writing assignment and/or visual media project;
- attendance and engaged participation.

Credit Hours: **1.5**
Instructors: (varies) E.Aquino, L.Bird, T.Fuglem, L.Landrum, C. Rueda
Level: Graduate (M1 and M2)
Format: Seminar
one 4-hour class per week for five weeks (1st or 2nd half of term)
Offered: Fall and Winter – different topics each term, 2016-17
options listed on next page.
Prerequisites: None

CACB SPC: **ARCH 7020** / **ARCH 7030**

	A: CRITICAL THINKING & COMMUNICATION	
A	A1: Critical Thinking Skills	■
A	A2: Research Skills	■
A	A3: Graphic Skills	
A	A4: Verbal and Writing Skills	■
A	A5: Collaborative Skills	
U	A6: Human Behaviour	■
U	A7: Cultural Diversity	■
U	A8: History and Theory	■
A	A9: Precedents	■

	B: DESIGN & TECHNICAL SKILLS	
A	B1: Design Skills	
A	B2: Program Preparation	
A	B3: Site Design	
A	B4: Sustainable Design	
A	B5: Accessibility	
U	B6: Life-Safety Systems, Codes & Standards	
U	B7: Structural Systems	
U	B8: Environmental Systems	
U	B9: Building Envelopes	
U	B10: Building Service Systems	
U	B11: Building Materials and Assemblies	
U	B12: Building Economics & Cost Control	

	C: COMPREHENSIVE DESIGN	
A	C1: Detailed Design Development	
A	C2: Building Systems Integration	
A	C3: Technical Documentation	
A	C4: Comprehensive Design	

	D: LEADERSHIP & PRACTICE	
U	D1: Leadership and Advocacy	
U	D2: Ethics and Professional Judgment	
U	D3: Legal Responsibilities	
U	D4: Project Delivery	
U	D5: Practice Organization & Management	
U	D6: Professional Internship	

A = Ability required
U = Understanding required
SPC met ■
SPC introduced/partially met □

HISTORY THEORY

ARCH 7020/30
Research Topics: History and Theory

O Corte Paulista: Sectioning Architecture as the Revelation of Space

Instructor: **A. Aquino**
Offered: **Fall 2016** / first half

RESEARCH TOPIC OVERVIEW:
This course seeks to discuss the section as a way of thought, a form of language. The section reveals the genesis of many projects.

LEARNING OBJECTIVES Specific to this Research Topic:
- to discover the section as a design tool;
- to study a set of exemplary modern projects from Sao Paulo and understand these in the context of modernity and contemporary design.

COURSE REQUIREMENTS / EVALUATION
30% Studio Section (study of design project)
50% Paulista Section (study of Sao Paulo precedent)
20% Seminar

Questions of Creative Methods: Metamorphosis and Material Imagination

Instructor: **C. Rueda**
Offered: **Fall 2016** / second half

RESEARCH TOPIC OVERVIEW:
This course situates architectural design in the realms of imagination and place-making. The topic will be approached by establishing connections with other disciplines, including literature, philosophy, and cognitive science.

LEARNING OBJECTIVES *Specific to this Research Topic*:
- understanding of processes of imagination;
- implementation of creative strategies, related to the use of poetic embodied images, metaphor and metamorphosis;
- knowledge of intersections between technological and poetic forms of making;
- understanding phenomenological implications of architecture, meaning & monumentality.

COURSE REQUIREMENTS / EVALUATION
35% Seminar Presentation on Assigned Readings
25% Participation and Attendance
40% Final Report / Presentation (1200 words)

History Theory Topics Options
Fall 2016

Digital Psychogeography

Instructor: **L. Bird**
Offered: **Fall 2016** / second half

RESEARCH TOPIC OVERVIEW:
Beginning with Guy Debord's seminal manifesto on *la dérive*, describing the psychogeographic drift through the city, this seminar examines several texts from this era, trying to understand what these writers were concerned with and why. The premise is that the Situationists can help us rethink our own urban experience. Today, our perception is increasingly mediated by technology, by devices that enhance and augment, but also narrow, our perceptive field. What can these technologies do for/to our perception of the city? How do they matter for that other dimension of urban & media life – our engagement with one another as citizens? Students will discuss readings and present observations of the city in the form of photographic, drawn, video and/or audio material gathered on their own drifts through the city.

LEARNING OBJECTIVES Specific to this Research Topic:
- to gain knowledge of the Situationalist movement and its cultural context, and to understand it in relation to modernity and present-day social and existential concerns about inhabiting the city & living with media;

COURSE REQUIREMENTS / EVALUATION
30% Group seminar presentation of *drift* experiences, related readings and research
70% Individual visual narrative document (film and text)

HISTORY THEORY

ARCH 7020/30
Research Topics: History and Theory

Varieties of Architectural Imagination

Instructor: **L. Landrum**
Offered: **Winter 2017** / first half

RESEARCH TOPIC OVERVIEW:
This seminar examines varieties of imagination most conducive to architectural work, and aims to understand how our imaginative faculty functions in the first place. Students study a set of provocative texts from architects, architectural thinkers-teachers and philosopher-poets. Readings illuminate interdependent modes of imagination: collective, ethical, ecological, embodied, spatial, narrative, material and tectonic. The seminar also engages personal imagination, by sharing fascinations and insights; representational imagination, through presentations and making of poetic images; and linguistic imagination, by inventing lucid figurative language. Grounded in history and theory, this seminar is also oriented around exemplary architectural projects of the 20th and 21st centuries.

LEARNING OBJECTIVES *Specific to this Research Topic*:
- to cultivate capability to wonder about architecture, architectural experience, and the world;
- to comprehend imagination's variety, so as to make our understanding of its workings more richly nuanced and our engagement with its revelatory and generative powers more comprehensive and profound.

COURSE REQUIREMENTS / EVALUATION
40% Seminar Presentation on selected readings and individual research
20% Presentation of image research and image
30% Manifesto (1500-word)
10% Attendance and participation

History Theory Topics Options
Winter 2017

Architecture of Exchange: An Architectural Inquiry into Post-Capitalist Approaches to Exchange

Instructor: **T. Fuglem**
Offered: **Winter 2017** / second half

RESEARCH TOPIC OVERVIEW:
This topics course examines ideas and theories of exchange – the city as a locus of both commercial and cultural exchange – as these affect and pertain to urban and architectural theory and practice. Discussion topics include: the role of markets and trade in the formation of cities; standardization of codes and measures for the facilitation of trade and commerce; the nature of culture; theories of economy and the importance of ritual gift-giving to culture; the pernicious effects of capitalism, neo-liberalism and globalism on culture, craft and urban growth; trade agreements to which Canada is a signatory and their effects on architectural production.

LEARNING OBJECTIVES *Specific to this Research Topic*:
- to understand the history of modernity and architecture with respect to the formulation of various theories of exchange;
- to understand the relationship of architecture to larger cultural ideas, historical contexts & social movements.

COURSE REQUIREMENTS / EVALUATION
35% Seminar Presentation on Assigned Readings
25% Participation and Attendance
40% Final Report / Presentation (1200 words)

The M.Arch curriculum (outlined above) is required of all architecture students and meets SPCs. Graduate students additionally have access to a stimulating and relevant variety of electives. To satisfy 6-credits of elective requirements, some students opt to take a greater variety of Advanced Technology and / or History and Theory Research Topics (4 x 1.5-credits). Others choose 3-credit courses in the Faculty of Arts, School of Art, or other UM Faculty. The Department of Architecture and other programs in the Faculty of Architecture offer some 3-credit electives and independent studies as options. The following offerings from 2016-17 are representative of the available electives each year.

ARCG 7080 – ELECTIVE
Topics in Environmental Process and Design
Rainbow Gardens Community Build

Credit Hours: **3**
Instructor: **L. Veness**
Level: Graduate (M1)
Format: Studio – a design/build block course, Mon.-Fri. 8:30-4:30, May 2-June 2
Offered: **Spring 2017**
Prerequisites: None
Students: 10 M.Arch students

COURSE CALENDAR DESCRIPTION:
A defined topic or project, with supervision by a faculty advisor. Prior program approval required.

OVERVIEW:
This course offered hands-on experience to build and install a set of small-scale wood and steel framed garden structures, and to prepare landscaping conditions at the site near campus. The pavilions include a tool shed and composting toilet. On site work will be done in collaboration with the Immigrant Integration & Farming Community of Rainbow Gardens. This course elaborates on design work initiated by M.Arch students in ARCH 7050 under L. Coar in Fall 2016.

LEARNING OBJECTIVES:
- to develop practical experience with consultant coordination, project management & scheduling;
- to expose students to a range of sustainable design and construction practices;
- to develop skills in working effectively as part of a team and in collaborating with industry professionals, partner faculties (landscape and engineering), and local community members;
- to develop skills in interpreting construction drawings & details, and trouble-shooting on site.

COURSE REQUIREMENTS / EVALUATION
100% Portfolio, documenting work throughout the course (the course also required substantial time commitments on site and in C.A.S.T.).

ARCG 7080 – ELECTIVE
Topics in Environmental Process and Design
Joinery: Mid-century Modern

Credit Hours: **3**
Instructor: **E. Epp**
Level: Graduate (M1 and M2)
Format: Lecture & workshop/lab, 3.5-hour class, once a week
Offered: **Winter 2017**
Prerequisites: None
Students: 7 M.Arch students

COURSE CALENDAR DESCRIPTION:
A defined topic or project, with supervision by a faculty advisor. Prior program approval required.

OVERVIEW:
This course examines the theory and practice of wood joinery in structures, furniture and sculpture. Historical & contemporary knowledge, techniques and applications will inform hands on learning and experimentation in a workshop setting. Students will engage manual and digital forms of making.

LEARNING OBJECTIVES:
- to engage the *praxis* of architecture through thinking and making;
- to develop hand skills as an extension of design-thinking;
- to understand craft principles and techniques of wood joinery and construction;
- to understand the tools and equipment required for manual and machine fabrication;
- to understand the principles of structural and material behaviour in wood;
- to gain knowledge of modern design;
- to gain experience in imagining, designing and building a piece of furniture.

COURSE REQUIREMENTS / EVALUATION
10% Research Paper (500 words + bibliography)
20% Design prototypes
60% Construction (design-build)
10% Documentation & Installation

ARCG 7080 – INDEPENDENT STUDY
Topics in Environmental Process and Design
Drawing Ecology:
Translations of Place and Experience

Credit Hours: **3**
Instructor: **L. Landrum**
Level: Graduate (M2)
Format: Independent Study
Offered: **Summer 2016**
Prerequisites: None
Students: 1 M.Arch student

COURSE CALENDAR DESCRIPTION:
A defined topic or project, with supervision by a faculty advisor. Prior program approval required.

OVERVIEW:
This course explores interrelationships between architecture and landscape by studying specific texts and sites. Coursework includes: close reading and interpretive summaries of select essays; the preparation of a written and graphic site analysis; and making of mixed media drawings, disclosing each site's materiality, temporality and potentiality.

LEARNING OBJECTIVES:
- to develop discursive, analytical and interpretive skills essential to the practice of architecture;
- to develop practical research skills through critical and creative analysis of key texts & sites;
- to develop expertise in architectural design, history and theory through focused study of a specific subject of inquiry;
- to establish the conceptual and methodological framework for future design thesis studies;
- to formulate relevant and revealing architectural questions and to contextualize these in relation to contemporary trans-disciplinary discourse;
- to refine architectural communication skills—visual, oral and written.

COURSE REQUIREMENTS / EVALUATION
20% Site Readings (Annotated Bibliography, approx. 3600 words/300 x 12 texts)
20% Site Proposals (Propositional Paper, min. 2500 words)
50% Site Drawings (mixed media)
10% Final Document (pdf), incorporating all edited course work and a concluding reflective coda

ARCG 7080 – INDEPENDENT STUDY
Topics in Environmental Process and Design
Digitizing Physicality

Credit Hours: **3**
Instructor: **L. Coar**
Level: Graduate (M2)
Format: Independent Study
Offered: **Fall 2016**
Prerequisites: None
Students: 1 M.Arch student

COURSE CALENDAR DESCRIPTION:
A defined topic or project, with supervision by a faculty advisor. Prior program approval required.

OVERVIEW:
This course will explore how digital parametric modeling software (Rhinoceros and Grasshopper) can be developed so as to relate directly to the parametric physical behaviours of the materials we build with. Students will look at how our approach to design can promote a congruent and reciprocal relationship between digital space and the physical realm it represents. This will be achieved through the development of digital and physical models that achieve highly structural behaviors through the common ground of dynamic material behaviour, namely flexibility.

LEARNING OBJECTIVES:
- to expose students to advantages & limitations of digital parametric modeling software;
- to present the methods and techniques required to program digital tools to align with the behaviour of their material counterparts.
- to explore how digital and physical modeling techniques can lead to the design of bending-active structures;
- to offer a hands-on experience in constructing a fiberglass modeling of bending active structures to verify and comprehend the digital models;
- to develop a critical understanding of how to use of technology to promote meaningful working methods and techniques to improve the design and construction of architecture.

COURSE REQUIREMENTS / EVALUATION
15% Participation
85% Project Portfolio

IDES 7270 – ELECTIVE
Traveling Concepts in Photography

Credit Hours: **3**
Instructor: **Susan Close,** Associate Prof.
Department of Interior Design
Level: Graduate (M1)
Format: Field Studies & Course Work
May 15- June 6 (3-6 hr. mtgs.)
Offered: **Spring 2017** (offered every other year)
Prerequisites: None
Students: 8 (2 M.Arch students)

COURSE CALENDAR DESCRIPTION:
This is a graduate level photography elective that combines the practice, theory and history of photography. The outcome is to stimulate the use of photography as a visionary and hands-on tool. The final outcome is an exhibition of student work.

OVERVIEW:
This course consists of two-week photographic field studies in Montreal and Ottawa, including independent exploration of various urban districts, and group visits to several galleries and museums, including the Canadian Centre for Architecture archive. Field studies are accompanied by assigned readings, group discussions, and critical analysis of creative work. A substantial reading list and theoretical questions concerning photography and design culture frames the course.

LEARNING OBJECTIVES:
- to develop critical thinking and research skills;
- to understand the agency of photography in design culture;
- to develop interpretive tools to analyze the urban environment and visual representations.

COURSE REQUIREMENTS / EVALUATION
15% Talking Pictures: Analysis of Imagery
25% Making vs. Talking: Portfolio from Montreal and Ottawa
35% Final Portfolio and exhibition
25% Participation

4.4 Current Faculty Resumes

The appendix of the APR must include a condensed resume (not more than two pages) for each faculty member currently teaching in the program. The resume must list: the courses currently taught; educational background and registration data; recent honors and awards; recent research, scholarship, and creative activity; recent publications; current academic, professional, and public service; and professional memberships. The term "recent" refers to accomplishments since the last accreditation visit. The term "recent" refers to accomplishments since the last accreditation visit.

Resumes highlight teaching and research activities for the last three years only.

FULL-TIME FACULTY:

Dr. Eduardo Aquino	Associate Professor (tenured)
Lancelot Coar	Associate Professor (tenured)
Herbert Enns	Professor (tenured)
Eduard Epp	Associate Professor (tenured)
Terri Fuglem	Associate Professor (tenured)
Dr. Lisa Landrum	Associate Professor (tenured), Associate Head, Associate Dean (Research)
Neil Minuk	Assistant Professor (tenure-track)
Dr. Carlos Rueda	Associate Professor (tenured), Head
Ralph Stern	Professor (tenured)

PART-TIME FACULTY:

Dr. Lawrence Bird
Chad Connery
Colin Gibbs
Suchita Ghosh
Johanna Hurme
Sotirios Kotoulas
Ted Landrum
Dean Leith
Neil McArthur
Mark O'Neill
Colin Neufeld
Sasa Radulovic
Dean Syverson
Liane Veness

ABBREVIATIONS:

F	Fall Term (Sept. – Dec.)
W	Winter Term (Jan. – Apr.)
S	Summer (May – Aug.)
DoA	Department of Architecture
FAUM	Faculty of Architecture, University of Manitoba
UM	University of Manitoba

DR. EDUARDO AQUINO *Associate Professor*

TEACHING RECORD

2016-17 *F:* EVAR 3008 Architecture Design Studio 1 ED 3 / Architecture Masters Preparation (AMP) Arch Studio 1
EVAR 3000 Pre-modern Architectural History & Theory 1, Contributing Instructor/Lecturer
ARCH 7020 Research Topics: History & Theory, *Architectural Section as the Revelation of Space*
EVAR 3014 A01 Drawing Freehand and Digital
W: EVAR 3010 / ED 3 / Architecture Masters Preparation (AMP) Program: Arch Studio 1
GRAD 7090, M2 Design Thesis (4 students)
EVAR 4006 Modern Architectural History & Theory 2, Primary Instructor

2015-16 *F:* EVAR 3008 Architecture Design Studio 1 ED 3 / Architecture Masters Preparation (AMP) Arch Studio 1
EVAR 3000 Pre-modern Architectural History & Theory 1, Contributing Instructor/Lecturer
EVAR 3014 A01 Drawing Freehand and Digital
W: EVAR 3010 / ED 3 / Architecture Masters Preparation (AMP) Program: Arch Studio 1
GRAD 7090 M2 Design Thesis (7 students)
ARCH 7030 Research Topics: History & Theory, *Architectural Section as the Revelation of Space*

2014-15 *F:* EVAR 4004, ARCH 7050, ARCH 7070 Vertical Design Studio, ED4, M1, M2
EVAR 4000 Modern Architectural History & Theory 1, Contributing Instructor/Lecturer
ARCH 7020 Research Topics: History & Theory, *Architecture as Infrastructure*
EVAR 3014 A01 Drawing Freehand and Digital
EVAR 4002 Arch Tech 3 (consultant)
W: EVAR 4010, ARCH 7060 Vertical Design Studio, ED4, M1
GRAD 7090, M2 Design Thesis (3 students)
EVAR 4006 Modern Architectural History & Theory 2, Primary Instructor

EDUCATION

2010-14 PhD in History and Fundaments of Architecture and Urbanism.
Faculdade de Arquitetura e Urbanismo, Universidade de São Paulo - SP, Brazil.
1991-94 Masters of Fine Arts [Open Media], School of Fine Arts, Concordia University, Montreal, QC.
1990 Maîtrise en arts visuels (one year completed), Université du Québec à Montréal
Faculté des arts - École des arts visuels et médiatiques, Montréal, QC.
1987-88 Certificate in Studio Arts
Escola de Artes Visuais do Parque Lage (School of Visual Arts of Parque Lage), Rio de Janeiro, RJ
1981-86 Bachelor of Architecture and Urbanism, Faculdade Belas Artes de São Paulo (São Paulo School of Fine Arts), São Paulo, SP, Professional double degree - Architect and Urban Planner
1979-80 Diploma in Interior Design, Escola Panamericana de Arte (Pan-American School of Art)

PROFESSIONAL REGISTRATION

2013 ABAP | Associação Brasileira de Arquitetos Paisagistas, São Paulo, Brazil
1998 CBA - Colégio Brasileiro de Arquitetos | CAU - Conselho de Arquitetura e Urbanismo - Brazil
1986 CREA | Conselho Regional de Engenharia e Arquitetura de São Paulo
Regional Council of Engineering and Architecture of São Paulo, Brazil
Professional Registration (Architect & Urban Planner): CREA-SP nº 148.365
1986 CONFEA | Conselho Federal de Engenharia, Arquitetura e Agronomia - Brazil

HONOURS, AWARDS, GRANTS

2017 Faculty of Architecture ($8,000), for "Carbuncle" (Warming Hut)
2017 University of Manitoba Teaching Laboratory Renewal Fund ($1,300,000), as Facilities representative, for Architecture 2 Studio Renovations, University of Manitoba, Winnipeg, MB
2017 UManitoba Teaching and Learning Enhancement Fund ($15,000), for "Tiny Studio", Principal Investigator.
2016 Outstanding Teacher Recognition Award – UM Centre for the Advancement of Teaching and Learning,
2016 Manitoba Arts Council Travel Grant ($600), for "Border Crossings Art & Architecture", Co-editor
2015 Canada Council of The Arts Grant To Architecture And Firms, Border Crossings Special Inaugural Issue on Art & Architecture, Winnipeg, MB. $20,000.00

A. Aquino (con't)

2014 Royal Architectural Institute Of Canada - National Urban Design Award (Urban Fragments) for Jiigew [By the Water], Thunder Bay Waterfront Rehabilitation Project, Thunder Bay, ON.

2014 Social Sciences and Humanities Research Council - Sensing The Future [Lazslo Moholy-Nagy] - Research project in collaboration with UManitoba School of Art, Professor Oliver Botar (lead), Co-investigator, Plug In Institute of Contemporary Art (Winnipeg), and Bauhaus Archives (Berlim). $180,000.00

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

2017 Qaujimajatuqangit, a Public Art Strategy for the Iqaluit International Airport - Consultant for the Government of Nunavut (Ministry of Economic Development and Transportation), in collaboration with Stephen Borys, Director & CEO of the Winnipeg Art Gallery (Inuit Art Centre).

2017 Carbuncle (Warming Hut Festival) – Design collaborator and coordination, MB.

2017 Chandelier – Public Art Project for SLP Residential project, Winnipeg, MB.

2017 Wallscapes 2 (Josef Albers) – Public Art Project for SLP Residential project, Winnipeg, MB.

2016 Wallscapes 1 (Cities and Things) – Public Art Project for SLP Residential project, Winnipeg, MB.

2017 Picasso in Canada, Winnipeg Art Gallery (Exhibition design), Winnipeg, MB.

2017 Baker Lake, Embassy of Canada (Exhibition design), Washington DC.

2014-17 ASIN – Public Art Project for the University of Winnipeg with Ebb & Flow community, Winnipeg, MB.

2015 Escola da Cidade, São Paulo, Brazil - Civilization Americas Program. Coordinator, critic, curator, and instructor on the segment on Canadian Architecture and Urbanism.

2015 Modern Architecture in Canada: Challenges and Propositions. Escola da Cidade, São Paulo, SP.

2015 Favelas y proposiciones para una nueva ciudad - Universidad Piloto de Colombia, Bogotá, Colombia.

2015 BEACHSCAPE *- Atmosphere Conference [Emergence] - Winnipeg Art Gallery / FAUM.

2014-2014 Broadway Social [Jet Turbine Chandelier] *– Public Art Project for the Winnipeg Arts Council, Winnipeg,

2014 9th International Conference on Short and Medium Span Bridges * Calgary, Alberta, Canada, July 15-18, "From Here until Now - Public Art within the Rehabilitated Osborne Street Bridge"

2014 Actual Gallery / Hutk Design - Design, Winnipeg, MB.

2014 Moholy-Nagy Exhibition Design - Plug In ICA, Winnipeg, MB.

2014 Beachscape: The Rediscovery of Public Space on The Beach - Mackenzie Art Gallery, Regina, SK.

2014 Praiapaisagem: a redescoberta do espaço público na praia - FAU, Universidade de São Paulo, Brazil.

2014 Green Corridor - Design proposal for the University of Winnipeg, in collaboration with the Wii Chiiwaakanak Learning Centre, and the U of W president's office.

PUBLICATIONS (* = refereed/peer reviewed) Sole Authored, unless noted.

2017 Co-author (book), Syndetic Modernisms, Universidad Piloto de Bogotá, Colombia.

2017 Co-author, editor (book). Carbuncle, Department of Architecture, University of Manitoba, Winnipeg, MB.

2016 Co-author (editor), Border Crossings (Special Issue on Art & Architecture), Winnipeg, MB.

2016 Place Maker: the Art of Paulo Mendes da Rocha, Border Crossings (Special Issue on Art & Architecture), Winnipeg, MB, 38-42.

2016 "Art and Architecture: an Introduction", Border Crossings (Special Issue on Art & Architecture), Winnipeg, 8-9.

2016 "Nat Chard and Perry Kulper", Border Crossings (Special Issue on Art & Architecture), Winnipeg, 156-57.

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2017 Department of Architecture Search Committee for Building systems position - FAUM

2015- Architecture Masters Preparation Program (Coordinator), FAUM

2017 Admissions Committee (ED) - FAUM

2015 Department of Architecture Search Committee - FAUM

2012-15 School of Fine Arts, FAUM, Final reviews for final Photography Studio project (Professor Dominique Rey)

2011-15 Poolroom (Architecture 2 Bldg Lobby Exhibition Room) - Co-curator and coordinator, FAUM

2015 Thesis Committee (advisor and internal advisor) - FAUM

2015 Research Committee - FAUM

2015 Department of Architecture Search Committee Pool - FAUM

2015 Publications Committee - FAUM

2015 Ad-Hoc Building Economics and Cost Control Committee for Accreditation (CACB), Chair, FAUM

2014 Facilities Committee - FAUM

A. Aquino (con't)

2014- Nominating Committee (Architecture representative & Chair) - FAUM
2014-15 Tenure and Promotion Committee for Professor Lisa Landrum - FAUM
2014-15 Tenure and Promotion Committee for Professor Lancelot Coar - FAUM
2012- Admissions Committee (AMP) - FAUM

Professional:

2017 Venice Bienalle (Jury of Canadian representation) – Canada Council of the Arts, Ottawa, ON.
2016- SITE magazine – Contributing editor, Toronto, ON.
2014-15 Onsite Review - Editorial Board, Calgary, AB.
2008- Mosaic, a journal for the interdisciplinary study of literature, Editorial board, UManitoba, Winnipeg, MB.
2004- Border Crossings Cultural Magazine – Board of Directors & Contributor, Winnipeg, MB

Public/Community:

2016- Architecture 2 Building Renovation – Coordinator, Faculty of Architecture, University of Manitoba, Winnipeg, MB

PROFESSIONAL MEMBERSHIPS

1986 IAB-SP | Instituto dos Arquitetos do Brasil, São Paulo
1986 UIA | International Union of Architects - Paris
1986 FPAA | Pan-American Federation of Associations of Architects, Montevideo, Uruguay
1998 ACSA | Association of Collegiate Schools of Architecture (ACSA)
2014 ACC | Aboriginal Curatorial Collective - Canada (non-indigenous associate)
2015-16 ANPAFA | Association for Non-profit Architectural Fieldwork (Board of Directors) - Calgary, AB.
1998-02 RAIC | Royal Architectural Institute of Canada, Ottawa
1987-88 IAB-RJ | Instituto dos Arquitetos do Brasil, Rio de Janeiro
2000-10 PLUG IN ICA | Plug In Institute of Contemporary Art, Winnipeg, MB (Board of Directors)

LANCELOT COAR *Associate Professor (tenured)*

TEACHING RECORD

2016-17 *W:* Research Study Leave
F: ARCH 7050 M1 Arch.Studio 5
ARCH 7070 M2 Design Research Studio
ARCG 7070 M2 Topics in Environmental Processes
EVAR 3004 ED3 Architectural Technology 1

2015-16 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3
ARCH 7070 M2 Design Research Studio
EVAR 3004 ED3 Architectural Technology 1
W: EVAR 4010 ED4/AMP2 Arch.Studio 4
GRAD 7090 M2 Design Thesis (4 students)
ARCH 7000 Advanced Technology Topics

2014-15 *F:* EVAR 4004, ARCH 7050, ARCH 7070 Vertical Design Studio, ED4, M1, M2
EVAR 3004 ED3 Architectural Technology 1
EVAR 3012 Architectural Technology Preparation: Structural Concepts, co-taught with T. Colin Gibbs)
W: EVAR 4010, ARCH 7060 Vertical Design Studio, ED4, M1
GRAD 7090, M2 Design Thesis (2 students)
EVAR 4006 Modern Architectural History & Theory 2, Contributing Instructor/Lecturer
ARCH 7000 Advanced Technology Topics

EDUCATION

2016 - PhD (candidate), Department of Architectural Engineering, Vrije University, Brussels. (Main advisor - Dr. Lars De Laet, co/advisor - Mark West). Anticipated completion 2020.
2001 M.Arch (professional degree), University of California, Berkeley
1997 B.S. Architectural Engineering (professional degree), Drexel University
1997 B.S. Civil Engineering (professional degree), Drexel University

HONOURS, AWARDS, GRANTS

2017–23 *Social Sciences and Humanities Research Council (SSHRC) ($2,500,000): "*Northern teaching lodges: learning partnership for community development and Mino Bimaadizwin in First Nation communities." Co-investigator, with Thompson, S. (principal investigator) and 17 other co-investigators.
2017 Canadian Institute of Steel Construction, Educational research award ($5,000), "Rainbow Gardens Architecture and Engineering Initiative", co-applicant with Dr. Dimos Polyzois.
2017 Honorable Mention: "Clearwater Cabins", Live Projects Network, honoring excellence in international community-based design/build projects.
2014–15 Canadian Institute of Health Research (CIHR): Population Health Intervention Research Grant ($192,870), "A new vision: Dene First Nations perspectives on healthy housing." Co-investigator, Larcombe, L. (Principal Investigator), Avery-Kinew, K. (Co-Investigator), Orr, P. (Co-Investigator), Saulnier, B. (Co-Investigator).

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (*=peer-reviewed)

Research Projects

2017 "Ice Bloom" (with Dr. Sigrid Adriaenssens, M. Cox (Princeton U.), L. De Laet (Vrije U.), M. West). A fiberglass framed fabric formed ice dome structure advancing novel methods of design/construction of lightweight shell structures, University of Manitoba.
2016 "Fabrigami" (with Dr. C. Mueller (MIT), Dr. L. De Laet (Vrije U.), J. Hare (U of M), K. Wiese (U of M). A fabric formed origami ice shell installation for the University of Manitoba for the International Warming Huts Exhibition at the Forks, Winnipeg, MB.

Exhibitions

2015 * *Design Latitudes Exhibition.* "Northern Perspectives on Indigenous Housing", "Clearwater Studio", and "Wobbly Structures". University of Alberta.
2014 – 15 "Polycinema". A fabric, urethane, wood, steel, and aluminum installation (with P. Harrop) in a group exhibition by O. Botar (curator), Training for Modernity: Moholy-Nagy and the Onslaught of the Digital, at the Bauhaus Archives, Berlin & The Plug-in ICA, Winnipeg.

L. Coar (con't)

PUBLICATIONS (* = refereed/peer reviewed) Sole Authored, unless noted.

Journals:

2017 Culvers, P., Mueller, C., Coar, L. "Simulation of active bending structures for architectural design: algorithims and performance. " In *TAD: The Journal of Technology, Architecture and Design*. (forthcoming)

2017 Coar, L, Cox, M, Adriaenssens, S., 'Seeking congruency in digital optimization and constructability in fabric formed ice shells utilizing bending active frames." In the *International Journal on Rapid Manufacturing, Special Issue on Additive Manufacturing in Architecture* (forthcoming)

Reports:

2017 Coar, L., Larcombe, L. (Eds.) "Sekuwe (My House): Dene First Nation's Perspectives on Healthy Homes", Friesens Publishing, Altona, MB.: ISBN 978-1-36-740087-0

Conference Proceedings:

2017 Coar, L., Cox, M, Adriaenssens, S., and De Laet, L. "The Design and Construction of Bending Active Framed Fabric Formed Ice Shells Utilizing Principle Stress Patterns." In *Proceedings of International Association of Shell and Spatial Structures* (IASS) Conference (forthcoming).

2017 Pronk, A., Li, Q., Sanders, F., Overtoom, M., Coar, L. "Success factors in the realization of large ice projects in education." In *Proceedings of International Association of Shell and Spatial Structures* (IASS) Conference (forthcoming).2016 Coar, L., Mueller, C., De Laet, L., Hare, J., Wiese, K., Oberlin, S. "Fabrigami: Design and Fabrication of an Origami-inspired ice and fabric shell," In the *International Association of Shell and Spatial Structures Annual International Symposium on Spatial Structures in the 21st Century*, Tokyo, Japan, University of Tokyo.

2015 "Synthesizing Design and Construction through Physical Parametrics," In the *International Association of Shell and Spatial Structures Annual International Symposium on Future Visions*, Amsterdam, Holland. KIVI Publishing.

Presentations/Lectures:

2017 Clearwater Cabins. In the Structures for Inclusions: Building on Common Ground symposium. Awarded Honorary Mention for excellence in international Live Projects. Portland State University, Portland, OR.

2016 * "Fabrigami: Design and Fabrication of an Origami-inspired ice and fabric shell," In the International Association of Shell and Spatial Structures Annual International Symposium on Spatial Structures in the 21st Century, Tokyo, Japan, University of Tokyo.

2016 Co-presentor with Dick, K., "Current Research", at SFPNC Project in the ERA-Can Twinning Programme: Sustainable Energy Efficient Healthy Buildings Workshop, University of Bath, Bath, England.

2017 "The Future is Flexible: Searching for construction logic in a pliable world" Public presentation, Department of Architectural Engineering, AELab, Vrije University, Brussels, Belgium.

2016 "Provoking Material" Alumni Lecture Series - College of Architectural & Environmental Engineering Alumni Lectureship, Drexel University, Philadelphia, PA.

2016 "Rewilding Materials" School of Architecture+Planning, Massachusetts Institute of Technology, Cambridge, MA.

2015 * Synthesizing Design and Construction through Physical Parametrics. In the International Association of Shell and Spatial Structures Annual International Symposium on Future Visions, Amsterdam, Holland.

2014 *Beginning from the End: Deconstructing Context in the Design/Build Studio. The Association of Collegiate Schools of Architecture Fall Conference, Working Out: thinking while building, Dalhousie Univ., Halifax, NS.

2014 * Fluid + Formal: Seeking Critical Progress through Congruence in Design and Construction. Sustainable Structures Symposium, School of Architecture, Portland State University, Portland, OR.

2014 * Push, Pull, Bend, Bind: Enacting Architecture through Behaviour & Consequence. Atmosphere Conference: Action, University of Manitoba, Winnipeg, MB, February 8.

2014 The Fluid + Formal. Hyde Lecture Series, University of Nebraska-Lincoln, Lincoln, NB.

2014 Clearwater Cabins. Public presentation to the community of Clearwater, Manitoba at the opening of the Clearwater Cabins project, Clearwater, MB.

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2017-18 Member, New Hire Committee, Department of Architecture

2015-17 Chair, Ad-hoc Sustainability Committee

2015-17 Member, Ad-hoc Comprehensiveness Committee

2014-17 Chair & Faculty Coordinator for the Workplace Hazardous Materials Information System (WHMIS)

2015-17 Member, CAST Committee

2015-17 Board Member, Faculty Representative for the University of Manitoba Faculty Association (UMFA)

2015-17 Faculty Representative, Partners Program

2014-17 Member, Awards & Bursaries committee

L. Coar (con't)

2014-17 Technology Coordinator, Department of Architecture
2014-17 Member, Local Area Safety and Health (LASH) Committee
2015-16 Member, New Hire Committee, Department of Architecture
2014-16 Chair, Student Work Experience Committee
2015 External reviewer for Tenure and Promotion candidate at Arizona State University, Arizona.
2015 External reviewer for Tenure and Promotion candidate Lawrence Tech., Michigan.
2014-15 Member, Department of Architecture Head Search Committee
2014 Admissions Committee, Department of Architecture

Professional:

2015-17 Member, CISC Educator Committee
2015-17 Member, CISC Awards Committee

Public/Community:

2015-17 Board Member, Art City
2014-17 Member, Art City
2014-17 Member, Harvest Moon Society
2014-17 Member, Plug-In ICA

PROFESSIONAL MEMBERSHIPS

2017 Social Economic Environmental Design (SEED) certification
2017 Member, SEED Network
2015-17 Member, Canadian Institute of Steel Construction (CISC)
2014-17 Member, Building Materials Reuse Association (BMRA)
2015-17 Member, International Association of Shell and Spatial Structures (IASS)

HERBERT ENNS *Professor of Architecture, University of Manitoba*

Director, CISCO Innovation Centre for Collaborative Technologies University of Winnipeg (40% Secondment)
Senior Scholar, St John's College, University of Manitoba
Chair, Editorial Board, *Mosaic: An Interdisciplinary Critical Journal*, University of Manitoba, (Dr. Dawne McCance, Editor) (2000 – 2017)
Co-Lead, with Tomi Knuttila, Thematic Network in Digital and Media Arts, University of the Arctic (2012 – 2017)

TEACHING RECORD

2016-17 *F:* Research Study Leave
W: ARCH 7060 M1 Arch.Studio 6 (with ARC560R, ARC 696 Advanced Studio, U. Texas at Austin SOA
Light & Sound -Space & Span: Production & Collaboration Facilities for Iceland's Creative Economy
Iceland Field Trip February 16 – 28: Focus on Reykjavik Harbour, *Co*-organized by Tanis Paul and Herbert Enns)
GRAD 7090, M2 Design Thesis (1)
ARCH 7080 Technology Thesis Report (3 Credits)
- Co-Taught with Carlos Rueda Plata & Chad Connery [Advised 6 Design Thesis Students]

2015-16 *F:* ARCH 7050 M1 Arch.Studio 5; *Heavy Weather: Great Plains*
Field Trip: Minnesota, Iowa, Illinois, Nebraska, South Dakota, North Dakota [St. John's Abbey, Collegeville (Breuer), Walker Art Center (Edward Larabee Barnes, Herzog & Des Meurons), Figge Art Museum (D. Chipperfield), Des Moines Public Library (David Chipperfield), John Deere World Headquarters, Moline, Illinois (Eero Saarinen), etc.]
W: ARCH 7060 M1 Arch.Studio 6; *Heavy Weather: Reykjavik Harbour, Iceland*
Field Trip: Iceland (Reykjavik, Stykkishólmur, Silfra [Thingvellir National Park], Vik, Stokkseyri, Eyrarbakki)

2014-15 *W:* EVDS 1600 EVDS Introduction to Environmental Design, Contributing Instructor
EVDS 3710 T02 Elective: Future Studio: Digtial Media / Hudson's Bay Archive / Reconciliation
(With support from 3D Solutions, Hudson's Bay Archive, Winnipeg Art Gallery)
S: EVDS 31981–T02/30893 – ARCG 7070 Interdisciplinary Summer Course, Iceland Field Studies: ED3 ID, Arch, LA, ED4, M1 *Strange Spaces:* Cultural Invention in Iceland: Field Trip 17-30 May 2015, Co-organized by Tanis Paul and Herbert Enns, Field trip joined by Prof. Roger Mullin and Graduate Students from Dalhousie [Published: UM Faculty of Architecture 2015 Network Journal, pp. 46-47]
EVDS 3710 –T03 / 30896 – ARCG 7070 *Strange Spaces:* Cultural Invention in Iceland: Summer Studio
30 May -18 June; Exhibition: Icelandic Academy of the Arts, Skipholt 1, 105 Reykjavik: 09-14 Nov. 2015 Curated by Tanis Paul, Herbert Enns, Roger Mullin; Exhibition in Winnipeg: MAKE, 751 Corydon, Winnipeg, 19 March – 30 May, 2016, Curated by Herbert Enns and Jae-Sung Chon

EDUCATION

1985 M.Arch, University of Manitoba
1981 B.ES University of Manitoba

PROFESSIONAL REGISTRATION

1988 Manitoba Association of Architects (MAA)

HONOURS, AWARDS, GRANTS (past 3 years)

2012 – present Director, CISCO Innovation Centre for Collaborative Technologies, University of Winnipeg
Major 10 year Research Grant from CISCO Systems Canada with Provincial Support

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

Design Practice Research;

2017 - Revitalization of the turn-of-the-century 32,000 sq. ft. 'Bridge and Tank' Building, North Kildonan, Winnipeg
2017 - Site and Monument Design to mark the former Assiniboine Indian Residential School on Academy Avenue
2014- 17 River House, East S. Paul, Winnipeg (Completed)
2015-16 Low Carbon Housing: Unit 01 and Unit 02 (Completed)
2014-16 Lake House, Clearwater Bay, Ontario (Completed)
2015 International Institute of Sustainable Development / Experimental Lakes Area (IISD/ELA)
2015 IISD/ELA Master Plan: International Institute of Sustainable Development / Experimental Lakes Area
2015 Dining Facilities and Retreat Centre Living Units (Schematic Design)

H. Enns (con't)

PUBLICATIONS (past 3 years)

2014* *Book:* Herbert Enns (Author) and Kevin Alter (Editor*, Author)*
Centerline, Volume 8, *Mining Location J.O. 180: Experimental Buildings at Shoal Lake,*
pub. by the Center for American Architecture and Design, School of Architecture,
The University of Texas at Austin. ISBN – 13 978-0934951180

Lectures:

2015 University of Lapland, University of the Arctic Thematic Network in Digital and Media Arts, Monday 16 March
2014 Mining Location J.O. 180 , University of Texas at Austin, 23 April
2014 Lecture: The Pedagogy of Innovation, Red River College, 02 May
The Manitoba Association for Distributed Learning and Training Conference:

Seminars:

2017 Iceland Seminar, University of Texas at Austin 23 January

Reviews:

2017 Final Reviews, University of Texas at Austin 03-04 May

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2016 Prairie Wood Design Awards Competition Jury, Wood WORKS Alberta / Canada Wood Council
20 January 2016, Edmonton Alberta.
Jury: James Brown, Director, Bing Thom; Stephen Teeple, Principal, Teeple Architects, Herbert Enns.
2011 –15 Assisted the Dean in the ongoing revitalization of the Russell Building including the following spaces: Faculty Lounge, Partner's Program Offices, General Office Lounge, Faculty and Staff Restrooms, second floor Student Restrooms, basement level Restrooms, technical support for FabLab upgrades, Dean's Office;
2014-15 Annual Report Reviews and Written Assessments as Chair, CACB Accreditation Visiting Team: 2014-15
University of Calgary Faculty of Environmental Design Master of Architecture Program
2014-16 Annual Report Reviews and Written Assessments as Chair, CACB Accreditation Visiting Team: 2014-16
Ryerson University Department of Architectural Sciences
2014 Chair, Two Faculty of Architecture Tenure and Promotion Committees
2014 Mobile Human Computer Interaction (HC) 2014, Toronto, Ont.
Organizing Committee Member & Chair, Keynote Speakers,
Mark Vanderbeeken, Experientia, Turin Italy
Amahl Hazelton, MOMENT FACTORY, Montreal, Canada
2014 WNDX Festival of Moving Image, Outdoor Video Installation, Royal Winnipeg Ballet Alley, 28 September
John Szot, New York, *Architecture and the Unspeakable: Soho, Shibuya Station, Detroit*.
2014 Session Chair: MOSAIC Conference: A Matter of LifeDeath
2014 *Photograp*h: A Panel at the School of Art, 14 March
- Sarah Ciurysek, Dawne McCance, Herbert Enns and Shepherd Steiner.

Professional Community Service:

2014 - 17 Winnipeg Art Gallery Building Committee
2014 - 17 Winnipeg Art Gallery Board of Governors
2012 - 16 Groundswell Board of Directors
2012 - 16 Economic Development Winnipeg *Smart City Caucas*
2012 – 16 Intelligent Communities Competition Group

PROFESSIONAL MEMBERSHIPS

1988 Member, Royal Architectural Institute of Canada (RAIC)

EDUARD EPP *Associate Professor (tenured)*

TEACHING RECORD

2016-17 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3
ARCH 7070 M2 Design Research Studio
W: EVAR 4010 ED4/AMP2 Arch.Studio 4
GRAD 7090 M2 Design Thesis (3 students)
ARCG 7000 Elective, *Joinery: Mid-Century Modern*

2015-16 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3
ARCH 7070 Design Research Studio, M2
ARCH 7000 Tech Topics 1, M1, M2
ARCH 7010 Tech Topics 2, M1, M2
W: EVAR 4010 ED4/AMP2 Arch.Studio 4
GRAD 7090 M2 Design Thesis (4 students)

2014-15 *F:* EVAR 4004, ARCH 7050, ARCH 7070 Vertical Design Studio, ED4, M1, M2
ARCH 7000 Tech Topics 1, M1, M2
ARCH 7010 Tech Topics 2, M1, M2
W: No teaching assignment

EDUCATION

1994 Master of Architecture Degree, McGill University
1987 Master of Landscape Architecture, University of Manitoba
1982 Bachelor of Environmental Studies Degree, University of Manitoba

HONOURS, AWARDS, GRANTS

2014 *Here + Now Exhibition* Funding: MAA $1400.00; FAUM $2600.00; Storefront MB. $1600.00
2015 *Atmosphere 8 Funding:* FoA Endowment Fund $15,000.00 (by others); MAA $1250.00; PIDIM $750.00
2016 *Atmosphere 9 Funding:* FoA Endowment Fund $15,000.00; other
2017 *Research / Study Leave*, 07.2017- 06.2018, Faculty of Architecture, UM
Spatial Recall: Spaces for Re/Conciliation, publication (ebook): DoA $900.00

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

in progress Flood Architecture. A book project with ACTAR (pending funding)
Walls, Doors, Windows. A photographic essay on contemporary life in Israel and the Palestinian Territories
WAU (Winnipeg Architecture Union). Research into alternative professional architecture education
Unit 18-270 Roslyn Road. On-going townhouse design and renovation; sustainable design/living research
324-6th Avenue Summer Residence/Studio. On-going cottage design and renovation

2016-17 *"The North of 60 Atlas of the Built Environment",* principal investigator. UCRP Application, UM
Spatial Recall Studio Field Studies, Ottawa, Canada (in support of EVAR 4004/10)
Circles for Reconciliation Program, UM/DoA discussion circles (in support of EVAR 4004/10)

2015-16 *WATER+ [Atmosphere 8 Symposium],* co-chair with Alyssa Schwann, Richard Perron, FAUM, Winnipeg, MB
Situating Architecture Studio Field Studies, New York, New York (in support of EVAR 4004/10)

2014-15 *Architecture Fringe Festival. Winnipeg, MB (numerous venues with RAIC); AFFC member, co-organizer*
Here + Now Exhibition. Winnipeg, MB (AFF/RAIC); co-curator with K. Borton, S. Radford
Urban Marker Competition. Winnipeg, MB (AFF/RAIC); co-organizer with J. Comeau, D. Penner, R. Prins
River Avenue Housing. Affordable housing study/schematic design, with Cibinel Architects Ltd.
Flood Architecture Studio Field Studies, Netherlands (in support of EVAR 4004/10, ARCH 7050/60/70)

PUBLICATIONS

2016-17 *"Flood Architecture: The Alberta Project*". * Refereed paper and presentation, 'Under Western Skies Conference: Water – Events, Trends, Analysis', Mt. Royal University, Calgary, Canada
"The North of 60 Atlas of the Built Environment", with Alyssa Schwann. *Refereed paper/presentation at 'ICASS 9: People and Place', Umea, Sweden

E. Epp (con't)

2014-15 *Flood Architecture*. Invited speaker/presentation, MB Ministry of Infrastructure and Transportation, Winnipeg, MB
Flood Architecture: The Assiniboine River Basin. Invited speaker/presentation at the 'Amphivious Architecture in the Americas' Symposium, UNESCO-IHE/TU Delft, Netherlands
"Reflections on Studio della Valle del Brenta". Network Journal, FAUM, Winnipeg, MB

2015-16 "Transformations in North Canada: Imaging Future Communities", with Alyssa Schwann. *Refereed paper/presentation at the Transformations 2015: People and the Planet in the Anthropocene', Stockholm, Sweden.
"Oxbow Field Station, University of Manitoba, Canada". Prof. Epp et al, *Mirimark Arredamento* (Turkish Architecture, Design, Culture), November 2015, pp. 69-71

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2016-17 FoA/FoE, Indigenous Scholar Position Search Committee, Member
FoA, Tenure and Promotion Committee (Brenda Brown), Member
DoA, Admissions Committees (Graduate and ED/Undergraduate), Member
DoA Comprehensive Design Studio Review Committee (ad hoc), Chair
DoA, Tenure and Promotion Committee, Member
DoA Year-end Exhibition, Coordinator
DoA, Awards Committee, Chair

2014-15 FoA, ED Program Technology Position Search Committee, Member
FoA, Tenure and Promotion Committee (Anna Thurmyar), Member
FoA, DoA Headship Search Committee, Member
DoA CACB Accreditation Report, Committee Member
DoA, Tenure and Promotion Committee, Member
DoA, Awards Committee, Chair

2015-16 FoA, Tenure and Promotion Committee (Jean Trottier), Member
FoA, ED Program Advisory Committee, DoA Representative
DoA, Admissions Committees (Graduate and ED/Undergraduate), Member
DoA Comprehensive Design Studio Review Committee (ad hoc), Chair
DoA, Tenure and Promotion Committee, Member
DoA Year-end Exhibition, Coordinator
DoA, Awards Committee, Chair

Professional:

2014 Prairie Design Awards (MAA, SAA, AAA). Awards Program / Jury Facilitator
2015 Premier's Awards for Design Excellence. Awards Program / Jury Facilitator

Public/Community:

2014 The Architecture Fringe Festival Committee, Member

PROFESSIONAL MEMBERSHIPS

RAIC, Member

TERRI FUGLEM *Associate Professor (tenured)*

TEACHING RECORD

2016-17 *F:* EVAR 3008 ED3/AMP1 Design Studio 1
EVAR 3014 ED3/AMP1 Drawing: Freehand & Digital
ARCH 7070 M2 Research Design Studio
EVAR 4000 Modern Architectural History & Theory 1, Coordinator & Primary Instructor
W: EVAR 3010 ED3/AMP1 Design Studio 2
EVAR 4006 Modern Architectural History & Theory 2, Contributing Lecturer
ARCH 7030 Research Topics in History & Theory
GRAD 7090, M2 Design Thesis (2 students)

2015-16 *F:* EVAR 3008 ED3 Design Studio 1
EVAR 3014 ED3 Drawing: Freehand & Digital
EVAR 3000 Pre-modern Architectural History & Theory 1, Contributing Lecturer
W: Administrative Leave

2014-15 *F:* EVAR 3008 ED3 Design Studio 1
EVAR 4000 Modern Architectural History & Theory 1, Contributing Lecturer
W: EVAR 3010 ED3 Design Studio 2

EDUCATION

1993: M.Arch. - History/Theory, McGill University, Montreal (post professional degree)
1984: B.Arch, Carleton University, Ottawa (five year professional degree)

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

current Sacred & Modern: The Mid-Century Religious Architecture of Winnipeg

2016 "Tiny Farms for Northern Climes" lecture presented at the inaugural NWTAA (Northwest Territories Association of Architects) Architecture and Photography Awards, Yellowknife.

2016 * "Architecture into Art: The Ar(t)chitectural Production of Richard Henriquez" presented at the AR(t)CHITECTURE international conference at held at the Technion Institute of Technology Faculty of Architecture and Town Planning in Haifa, Israel from April 19-21.

2016 * Design consultant to SPMB/1x1 Architecture (Winnipeg) on their submission for the Lord Stanley's Gift Monument competition. SPMB/1x1 was one of eight shortlisted design teams for a national competition to design a monument to the Stanley Cup in Ottawa.

PUBLICATIONS (* = refereed/peer reviewed) Sole Authored, unless noted.

2016 * "Architecture into Art: The Ar(t)chitectural Production of Richard Henriquez," proceedings of the AR(t)CHITECTURE international conference at held at the Technion Institute of Technology Faculty of Architecture and Town Planning in Haifa, Israel from April 19-21.

2016 Interpretive essay to accompany an installation and performance piece by the internationally recognized artist Wanda Koop. The piece was entitled "Trick Rider" and was presented by Wanda Koop (in collaboration with Freya Bjorg Olafson and Ridley Bent) at the Canadian Museum for Human Rights on February 24, 2016.

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic - University of Manitoba
2017 Peer Review of Scholarly Articles for the International Conf., ATMOSPHERE 9: BEAUTY | MEMORY | ENTROPY Winnipeg, MB: FAUM, February 2 – 4, 2017 (12 abstracts)
2016–pres. Chair, Accreditation Committee
2015–pres. Curriculum Committee (Faculty-wide)
2012-2015 Acting Department Head (includes Deans & Heads; Executive Council, FGS, etc.)
2012-15 Canadian Council of University Schools of Architecture

T. Fuglem (con't)

2015 Treasurer, Canadian Council of University Schools of Architecture
2014 Secretary, Canadian Council of University Schools of Architecture
2010-15 Thesis Committee; one of three "Thesis Chairs," Department of Architecture
2006-15 Equity Committee, Faculty of Architecture
2011-pres. Awards Committee, Department of Architecture

Academic – University of Waterloo

2017 External Reviewer of the Honors Bachelor of Architectural Studies (BAS); Master of Architecture (MARCH); Master of Architecture (MARCH) – CO-OP; and Master of Architecture (MARCH) – WATER Programs at the School of Architecture, University of Waterloo.

Professional:

2017 Member (Program Observer) of Visiting Team, CACB Accreditation Maintenance Review of the School of Architecture at the University of Waterloo.

2016 Jury member for the inaugural NWTAA (Northwest Territories Association of Architects) Architecture and Photography Awards in Yellowknife. Awards were divided into four categories: Public Spaces, Interior Architecture, Architecture, and Architectural Photography (48 submissions from across the northern territories including projects from the Yukon and Nunavut).

DR. LISA LANDRUM *Associate Dean (Research), Associate Head, Associate Professor (tenured)*

TEACHING RECORD

2016-17 *F:* ARCH 7050 + ARCH 7070 (M1 Arch.Studio 5 + M2 Design Research Studio), *Radical Campus*
EVAR 3000, Pre-modern Architectural History & Theory 1 (Independent Study – one student)
EVAR 4000 Modern Architectural History & Theory 1, Contributing Instructor/Lecturer
W: ARCH 7060 M1 Arch.Studio 6, *Radical Campus*
GRAD 7090, M2 Design Thesis Primary Advisor (5 students); Chair/2nd Advisor (7 students)
ARCH 7020 Research Topics: History & Theory, *Varieties of Architectural Imagination*
EVAR 3006, Pre-modern Architectural History & Theory 2 (Independent Study – one student)
EVAR 4000 Modern Architectural History & Theory 2, Contributing Lecturer
S: ARCG 7070 Topics in Env. Process & Design, *Place-making & Cultural Identity* (PhD Reading Course)
ARCG 7070 Topics in Env. Process & Design, *Cultural Sustainability* (M.Arch Reading/Research Course)
\+ Doctoral Student Supervision (Primary Advisor for one; Committee member for two).

2015-16 *F:* ARCH 7050 + ARCH 7070 (M1 Arch.Studio 5 + M2 Design Research Studio), *Phantasmagoria*
EVAR 3000 Pre-modern Architectural History & Theory 1, Primary Instructor
W: ARCH 7060 M1 Arch.Studio 6, *Phantasmagoria*
GRAD 7090 M2 Design Thesis Primary Advisor (4 students); Chair/2nd Advisor (10 students)
EVAR 3002, Pre-modern Architectural History & Theory 2, Primary Instructor/Curator
S: ARCG 7070 Topics in Env. Process & Design, *Drawing Ecology* (M.Arch Reading/Research Course)

2014-15 *F:* EVAR 4004, ARCH 7050, ARCH 7070 (Vertical Design Studio, ED4, M1, M2), *Main St. Studio*
EVAR 4000 Modern Architectural History & Theory 1, Primary Instructor
W: EVAR 4010, ARCH 7060 (Vertical Design Studio, ED4, M1), *Main St. Studio*
GRAD 7090, M2 Design Thesis Primary Advisor (2 students); Thesis Chair/2nd Advisor (4 students)
EVAR 4006 Modern Architectural History & Theory 2, Contributing Instructor/Lecturer
ARCH 7020 Research Topics: History & Theory, *Architecture + Performance*

EDUCATION

2011 Ph.D., Architecture History and Theory, McGill University, Montreal
2003 M.ArchII, Architecture History and Theory (Post-Professional), McGill University, Montreal
1995 B.Arch (5-year Professional Degree), Carleton University, Ottawa

PROFESSIONAL REGISTRATION

2002-pres. New York State
2012-pres. Manitoba

HONOURS, AWARDS, GRANTS

2017 Excellence in Graduate Student Mentoring Award, Faculty of Graduate Studies, University of Manitoba
2017 FAUM Studio Enrichment Fund ($1000) for external thesis critic.
2016 UM Creative Works Grant ($2,500) for "Architecture's Body Politic," an interactive installation at the Strauss Gallery, Dartmouth College, NH. Principal Investigator.
2015 UM/SSHRC TGP Travel Grant Program International Conference ($1,500). Sole Investigator.
2014 UM/SSHRC RGP Research Grant ($4,400), archival research at Vatican & Laurentian Libraries. Sole Investigator.

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

ongoing Architectural Acts, extensive research toward publications noted below and others (forthcoming).
2016-17 Campus Architecture, research at 5 archives and a dozen universities across Canada, w/ financial support from the editor's Canada Council grant; worked with two UM Undergraduate Research award winners.
2015 Chinese Architecture, myth and history, with Undergraduate Research Award Winner Mengzhu Jiang.
2015 Early performance spaces, including travel and documentation of archaeological sites in Crete

Exhibitions:

2016 *Architecture's Body Politic: Hex-Agonal Masque for Three* (w/ Ted Landrum), *Species Exhibit*, Gerald Auten, curator, Strauss Gallery, Dartmouth College, Hanover, NH. (June 28-Aug. 21).
2014 *Winged Compass* (with Ted Landrum) a permanent exhibition in the Frascari Collection at the Washington Alexandria Architecture Center Library, Virginia Tech, Alexandria, VA.

PUBLICATIONS (* = refereed) Sole Authored, unless noted.

Books:

2016 Editor. *ArchFolio2016,* a selection of design studio work, DoA, University of Manitoba, 2016.
2014 *This City is Red | This City is Read: Table Talk for 1200.* A Chapbook anthology, prepared for the RAIC/Storefront MB Table for 1200 event (May 30, 2014), Co-authored w/ Ted Landrum, 34 pages.

L. Landrum (con't)

Book Chapters:

2018 "Campus Architecture," in *Northern Building: Canadian Architecture 1967-2017,* ed. Elsa Lam and Graham Livesey. Princeton University Press (forthcoming).

2018 * "Architectural Agency and Storied Settings of Edgar Allan Poe," in *Reading Architecture*, ed. Angeliki Sioli and Yoochun Jung. New York: Routledge.

2017 "Table Talk" in *Warehouse* 26*,* ed. Emily Warsza + Mindy Dao. Winnipeg: University of Manitoba.

2017 * "Miming a Manner of Architectural Theory. *Eudaimonia*: A Pantomime Dream Play," in *Confabulations: Storytelling in Architecture,* ed. Carolina Dayer, Paul Emmons and Marcia Feuerstein. New York: Routledge.

2016 "Varieties of Architectural Imagination" in *Warehouse* 25*,* ed. Alena Rieger and Ally Pereira-Edwards. Winnipeg: University of Manitoba, 71-85.

2016 * "Architects of *Playtime:* Cities as Social Media in the work of Jacques Tati," in *Filming the City,* ed. Edward Clift, Ari Mattes & Mirko Guaralda. Bristol, UK: Intellect Books.

2016 * "Chōra before Plato: Architecture, Drama and Receptivity," in *Chora 7,* ed. Alberto Pérez-Gómez and Stephen Parcel. Montreal and Kingston: McGill-Queen's University Press, pp. 323-58.

2015 * "Poetic Persistence and Architectural Renewal: the fruits of investing in an economy of stories," *Economy and Architecture*, ed. Juliet Odgers, Stephen Kite and Mhairi McVicar. London: Routledge, 118-26.

2015 * "*Modus Operandi* of an *Architectus Doli: Architectural cunning in the comic plays of Plautus*," in *Architecture's Appeal: How Theory informs Architectural Praxis,* ed. Marc J. Neveu and Negin Djavaherian. London & New York: Routledge, 218-27.

2014 "Eudaimonia [Happiness]: a performance devised in honour of Marco Frascari," with Ted Landrum, in *Warehouse* 23*,* ed. Liane Lanzar and Kevin Complido. Winnipeg: University of Manitoba.

Journals:

2017 Review of *Material Operations* by Patkau Architects, *Canadian Architect* (Sept. 2017).

2017 * "Drawing, Dwelling and Cultivating Agricultural Imagination," with Xue Wei, *49th Parallel Schools of Architecture Consortium*, Vol. 1 (May 2017): 64-75. https://journalhosting.ucalgary.ca/index.php/49parallel/issue/view/2783

2016 * "Theory's Theatricality and Architectural Agency," *Architecture & Culture, Special Issue: This Thing Called Theory,* 43.3 (2016): 463-475.

2016 Review of "Heritage and Conflict: Syria's Battle to Save its Past (lecture by Dr. Maamoun Abdulkarim)," part of *Syria: A Living History* Exhibition at the Aga Khan Museum *Canadian Architect* (Nov. 2016).

2016 "Review of *Attunement: Architectural Meaning after the Crisis of Modern Science,* by Alberto Pérez-Gómez," *Canadian Architect* (Sept. 2016): 38,

2016 "Review of Folly Forest at Strathcona School, designed by Straub Thurmayr," *Canadian Architect* (Feb. 2016): 34.

2015 * "Before Architecture: *Archai*, Architects and Architectonics in Plato and Aristotle," *Montreal Architectural Review,* Vol. 2: 5-25 http://mar.mcgill.ca/article/view/17

2015 "Review of *Brutalist Architecture in Winnipeg* by Jeffrey Thorsteinson," *Canadian Architect* (June 2015): 31.

2014 "Difficult Harmonies," Review of the Canadian Museum for Human Rights, designed by Antoine Predock. *Canadian Architect* (Nov. 2014): 22-29.

2014 "Review of *Time Matter(s): Invention and Re-Imagination in Built Conservation* by Federica Goffi," *Journal of Architectural Education* 68.2 (Oct. 2014): 132-34.

Conference Paper Presentations/Lectures:

2017 * "Architect Figures in Plays and Plights of Rome," Poetics of Roman Architecture, chair Diane Favro, Society of Architectural Historians International Conference, Glasgow (June 7-11).

2016 "Architecture's Body Politic," Dartmouth College, Hanover, NH. (June 28).

2016 "Craft and Craftiness: Cunning Agencies in Greek Art," Winnipeg Art Gallery, part of the exhibition, *Olympus: The Greco-Roman Collections of Berlin* (Jan. 31).

2015 * "Performing Theory: Dionysian Practices and Architectural Agency," *This Thing Called Theory Conference*, Leeds University, Leeds, UK. (Nov. 19-21).

2015 * "What are architects good for? The *archai* of Architects in Plato and Aristotle," *International Society for the Philosophy of Architecture Workshop*. Dole Reed Center, Taos, NM (Aug.1-3).

2015 * "Enchantment and Entrapment: The Architecture of Edgar Allan Poe," *Reading Architecture Symposium.* Benaki Museum, Athens, Greece (June 16-18).

2014 * "Architects of *Playtime:* Cities as Social Media," *Mediated City Conference,* Woodbury Un., Los Angeles (Oct. 1-3).

2014 "Playtime" (presentation and discussant), *Winnipeg Design Festival / Winnipeg Architecture Foundation* & Film Group screening of Jacques Tati's 1967 film *Playtime* (Sept. 21).

2014 * "Before Architecture: Pre-disciplinary Context of Architectural Ethics," *Autonomy Reconsidered: International Society for the Philosophy of Architecture Conference,* Delft University of Technology, NL (July 9-11).

Citations of Scholarship (Select):

2017 Simon Weir, "On the Origin of the Architect," *Interstices* 17 (April 2017): 9-15.

2017 Elizabeth Merrill, "The *Professione di Architetto* in Renaissance Italy," *JSAH* (March 2017): 30, in full 13-36.

2016 Alberto Pérez-Gómez, *Attunement* (MIT Press), p. 263.

2014 Eva Franch i Gilabert, "Go Beyond Boundaries" interview, *DAC&,* Copenhagen.

L. Landrum (con't)

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic/Research:

2017-18 Co-Chair *Atmosphere 10: Fabrications,* Symposium UM/FAUM, w/ Liane Veness, Feb. 1-3, 2018.
2017-pr. Editorial Board, *Journal of the 49th Parallel Schools of Architecture Consortium*. University of Calgary
2017/08 External Reviewer for two tenure and promotion applicants in American Schools of Architecture.
2017/02 Session Chair & Symposium Organizing Committee, *Atmosphere 9: Beauty Memory Entropy*, Feb. 2-4.
2017/02 Peer reviewer, paper, *ARQ*, Architecture Research Quarterly Journal.
2016/12 Peer reviewer, abstracts, *Frascari Symposium III – Ceilings and Dreams: the architecture of levity.*
2016/12 Text editing, *Network* journal, FAUM.
2016/11 Peer reviewer, abstracts, *Atmosphere 9: Beauty Memory Entropy,* UM/FAUM.
2016/10 Thesis Critic, Carleton University, School of Architecture
2016/07 Session Chair, *International Society for Philosophy & Architecture Conference*, Bamberg, Germany
2016/04 Thesis Examiner, Carleton University, School of Architecture
2016/02 Peer reviewer, abstracts, *ISPA, International Conference, Human in Architecture,* Bamberg, Germany.
2015/10 Visiting Critic, Parsons School of Design, New York, Undergraduate Design Studio Reviews.
2015/09 Peer reviewer, paper, *Journal of Architectural Education* (JAE/Routledge).
2015/09 External Reviewer for promotion applicant at the University of North Dakota
2015/08 External Reviewer, book proposal, Routledge.
2015/04 Thesis Critic, North Dakota State University, Dept. of Architecture
2015/01 Reviewer, *SSHRC/Insight Grant.*
2014/10 Peer reviewer, essays, *ISPA, International Society for the Philosophy of Architecture Journal*.
2014/10 Peer reviewer, abstracts, *31st National Conference on the Beginning Design Student* (Un.Houston).
2014/07 Peer reviewer, papers, *Architectural Histories,* Journal of the European Architectural History Network.

Academic/Administrative:

2017-19 UM Senate Committee on Appeals
2017 UM Academic Schedule Review Committee
2012-pres. UM Senate (Faculty of Architecture representative)
2013-16 UM Status of Women Committee, University of Manitoba Faculty Association
2010-16 UM Faculty of Graduate Studies Awards Committee (SSHRC sub-committee)
2017-2021 FAUM Associate Dean (Research): Chair of Research Committee; Doctoral Studies Committee; Faculty of Graduate Studies Executive Committee; Academic Advisor for FAUM Co-op Program; etc.
2016-pres. FAUM Doctoral Studies Committee; Chair since July 2017
2016-pres. FAUM Student Internship Initiative (one student placement in Iqaluit)
2016-17 FAUM Student Experience Committee
2016-17 FAUM Presidential Advisory Committee (Faculty of Architecture Dean Search)
2015-16 FAUM Faculty of Architecture Restructuring Committee
2015-17 FAUM Endowment Fund Committee
2013-pres. FAUM Cultural Events Committee, Chair since May 2017
2010-pres. FAUM Atmosphere Symposium Committee (DoA representative)
2016-18 DoA Associate Head (Term Schedules, Dept. General Regulations, CACB APR, special initiatives, etc.)
2017 DoA Search Committee, Design and Technology/Building Systems Position
2015-16 DoA Search Committee, Design and Technology Position
2015 DoA Acting Head (for short intervals)
2015 DoA Comprehensive Design Ad-hoc Committee, Chair since 2017
2014-15 DoA Search Committee, Department of Architecture Head Position
2015-pres. DoA Publications Committee
2013-pres. DoA Graduate Admissions Committee
2013-pres. DoA Undergraduate Admissions Committee (Environmental Design – Architecture Option)
2013-pres. DoA Awards Committee (Chair in 2015)
2013-pres. DoA-MAA Strategic Committee
2012-17 DoA Design Thesis Coordinator
2010-pres. DoA ACSA Faculty Councilor (Association of Collegiate Schools of Architecture)

Professional:

2017 *Future of Architecture*, CCUSA-CALA Task Force member, meetings: Feb., March, July, Sept. 2017
2013-pres. *Canadian Architect* magazine, Winnipeg regional correspondent
2013-pres. MAA Mentor for five (5) Architectural Interns
2012-15 NCARB Supervisor for professional candidate in the Intern Development Program (IDP)

Public/Community:

2016-pres. Residents of the Exchange District, Winnipeg advocacy group for responsible development
2014/May Table Captain, *Table for 1200, Architecture Fringe Festival* and *RAIC Festival,* Winnipeg

PROFESSIONAL MEMBERSHIPS

MAA, RAIC, AIA, NCARB
ACSA; AHRA (Architectural Humanities Research Association); SAH; CAC (Classical Association of Canada); ISPA

NEIL SIMON MINUK *Assistant Professor (tenured track)*

TEACHING RECORD

University of Manitoba

2016-17 *F:* ARCH 7050 M1 Arch.Studio 5
ARCH 7070 M2 Design Research Studio
EVAR 4002 Architectural Technology 3 – Building Systems, Primary Instructor
W: ARCH 7060 M1 Arch.Studio 6
GRAD 7090, M2 Design Thesis (4 students)
EVAR 4008 Architectural Technology 4, Primary Instructor

2015-16 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3
ARCH 7070 M2 Design Research Studio
EVAR 4002 Architectural Technology 3 – Building Systems, Primary Instructor
W: EVAR 4010 ED4/AMP2 Arch.Studio 4
GRAD 7090 M2 Design Thesis (4 Students)
EVAR 4008 Architectural Technology 4, Primary Coordinator, Instructor
ARCH 7080 Technology Thesis Report, Primary Coordinator, Instructor
ARCH 7060 Arch Studio 6 Comprehensive Design Technology Report, M1, Primary Coordinator

2014-15 *F:* EVAR 4004, ARCH 7050, ARCH 7070 Vertical Design Studio, ED4, M1, M2
EVAR 4002 Architectural Technology 3 – Building Systems, Primary Instructor
W: EVAR 4010, ARCH 7060 Vertical Design Studio, ED4, M1
GRAD 7090, M2 Design Thesis (3 students)
EVAR 4008 Architectural Technology 4, Instructor
ARCH 7080 Technology Thesis Report, M2, Instructor
ARCH 7060 Arch Studio 6 Comprehensive Design Technology Report, M1, Instructor

University of Montreal

2014 *W*: Triptyque Studio Instructor

Escola Da Cidade, Sao Paulo Brazil

2016 *F*: Block Course to Post Graduate students

EDUCATION

1998 M.Arch, Thesis: Intention Construction, University of Manitoba
1989 B.A., [Native Studies], University of Manitoba

PROFESSIONAL REGISTRATION

2017 Manitoba (MAA)

HONOURS, AWARDS, GRANTS

2015 Canada Council ($20,000) for Border Crossings Issue on Architecture, Consulting Editor.

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

Design Practice Research:

2015-17 LN Pole House, Mill Creek Manitoba
2015-17 390 Osborne Winnipeg Mixed-used Building, $1 Million
2015-17 257 Osborne Winnipeg, Commercial Office and CRU Building, $6 Million
2016- 380 Osborne Winnipeg, 8 Storey Residential Building $14 Million
2017- 265 Osborne Winnipeg,12 Storey Residential / Office / Parkade Building, $14 Million

PUBLICATIONS (* = peer reviewed) Sole Authored, unless noted.

2014 Growing a Cottage, For Second House First Exhibition Catalogue, RAW GALLERY
AA London, ed. by Conrad Koslowsky
2016 Border Crossings Issue 138 Art+ Architecture, Consulting Editor
2014 Lecture, Enacting Architecture, University of Montreal, Montreal
2015 Lecture, DIN Projects, Sao Paulo, Brazil

N. Minuk (con't)

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Public/Community:

2014-17 Chair of Board, Border Crossings
2011-16 Board Member [V.P.] RAW Gallery

PROFESSIONAL MEMBERSHIPS

MAA

DR. CARLOS RUEDA *Associate Professor, Head Department of Architecture*

TEACHING RECORD

2016-17 *F:* EVAR 4004 Architecture Design Studio 3, *Open City Studio* 3 (co-taught)
ARCH 7020 Research Topics: History & Theory, *Questions of Creative Methods*
ARCH 7070 M2 Design Research Studio (2 students)
W: ARCH 7080 Technology Thesis Report (co-taught)
GRAD 7090, M2 Design Thesis (2 students)

2015-16 *F:* no teaching load (first term as Department Head)
W: ARCH 7020 Research Topics: History & Theory, *Questions of Creative Methods*

2014-15 *F:* ARCH 303 Design and Construction 2 (McGill University)
ARCH 250 Architectural History 1 (McGill University)
W: Seminario del Doctorado en Teoria e Historia del Arte y la Arquitectura (U. Nacional de Colombia)
Proyecto Profesional 1, Maestria en Diseno Urbano (U. Nacional de Colombia)
Historia de la Arquitectura (U. Nacional de Colombia)

EDUCATION

2009 Ph.D., Architecture History and Theory, McGill University
2001 M.ArchII, Housing (Post-Professional) McGill University
1989 B.Arch., Universidad de los Andes

PROFESSIONAL REGISTRATION

1992 CPNAA (Consejo Profesional Nacional de Arquitectura y sus Porfesiones Auxiliares, Colombia)

HONOURS, AWARDS, GRANTS

2017 Honorable mention, design competition for a Music Hall & Pavillion at Universidad de los Andes, Bogota.
2015 Honorable mention, international design competition for the Museo de la Memoria Historica, in Bogota: Societal Colombian de Arquitectos SCA.
2015 Gerald Sheff Award for Part-Time Teaching: School of Architecture, McGill University

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

Design Practice Research:
(with Monumental Arquitectura http://www.monumental.com.co/about-forte/)
2017 Jardin Infantil, Bogota (kindergarten, competition entry) http://www.monumental.com.co/pagela-1/
2016 Casa 1 (multifamily building) Bogota http://www.monumental.com.co/casa-1/
2015 Museo de la Memoria Historica, Bogota (competition entry) http://www.monumental.com.co/museum/
2015 Centro Civico Uniandes, Bogota (competition entry) http://www.monumental.com.co/civiccenter/
2015 Colegio Publico, Bogota (competition entry) http://www.monumental.com.co/pagela/
2015 Spolia: The Ruins of El Dorado (Paper Architecture) http://www.monumental.com.co/el-dorado-1/
2014 Weitzman House, Montreal (loft conversion) M. Litvack, collaborator.
http://www.monumental.com.co/weitzman-house/

Archival Research:
Project: "Poetic Historicity Through the Modernist Sieve: a study on the work of Alvaro Siza (Portugal and Montreal CCA), Rogelio Salmona (Colombia), and Shim&Suttcliffe (Toronto, Canada.)
2015- The work of architects Fernado Tavora, and Alvaro Siza: Canadian Centre for Architecture (CCA) Montreal
2015- The work of architect Rogelio Salmona: Fundacion Rogelio Salmona (FRS) Bogota

Symposia Participation:
2015 Keynote Speaker and External Evaluator in the symposium and design workshop: "Disenar lo publico como generador de convivencia: paisaje y lugar en el borde oriental de Bogota, zona Chapinero." Maestria en Arquitectura, MARQ, Universidad Piloto de Colombia, and Societal Colombian de Arquitectos, Bogota, November 13-18.

Public Presentations:
2017 Panelist and guest critic in a symposium on the redevelopment of the site of the Public Safety Building (Projects by HTFC, S+M+M, and 5468796 Architecture) Centreventure, the Winnipeg Free Press Café, Winnipeg, March 29.
2016 Introductory remarks vision on architectural education, from the Department of Architecture: addressing the Manitoba Association of Architects at their AGM, Royal MTC Warehouse, Winnipeg, June 22, 2016.

C. Rueda (con't)

2016 Panelist in the discussion of the film: "Precise Poetry/Lina Bo-Bardi's Architecture," Architecture+Design Film Festival, Cinematheque, Winnipeg, April 7.

2015 "Dreaming by the Building: Footnotes on Material Imagination," 10x20x20 EVENT 15, The Winnipeg Art Gallery, WAG, Winnipeg, September 18. http://10x20x20.blogspot.ca/search?updated-max=2016-01-23T19:55:00-06:00&max-results=6

PUBLICATIONS (* = refereed/peer reviewed) Sole Authored, unless noted.

Books

2017 * [co-authors] Ricardo L. Castro and Eduardo Aquino, *Syndesis III: Architecture, Place, and Landscape* (Carlos Rueda editor, Spanish version translator, and series director) Bogota: Editorial Unipiloto (forthcoming.)

2016 * [co-authors] Robert Mellin, and Ricardo L. Castro, *Syndesis II: Architecture, Place, and Landscape* (Carlos Rueda editor, Spanish version translator, and series director) Bogota: Unipiloto.

Edited Books

2016 *Un Viaje a Hellas: Paisajes del Mito y la Razon* (Carlos Rueda, ed.) Bogota: Editiorial Unipiloto.

Book Chapters:

2017 [co-authors] Adriana Uribe and German Ramirez, "After the Dogma: the Modern Path of Diken Castro," *Paths of Modernity II: the Architectural Sources and Paths of Gabriel Serrano and Diken Castro,"* Bogota: Editorial Unipiloto (forthcoming.)

2016 "Vida después de la muerte de las grandes ciudades norteamericanas; encuentros y desencuentros de Lewis Mumford con Jane Jacobs." *Textos 26; Critica Arquitectura y Ciudad.* Bogota, Universidad nacional de Colombia, 89-106.

2015 "Place as a World of Experience; a Phenomenological Excursus" *Written in Montreal: Texts in and about Place* (Carlos Rueda ed., and Spanish Translator.) Bogota: Editorial Unipiloto, 19-46

Journals

2016 * "Re-creación e Historicidad en el Cedazo de la Modernindad: La Casa de Huespedes Ilustres de Rogelio Salmona." *Revista Nodo*, 10 (21), 9-21.

2014 * "Cuestiones de método creativo. Metamorfosis y conciencia material en los procesos creativos en arquitectura." *Revista de Arquitectura,* 16, 58-67. https://dialnet.unirioja.es/descarga/articulo/5263290.pdf

Art/Architecture Magazines

2016 "Perfect Seven," *Border Crossings 138* (35) 2.

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2016- Secretary, Council of Canadian University Schools of Architecture, CCUSA
2015- Head, Department of Architecture
2015- Board of Directors, Council of Canadian University Schools of Architecture, CCUSA
2015- Chair, Architecture Department Council
2015- Chair, C.A.S.T Committee
2015- Design Thesis Chair, Department of Architecture
2015- Department of Architecture Admissions Committee
2015- Department of Architecture Awards Committee
2015- Department of Architecture Publications Committee
2015- Department of Architecture and Manitoba Association of Architects Committee
2015- Environmental Design Program Advisory Committee
2015- Environmental Design Admissions Committee
2015- Faculty of Graduate Studies Council
2015- Faculty of Architecture Equity Committee
2015- Faculty of Architecture Rules, Regulations, Student Appeals and Discipline Committee
2015- Faculty of Architecture Equity Committee
2014 Founder Director, Maestría en Arquitectura MARQ, Universidad Piloto de Colombia
2014 Comité Curricular de la Maestría en Arquitectura MARQ, Universidad Piloto de Colombia
2014 Comité del Doctorado en Historia y Teoría del Arte y la Arquitectura, Universidad Nacional de Colombia
2014- Editorial Board Member, *Revista pre-til* (peer reviewed journal) http://www.unipiloto.edu.co/investigacion/revista-pre-til/

PROFESSIONAL MEMBERSHIPS

Consejo Profesional Nacional de Arquitectura y sus Porfesiones Auxiliares, CPNAA, Colombia

RALPH STERN *Professor (tenured); Dean through August 31, 2015*

TEACHING RECORD

2016-17 *F:* Administrative Leave
W: EVAR 4010 A01: ARCH STUDIO 4
GRAD 7090, M2 Design Thesis (1 student)

2015-16 *F:* ARCG 7202 T02: INDIGENOUS INTERDISC. STUDIO
ARCH 7030 T03: PUEBLO: MOUNTAIN, VILLAGE, DANCE
EVAR 4004 A05: ARCH STUDIO 3
EVLU 4012 A02: STUDIO 5
W: Administrative Leave

2014-15 *W:* ARCG 7202 T01: SPECIAL TOPICS STUDIO
EVAR 4010 A07: ARCH STUDIO 4
EVDS 3710 T04: IMAGING BERLIN
EVDS 3710 T10: SP TOP ENV DES BERLIN
EVIE 4012 A02: ID STUDIO 4.2
EVLU 4014 A02: STUDIO 6
GRAD 7090, M2 Design Thesis (1 student)

EDUCATION

PhD (current ABD in History and Theory; anticipated completion 2018)
Bauhaus University Weimar, Germany.
Post–Graduate Research Position in Architecture / Urbanism
Qualifikationsstelle BAT II A. Technical University Berlin, Germany.
Diplom–Ingenieur / Dipl.–Ing.
Kultusministerium Bonn / Senatsverwaltung für Wissenschaft und Forschung Berlin / TU Berlin
Bachelor of Architecture / BArch
University of Oregon (competitive portfolio application; five–year professional degree)
Coursework in Architecture and History
University of Western Washington, United States. (transferred to the University of Oregon)

PROFESSIONAL REGISTRATION

2010–current Manitoba Registration in Architecture
1988–current New York State Registration in Architecture License # 020670
1988 New York State Examination for Licensure
1983–1987 New York State Intern–Development Program (IDP) Requirements
1994–2004 Berlin Chamber of Architecture, Member License # 07313

HONOURS, AWARDS, GRANTS (selection)

2016 Visiting Fellow, Bauhaus University Weimar
Full-Year Fellowship with the Bauhaus-Institute for History and Theory of Architecture and Planning

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (selection)

2016 Interdisciplinary Indigenous Design Centre (IIDC) w/ Marcella Eaton
This initiative builds upon their work in the area of Indigenous Design in the North American context, work that they have been pursuing for the past several years in their former capacities as Dean and Associate Dean Academic of the Faculty of Architecture, as members of the Departments of Landscape Architecture and Architecture (respectively), and in various research and outreach endeavours. The Interdisciplinary Indigenous Design Centre (IIDC) will serve Indigenous communities in areas intersecting landscape architecture, architecture, and environmental design.

2014 CACB-CCCA Conference on Educating Future Architects (Saint-Sauveur, Quebec)
Workshop with the "objective of conducting a deep and rigorous review on how architectural education is adapting and anticipating changes in the discipline and in the profession."

2014 Environmental Design Workshop (with Mohamad Araji) co-sponsored by Manitoba Hydro
Addressing "what does environmental design mean in the second decade of the twenty-first century" with a view towards developing performance-based criteria for establishing design excellence.

R. Stern (con't)

PUBLICATIONS (selection)

2014 "From the American West to West Berlin: Wim Wenders, Border Crossings, and the Transnational Imaginary *in: Transnationalism and the German City, (New York: Palgrave, 2014): 187-204.* w/ N. Huber

This essay is cited in: Published Online (accessed on 06.14.17):

2016 Shelley Rose, *Transnational Meets the German City*; H-Net Reviews in the Humanities & Social Sciences, September 2016.

2014 "From the American West to West Berlin: Wim Wenders, Border Crossings, and the Transnational Imaginary" (Excerpt) *in: Places, Public scholarship on architecture, landscape, and urbanism).* w/ N. Huber

This essay is cited in: Published Online (accessed on 12.14.14):

2014 Keyframe http://www.fandor.com/keyframe/daily-wenders-russell-gray

2014 Cranes are Flying http://cranesareflying1.blogspot.ca/2014/10/the-american-friend-der-amerikanische.html

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE (selection)

University of Manitoba:

2010-15 Provost's Council
2010-15 Senate
2014-15 Senate Committee on Academic Computing
2014-15 Senate Enrolment Management Committee
2014-15 Faculty of Graduate Studies Executive Committee
2012-15 Visionary (re)Generation Planning Working Group
2012-15 Campus Planning and Design Committee

Faculty of Architecture (selection):

2010–2015 Chair, Faculty of Architecture Council
2010–2015 Chair, Faculty of Architecture Executive Committee
2010–2015 Chair, Deans and Heads (management committee)
2014–2015 Chair, Dean and Associate Deans (executive leadership committee)
2010–2015 Chair, Rules, Regulations Student Appeals & Discipline Committee
2010–2015 Chair, Facilities Committee
2010–2015 Chair, Curriculum Committee
2013–2015 Chair, Faculty of Architecture Centennial Publication Editorial Board
2010–2015 Co-Chair, Student Technology Fee Fund Committee
2010–2015 Nominating Committee, Member ex-officio
2010–2015 Research Committee, Member ex-officio
2010–2015 Cultural Events Committee, Member ex-officio
2010–2015 Environmental Design Program Advisory Committee, Member ex-officio
2010–2015 Equity Committee, Member ex-officio
2010–2015 Faculty Endowment Fund, Member ex-officio
2010–2015 Faculty Partners Program Advisory Board, Member ex-officio
2014–2015 Chair, Department of Architecture Headship Search Committee
2014–2015 Chair, Department Interior Design Headship Search Committee

Other Functions as Chair:

2010–2015 Faculty Scholarships and Bursaries as determined by respective Terms of Reference

Department Councils:

2010–2015 Department of Architecture Department Council
2010–2015 Department of City Planning Department Council
2010–2015 Department of Interior Design Department Council
2010–2015 Department of Landscape Architecture Department Council

Professional:

2011–current Manitoba Association of Architects Council

Public/Community:

2015–current Executive Board: Council for Aboriginal Educators of Manitoba (CAEM)

2015–2016 Advisory Board: Urban Design Advisory Committee (UDAC), City of Winnipeg

2011–2016 Board of Directors: Places, Public scholarship on architecture, landscape, and urbanism https://placesjournal.org/

DR. LAWRENCE BIRD *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* ARCH 7030 Research Topics: History & Theory, *Digital Psychogeography*
2015-16 *F:* ARCH 7020 Research Topics: History & Theory, *"Earth" or "World"? Google Earth & the Prosthetic Imagination*
2014-15 *F:* ARCH 7030 Research Topics: History & Theory, *The Architecture of Image*

EDUCATION

2009 Ph.D. History & Theory of Architecture (McGill)
2000 M.Sc. City Design & Social Science (London)
1991 B.Arch. (McGill)
1989 B.Sc. Arch (McGill)

PROFESSIONAL REGISTRATION

2016 Manitoba (MPPI/CIP)
2012 Manitoba (MAA)

HONOURS, AWARDS, GRANTS

2017 Grant to Film & Video Artists: Research/Creation, Canada Council for the Arts ($19,800), "Dominion," Sole.
2017 Travel/Professional Development grant, Winnipeg Arts Council ($1000), Sole.
2016 Individual Artist Grant, Winnipeg Arts Council ($2000), "Dominion," Sole.
2016 Travel/Professional Development grant, Canada Council for the Arts ($1500), Sole.
2016 Travel/Professional Development grant, Manitoba Arts Council ($600), Sole.
2016 Travel/Professional Development grant, Winnipeg Arts Council ($500), "Dominion," Sole.

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

Design Practice

2016-17 Architect + Planner, Ager Little Architects. Design, construction documents, project management: institutional and commercial buildings.
2012-16 Urban Design Consultant, Gem Equities. Urban design, masterplanning, space planning: residential infill Transit Oriented Developments.

Research/Creation

2017 *Dominion:* A critical visual meta-survey of the prairie landscape and its image, employing aerial and satellite imagery. With *parallel* & *Transect,* this project forms part of a sustained exploration of the digital image of landscape and geography, addressing the politics, ecology, and epistemology of mapping.
2015-16 *parallel:* Single-channel video derived from satellite imagery of the US/Canada border.
2014 *Transect:* Projection mapped video derived from satellite imagery of the Prime and Anti-meridia.

Exhibitions

2017 * *Dominion: 16 Trajectories* projection-mapped, Nuit Blanche *Illuminate the Night*, Culture Days 2017, Winnipeg.
2017 * *parallel* screened at *International Symposium on Electronic Art*, Manizales, Colombia.
2016 * *parallel* screened at *Coder et Decoder la Frontiere à l'Aube du 21ème siècle*, Anti-Atlas of Borders exhibition, Université Libre de Bruxelles.
2016 * *parallel* screened at *Once is Nothing: a Drone Art Exhibition*, Inter/Access Gallery, Toronto.
2015 * *The Post-Prairie* Park, a speculative urban design project for Winnipeg, exhibited at *Re-Imagining Rurality* conference, University of Westminster.
2014 * *Transect* projection mapped at Queen Anne Court, Royal Naval Hospital (Wren and Hawksmoor, 1696-1712), University of Greenwich, UK, as part of conference *Digital Research in the Humanities and Arts*.

Design Competitions / Calls for Ideas

2017 " UNIdos," entry for *Unbuild the Wall* (Nogales, Mexico/USA). With Ager Little Architects.
2015 "Benchscape," entry for *BenchMARK* urban furniture design competition. Sole.
2015 "Make Your Mark," entry for *Chair Your Idea* urban ideas competition. Sole.

Symposia and Workshop Participation

2017 Participant in *Elastic Spaces - Projected Narratives of Being and Belonging*, workshop on projection mapping at *International Symposium on Electronic Art*, Manizales, Colombia.
2016 Panel discussant, *Once is Nothing: A Drone Art Exhibition,* Inter/Access Gallery, Toronto.
2014 Participant in *Digital Psychogeography*, workshop at *Digital Research in the Humanities and Arts,* University of Greenwich, UK.
2014-17 Participant in workshops and site visits in Winnipeg and Manitoba, Sustainable Building Manitoba.

L. Bird (con't)

PUBLICATIONS

Books

2016 ed., with S. Wohl, *Re-Imagining Winnipeg*. Winnipeg: Storefront MB.

Book Chapters

2017 * with S. Nagler, "Brief Encounter," in *Urban Encounters: Art and the Public*, ed. M. Radice, A. Boudreault-Fournier. Kingston: McGill-Queen's University Press, 161-181.

2016 * "Territories of Image: disposition and disorientation in Google Earth", in *Imaging the City – art, creative practices and media speculation*, ed. S. Hawley, E. M. Clift, K. O'Brien. London: Intellect Press, 13-30.

2015 * "Earth or World? Aerial Image and the Prosthetic Imagination", in *Architecture's Appeal*, ed. M. J. Neveu, N. Djavaherian. Abingdon, England: Routledge, 106-120.

Trade Journals

2017 "Skewing the Square," in *Canadian Architect*, April.

2017 "Winnipeg Warmth," in *Canadian Architect*, Jan.

2016 "Worlds Colliding," in *Canadian Architect*, Oct.

Online Journals

2016 "Temporal Earths: Technical Memory and the Global Map," in *Montreal Architectural Review*, Vol. 3., ed. O. Recktenwald, A.C. Syrakoy. http://mar.mcgill.ca/article/view/22/17.

2016 "parallel," in The Site Magazine, Spring, ed. N. Bruun-Meyer et. al. http://www.thesitemagazine.com/read/parallel.

2014 "Art in the Field: harvesting visual narratives in the dispersed city," in *London School of Economics Field Research Methods Lab*, July, ed. H.B. Shin. http://blogs.lse.ac.uk/fieldresearch/2014/07/21/art-in-the-field-harvesting-visual-narratives-in-the-dispersed-city/ .

2014 "Once by Water, Once by Fire: imaging the end of architecture," in *Edge Condition*, Vol. 2, ed. G. Barton. http://www.edgecondition.net/vol-2-presenting-architecture.html.

Reviews of my visual research:

2016 *parallel* reviewed with other work in the group show *Once is Nothing*, in:
"This drone footage will blow your mind", by Leah Collins, on *CBC Arts* (Feb. 17):
http://www.cbc.ca/beta/arts/this-drone-footage-will-blow-your-mind-but-not-for-the-reasons-you-think-1.3451628"
Once is Nothing: A Drone Art Exhibition at Inter/Access", by Alice Pelot, on *ArToronto* (Feb. 21)
http://www.artoronto.ca/?p=32830
"An Artist's Tool: Once Is Nothing", by Rachel Chen, on *The Varsity* (no date):
http://thevarsity.ca/2016/02/21/an-artists-tool/

Citations of my written research (select):

2017 Nathalie Bredella, "Visualization Techniques and Computational Design Strategies" in *The Active Image: Philosophy of Engineering & Technology*, Vol. 28. Cham, Switzerland: Springer International, 160, 161, 172.

2016 Lee Rodney, *Looking Beyond Borderlines: North America's Frontier Imagination*. NY: Routledge, 151.

2016 Kimberly Hurd Hale, *The Politics of Perfection.* Lanham; London: Lexington Books, 25.

2016 Meghana Nayak, "Remaking the global," in *Understanding Popular Culture and World Politics in the Digital Age*, ed. L. J. Shepherd, C. Hamilton. London & New York: Routledge, 96.

2015 Sabine Müller, "Verführung und Verderben durch Automaten? Weibliche Maschinenmenschen und 'Orient'-Topoi in *Metropolis* und *Gothic,*" in *Autonome Automaten: Künstliche Körper und artfizielle Agenten in der technisierten Gesellschaft*, ed. M.-C. Gruber, J. Burg, S. Ziemann. Berlin: Berliner Wissenschafts-Verlag, 240.

2015 Rachel Stewart, "World Literature and Japan: Tokyo, Worlding and Murakami Haruki," in *Literature Compass* 12/4: 146–160.

2015 Tim McGinley, Andrew Fotia, Brett Abroe, "From Hopeful Monsters to Morphogenetic Prototypes," in *Architectural Theory Review*, Vol. 20, Iss. 3, 368.

2015 R.F.Malina, C.Strohecker, C.LaFayette, A.Ione. *Steps to an Ecology of Networked Knowledge & Innovation.* Vol. 1&2 (Science, Engineering, Arts & Design White Paper), Cambridge, MA & London: MIT Press / ISAST.

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2017 Editorial review for *Journal of Architectural Education*, 1 paper.

2015-17 Editorial review for *Leonardo*, The MIT Press, 4 papers.

Professional:

2015-17 Treasurer, Sustainable Building Manitoba Board of Directors.

2015-17 Member, Programming Committee, Sustainable Building Manitoba.

Public/Community:

2016-17 Juror, Archishorts Film Competition, Winnipeg Architecture and Design Film Festival.

2016 Pro-bono animation for Sustainable Building Manitoba re-branding.

PROFESSIONAL MEMBERSHIPS

MAA, MRAIC, MPPI, MCIP, LEED®GA, Sustainable Building Manitoba, Winnipeg Film Group, Video Pool

CHAD CONNERY *Sessional Instructor*

TEACHING RECORD

2015-16 *W:* EVAR 3010 ED3 Arch.Studio 2

2016-17 *F:* EVAR 3008 ED3 Arch.Studio 1
EVAR 3014 ED3 Drawing: Freehand and Digital
W: EVAR 3010 ED3 Arch.Studio 2

EDUCATION

2012 M.Arch, University of Manitoba
2010 B.EnvD, University of Manitoba

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

Exhibitions

2016-17 *Carbuncle Warming* Hut, with Eduardo Aquino, Terri Fuglem, and Liane Vaness, Warming Huts Exhibtion, The Forks, Winnipeg, MB.
2016 *Clepsydra Anon*, with Anca Matyiku, Secret Life of Objects Competition, Secret Life of Objects Conference, University of Texas at Austin, TX, USA.
2016 *Knaves Turn'd Honest*, with Anca Matyiku, Beehouse Competition, Univeristy of Manitoba, Winnipeg, MB.

Design Practice Research

2017 695 Darling Residence, with Al Coppinger Architect, 695 Darling St, Winnipeg, MB.
2016-17 Bear's Den Development, with Al Coppinger Architect, RM of Harrison–Park, MB.
2015-17 696 Portage Ave Apartments / Manitoba Child and Family Services Offices, with Din Projects & Al Coppinger Architect, 696 Portage Ave, Winnipeg, MB.
2015-16 Forth Cafe / Tipping Canoe Offices, with Din Projects & Al Coppinger Architect, 171 Mcdermot Ave, Winnipeg, MB.
2014-16 Manitoba Hydro Bipole 3 Convertor Stations, with Din Projects & Al Coppinger Architect, Winnipeg & Gilam, MB.

PUBLICATIONS (* = refereed/peer reviewed) Sole Authored, unless noted.

2015 * "The Thoughful Object," with Anca Matyiku,103rd *ACSA Annual Meeting Proceedings,* Lola Sheppard, David Ruy, eds. New York: ACSA Press, 279-287.

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2016 Secret Life of Objects Conference, University of Texas at Austin
2015 ACSA 103rd Annual Meeting: The Expanding Periphery and the Migrating Center, Toronto

T. COLIN GIBBS P.Eng., C.Eng., MICE, *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* EVAR 3012 Architectural Technology Preparation – Structural Concepts

2015-16 *F:* EVAR 3012 Architectural Technology Preparation – Structural Concepts
W: EVAR 4008 Architectural Technology 4 - Comprehensive Design Technology Report (Consultant)
ARCH 7080 Technology Thesis Report (Consultant)

2014-15 *F:* EVAR 3012 Architectural Technology Preparation – Structural Concepts
W: EVAR 4008 Architectural Technology 4 - Comprehensive Design Technology Report (Consultant)
ARCH 7080 Technology Thesis Report (Consultant)

EDUCATION

1960 Diploma Civil Engineering (Hons), University of Technology, Loughborough, Leicestershire, England.
2014 Value Engineering, APEGM Professional Development.

PROFESSIONAL REGISTRATION

1980 Member, Association of Professional Engineers of Manitoba

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

Professional Experience:

2002-pres. Private Practice: Expert Witness and Litigation Advisor
2008-pres. Member Technical Committee Manitoba New Home Warranty Program

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Professional:

Member Technical Committee Manitoba New Home Warranty Program.

Community:

Board Member Winnipeg Condominium Corporation 310.

PROFESSIONAL MEMBERSHIPS

Member, Association of Professional Engineers of Manitoba
Chartered Engineer (C.Eng.), Engineering Council, United Kingdom
Institution of Civil Engineers UK, (MICE), 1964-Present

SUCHITA GHOSH *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* ARCH 7000 Advanced Technology Topics 1
Sustainability by Design: Passive Energy Systems

EDUCATION

2006 M.S. in Sustainable Design, University of Texas at Austin, USA
2001 M.S. in Energy Efficient Buildings, Oxford Brookes University, UK
2000 B.Arch, TVB School of Habitat Studies, India

PROFESSIONAL REGISTRATION

2000 India, Indian Institute of Architects
2000 India, Council of Architecture

PROFESSIONAL MEMBERSHIPS

LEED AP

JOHANNA HURME *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3, *Critical Path*
ARCH 7070 Design Research Studio, M2 (1 student)
W: EVAR 4010 ED4/AMP2 Arch.Studio 4, *Critical Path*
GRAD 7090 Design Thesis, M2 (1 student)
ARCH 7000 Advanced Tech Topics 1, *The Tell Tale Detail*

2015-16 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3, *Next Urbanity*
ARCH 7070 M2 Design Research Studio (1 student)
W: EVAR 4010 ED4/AMP2 Arch.Studio 4, *Next Urbanity*
GRAD 7090 M2 Design Thesis (1 student)

EDUCATION

1999 Faculty of Architecture, Helsinki University of Toronto
1999 B.Env.D., University of Manitoba
2002 M.Arch, University of Manitoba

PROFESSIONAL REGISTRATION

2008 Manitoba (MAA); 2007 Ontario (OAA); 2014 Saskatchewan (SAA); 2015 Alberta (AAA); 2016 British Columbia (AIBC).

HONOURS, AWARDS, GRANTS

2017 Moira Gemmill Prize . Women in Architecture Awards . Finalist
2016 548 Stradbrook . Architizer A+ Awards . Architecture + Glass . Finalist . 5468796 Architecture
OZ Condominiums . MCHAP.emerge . Finalist . 5468796 Architecture
youCUBE . Prairie Design Awards . Award of Merit . 5468796 Architecture
Crossroads Garden Shed . American Architecture Prize . Platinum . 5468796 Architecture
Tweener . Edmonton Infill Competition . Open Category . Winner . 5468796 Architecture
Arthur Residence . World Architecture Festival . Housing . Winner . 5468796 Architecture
Brewery at the Forks . Canadian Architect Award of Merit . 5468796 Architecture
2015 Table for 1200 . Spirit of Winnipeg Awards . Finalist . 5468796 Architecture
youCUBE . Architizer A+ Awards . Multi-Unit Housing . Special Mention . 5468796 Architecture
Windmill Developments Mixed-Use Tower . Competition Finalist . 5468796 Architecture
Canadian Canoe Museum . Competition Finalist . 5468796 Architecture
youCUBE . Premier's Award for Design Excellence . 5468796 Architecture
Bloc_10 . Premier's Award for Design Excellence . 5468796 Architecture
OMS Stage . Premier's Award for Design Excellence . 5468796 Architecture
2014 OMS Stage . Mies Crown Hall Americas Prize . Shortlist . 5468796 Architecture
Manitoba Start . Prairie Design Awards . Award of Merit . 5468796 Architecture
The Avenue on Portage . Prairie Design Awards . Award of Excellence . 5468796 Architecture
5468796 . Rice Design Alliance Spotlight Prize . 5468796 Architecture
62M . World Architecture Festival . Housing . Shortlist . 5468796 Architecture
AGGV . World Architecture Festival . Competition Entries . Winner . 5468796 Architecture
AGGV . World Architecture Festival . Future Project of the Year . 5468796 Architecture
Arthur Residence . Canadian Architect Award of Excellence . 5468796 Architecture

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

2017 Canada Green Building Awards . SABmag . Jury . Ottawa
Tapped/Untapped . Installation . Toronto Design Offsite Festival . Toronto
One Bucket at a Time . Installation . Mextrópoli 2017 . Mexico City
AIA Omaha Lecture Series . Omaha
UK-China GDCCUS Centre . Lecture/Presentation . Guangdong China
2016 Canadian Architect Awards of Excellence . Jury . Toronto
World Architecture Festival . Housing . Jury . Berlin
U of T Daniels School of Architecture . Housing Lecture/Presentation .Toronto
IIT MCHAP.emerge Symposium . Chicago
Dalhousie School of Architecture . Lecture/Presentation . Halifax

J. Hurme (con't)

College of Arts + Architecture . University of North Carolina . Charlotte NC
D. Talks. Density . Calgary

2015 AIANY Design Awards . Jury . New York City
World Architecture Festival Future Project . Housing . Jury . Singapore
BUILD . Exhibition . University of Manitoba Arch II Gallery . Winnipeg
Centerbrook Architects Lecture Series . Centerbrook CT
Chicago Architecture Biennial Van Alen Lecture . Chicago
Alaska Design Forum . Achorage, Fairbanks, Juno
Cornell University Lecture Series . Ithaca NY
World Architecture Festival Lecture Series . Singapore
University of Manitoba Lecture Series . Winnipeg

2014 RAW:almond Design Competition . Jury . Winnipeg
AIA Colorado North Awards . Jury . Colorado
T412 . Exhibition . University of Toronto
Banff Sessions Keynote . Lecture . Banff
Governor General Awards Presentations . Lecture/Presentation . Ottawa
IIT MCHAP.emerge Symposium . Lecture/Presentation . Chicago
RAIC Festival . Lecture/Presentation . Winnipeg
Rice University: Spotlight: The RDA Prize Lecture . Houston
Woodbury University Lecture Series . San Diego
AIA State Conference . Lecture/Presentation . Phoenix
University of Montréal Lecture Series . Montréal
University of Manitoba TEDX . Winnipeg
McGill University School of Architecture Lecture Series . Montréal

2014-pres. Warming Huts: Art + Art Exhibition on Ice . Jury . Winnipeg

PUBLICATIONS (* = refereed/peer reviewed) Sole Authored, unless noted.

Press / Interviews / Citations;

2017 OMS Stage + Table for 1200 . Frame: Happening 2 . January . 5468796 Architecture
Tapped/Untapped | Toronto Offsite Design Festival . Canadian Interiors . January . 5468796 Architecture
Tapped/Untapped | Toronto Offsite Design Festival . Canadian Architect . January . 5468796 Architecture
Crossroads Garden Shed . Architect Magazine, Cover and Article . January . 5468796 Architecture
5468796 | 62m . Architectural Review . March . 5468796 Architecture
Parallelogram House . Lawrence Bird . Canadian Architect . April . 5468796 Architecture

2016 5468796 . Space . January . 5468796 Architecture
OZ Condominiums . Canadian Architect . March . 5468796 Architecture
Brewery at the Forks . Canadian Architect . December . 5468796 Architecture

2014 OMS Stage . Materials for Design 2 . January . 5468796 Architecture
Bloc_10 . The Architecture of Engagement . March . 5468796 Architecture
5468796 . The Globe and Mail . March . 5468796 Architecture
5468796 . MacLean's . March . 5468796 Architecture
OMS Stage . Architecture and Culture . April . 5468796 Architecture
OMS Stage . Canadian Architect . May . 5468796 Architecture
5468796 . The Globe and Mail . June . 5468796 Architecture
Centre Village . Braun . Courtyard Architecture . July . 5468796 Architecture
Migrating Landscapes . Braun . Exhibition Design . July . 5468796 Architecture
OMS Stage . Monocle Magazine . September . 5468796 Architecture
5468796 . Mark Magazine . October . 5468796 Architecture
Arthur Residence . Canadian Architect . December . 5468796 Architecture

2015 Tree House Condominiums . The Globe and Mail . February . 5468796 Architecture
548 Stradbrook . The Plan . March . 5468796 Architecture
youCUBE . ID+C . April . 5468796 Architecture
Maples Chiropractic . Canadian Interiors . May . 5468796 Architecture
youCUBE . Yapi . September . 5468796 Architecture
OZ Condominiums . Architectural Record . October . 5468796 Architecture
5468796 . The Globe and Mail . December . 5468796 Architecture

J. Hurme (con't)

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

ongoing	Design Studio Instructor . Faculty of Architecture . University of Manitoba
2003-current	Sessional Instructor . Faculty of Architecture . University of Manitoba
2014	Design Studio Instructor . Undergraduate . University of Montréal School of Architecture

Professional:

2007-current	Co-founder and Principle at 5468796 Architecture Inc.
2013-2015	Board of Directors . RAW: Gallery of Architecture + Design . President
current	Manitoba Association of Architects Council . Member
2016-current	Design Quarter Winnipeg . Founder and CEO

Public/Community:

2014-current	Board of Directors . Winnipeg Chamber of Commerce . Incoming Chair 2017
2015-current	Creative Council . Winnipeg Chamber of Commerce . Chair

PROFESSIONAL MEMBERSHIPS

MAA . OAA . SAA . AAA . SAFA . AIBC . FRAIC . LEED a.p.

2002/2017	RAIC / FRAIC
2014-current	Van Allen Institute International Council of Design Leaders

SOTIRIOS KOTOULAS *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* EVAR-4004 (ED4) Arch Studio 3, *Analysis as Architecture*
W: EVAR-4010 (ED4) Arch Studio 4, *Analysis as Architecture*
2015-16 *F:* EVAR-4004 (ED4) Arch Studio 3, *Death Architecture*
ARCH 7070 (M2) Design Research Studio (1 Student)
W: EVAR-4010 (ED4) Arch Studio 4, *Death Architecture*
GRAD 7090 (M2) Design Thesis (1 Student)

EDUCATION

2015-present Mason Red Seal Apprenticeship Program, Red River College, Winnipeg
2009 M.Arch.II, History and Theory of Architecture, McGill University
2003 B.Arch., Irwin S. Chanin School of Architecture of the Cooper Union, New York

HONOURS, AWARDS, GRANTS

The Abraham E. Kazan Award for Urban Design Studies.
Prix du Public, City Crossings competition, Winnipeg, Canada.
National Museum of Puerto Rico GET competition, Honorable Mention, San Juan, Puerto Rico.

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

Design Practice Research

2013-pres. Sotirios Corp, President. Select Projects:
- Project designer: 120 unit mixed – use housing tower for 267 Sherbrook, Winnipeg Canada
- Project designer: Artist studios for Garth Weiser and Francesca DiMattio, Upstate New York
- Project manager: Restoration of Donald Judd Architecture Office, Marfa Texas. Client: Judd Foundation
- Project designer: House renovation for artist Liam Gillick
- Project designer: Reconstruction of a Stone House, Kerasia, Greece
- Project designer: Beach house renovation, Pelion, Greece
- Project designer: James Ave Pump Station, Winnipeg Canada

2000-pres. Alpha Masonry, Foreman and project management. Select Projects:
- Bank of Montreal, restoration
- Canadian Science Centre for Human and Animal Health, new construction
- Manitoba Legislative Building / Golden boy, restoration
- University of Winnipeg, Wesley Hall, restoration
- Wuskwatim Hydroelectric Dam, new construction
- Winnipeg Blue Bombers Stadium, new construction
- Research and Development: Thermal Barrier performance in Sub-Arctic Climates.

2003-08 Project Designer, NYC: Bone Levine Architects (2003-5); Hillier / RMJM Architecture (2005-8)

Exhibitions

2014 *Lessons From Modernism, Environmental Design Considerations in 20th Century Architecture, 1925 – 1970*, Houghton Gallery Cooper Union, New York, New York, USA. Chicago Architecture Biennial, Elmhurst Museum, Chicago, Illinois, USA, 2015.
2014/10 *Drawing From The Archive, Analysis As Design*, Houghton Gallery Cooper Union, New York, NY, USA,
2014 *Here + Now Architecture in Winnipeg 2004 - 2014*, Storefront MB, Winnipeg Manitoba

Lectures, Panels, Symposia:

2017 Moderator, "Ghost and Latent Histories of Winnipeg," Winnipeg New Music Festival, Winnipeg Manitoba: Winnipeg Symphony Orchestra.
2016 Moderator, "Fabrication of Experience," Winnipeg New Music Festival. Winnipeg Manitoba: Winnipeg Symphony Orchestra.
2015 Panelist, "Open City: An Existential Approach." Museum of Modern Art, New York, November.
2015 Moderator, "Architecture as Energy," Winnipeg New Music Festival. Winnipeg Manitoba: Winnipeg Symphony Orchestra.
2014 Moderator, "Imaginary," Lebbeus Woods / A Celebration. New York, New York: Cooper Union.
2014 Moderator, "Beyond," Winnipeg New Music Festival: Winnipeg Symphony Orchestra.
2014 Panelist, "The City in 7 Years." Spur Festival: Signal vs. Noise, Winnipeg, Manitoba.
2014 "Machine Gardens." Lecture on current projects at the University of Puerto Rico, San Juan, April.

S. Kotoulas (con't)

PUBLICATIONS (* = refereed) Sole Authored, unless noted.

2015 contribution to Diane Lewis, "Open City: An Existential Approach," (Milan: Charta, 2015).
2015 "Violating Genius: On Raimund Abraham," in Informa: Chronologies of an Architectural Pedagogy, ed. Francisco Javier Rodriguez Suarez, Carlos Garcia (San Juan: University of Puerto Rico).
2011 "At The Foundations Of The West." Lebbeus Woods Blog. Entry posted Aug. 14
http://lebbeuswoods.wordpress.com/2011/08/14/at-the-foundations-of-the-west/
"Emission Architecture." Lebbeus Woods Blog. Entry posted January 27 2011.
http://lebbeuswoods.wordpress.com/2011/01/27/sotirios-kotoulas-emission-architecture/
"Pretty Dam Pure." Lebbeus Woods Blog. Entry posted October 25, 2010.
http://lebbeuswoods.wordpress.com/2010/10/25/pretty-dam-pure/
"Seeing Space." Lebbeus Woods Blog. Entry posted January 22, 2009.
http://lebbeuswoods.wordpress.com/2009/01/22/seeing-space/
2005 Sotirios Kotoulas, "Space Out," (Vienna: Springer-Verlag, 2005).

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2013-pres. Instructor, University of Manitoba School of Architecture
2013-pres. Visiting Design Thesis Critic, University of Manitoba School of Architecture
2011-13 Research Consultant, Cooper Union Institute for Sustainable Design,
2011-12 Visiting Professor, Polytechnic University of Puerto Rico School of Architecture
2004-pres. Guest Critic, Cooper Union Irwin S. Chanin School of Architecture

Arts & Cultural Committees:

2014-pres. Chair, Space Committee, Plug In Institute of Contemporary Art, Winnipeg, Manitoba, Canada
2014-pres. Chair, Building Committee, Winnipeg Symphony Orchestra, Winnipeg, Manitoba, Canada.
2015-pres. Member, Development Committee, Winnipeg Symphony Orchestra, Winnipeg, Manitoba, Canada
2012-pres. Member, Finance Committee, Plug In Institute of Contemporary Art, Winnipeg, Manitoba, Canada
2013-15 Member, Winnipeg Art Gallery Ball Fundraising Committee
2012-pres. Member, Programming Committee of the New Music Festival, Winnipeg Symphony Orchestra,
2005-pres. Co-Director, R.A.P. Research Arctic Phenomena with artists Geoffrey Jones and Alex Kwartler
2004-pres. Member, R.I.E.A. Research Institute for Experimental Architecture, New York, Bern

Board Memberships:

2015-pres. Basilica Hudson, Hudson New York, Board of Directors, Board Chair
2015-pres. Plug In Institute of Contemporary Art, Winnipeg, Board of Directors, President
2015-pres. Plug In Institute of Contemporary Art, Winnipeg, Board of Directors, Treasurer
2013-pres. Winnipeg Symphony Orchestra, Winnipeg, Board of Directors

PROFESSIONAL MEMBERSHIPS

MMI Manitoba Masonry Institute

TED LANDRUM *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* EVAR-4004 (ED4) Arch Studio 3, *Open City studio* (co-taught)
ARCH-7000 Advanced Tech Topics, *Architectural Lighting and Shadows* (also offered Fall 2013)
W: ARCH-7010 Advanced Tech Topics, *Hands on Masonry*
2015-16 *W:* ARCH-7010 Advanced Tech Topics, *Hands on Masonry*
2014-15 *W:* ARCH-7010 Advanced Tech Topics, *Hands on Masonry*

EDUCATION

1995/2012 M.ArchII (post-professional), Ball State University, College of Architecture & Planning, Muncie, IN
1993 B.Arch (professional), Ball State University, College of Architecture & Planning, Muncie, IN
1993 B.Sc. Environmental Design, Ball State University, College of Architecture & Planning, Muncie, IN
1986-89 3 years (of 5) toward B.Eng (Mechanical) + co-op, Purdue University, W. Lafayette, IN

PROFESSIONAL REGISTRATION

NCARB certified, exams commenced 2002.
1995-2006 Full time architectural design and project management experience in New York City, Montréal, and Ottawa.

HONOURS, AWARDS, GRANTS

2017 Granted membership into the League of Canadian Poets
2017 FAUM Endowment Fund ($1500) w/ Susan Algie for the Architecture + Design Film Festival
2016 (Oct 19) Invited Reader/Poet, *Contemporary Verse* 2 Launch, McNally Robinson Bookstore, Winnipeg
2016 UM Creative Works Grant ($2,500) w/ Lisa Landrum for "Architecture's Body Politic," an interactive installation at the Strauss Gallery, Dartmouth College, NH. Principal Investigator.

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

Ongoing Research Projects:

Archi-Poetry, research toward publications and performances (noted below); plus creation and development of an online research archive on architectural poetics and philosophy, www.ubuloca.com;
Lighting + Shadows, technical and theoretical research in support of graduate teaching;
Masonry, research in support of graduate teaching, including field studies and scholarly research on masonry traditions and innovations around the world.
Architectural Criticism, regular participant in online forums with international critics on contemporary issues.
Architecture + Film, research in support of co-curating Winnipeg's annual Architecture + Design Film Festival.

Exhibitions

2016 Architecture's Body Politic: Hex-Agonal Masque for Three (w/ Lisa Landrum), *Species Exhibit*, Gerald Auten, curator, Strauss Gallery, Dartmouth College, Hanover, NH. (June 28-Aug. 21).
2014 Winged Compass (with Lisa Landrum) a permanent exhibition in the Frascari Collection at the Washington Alexandria Architecture Center Library, Virginia Tech, Alexandria, VA.
2014 "To Dream of Astonishment" for *Unface Book: a manifesto* at the 2nd Istanbul Design Biennial (Nov-Dec)

Creative Research:

2016 Oct-Nov. Poetry Workshop w/ Steven Ross Smith, Centre for Creative Writing & Oral Culture, UManitoba
2016/02 Poetry Workshop w/ Jean Randolph, Centre for Creative Writing & Oral Culture, UManitoba

Academic Research: Conferences Attended

2017/06 Society of Architectural Historians International Conference, Glasgow Scotland
2017/05 Building Performance Seminar, MB Building Envelop Council, Red River College, Winnipeg (May 16)
2017/02 Atmosphere: Beauty Memory Entropy Symposium, Univ. of Manitoba Faculty of Architecture
2016/02 Atmosphere: Water Symposium, University of Manitoba Faculty of Architecture
2015/11 Poetry in the Archives Symposium, University of Manitoba
2015/08 International Society for the Philosophy of Architecture Symposium Taos NM
2015/07 Reading Architecture Symposium, Athens, Greece
2015/02 Atmosphere: Emergence Symposium, University of Manitoba Faculty of Architecture
2014/10 Mediated City Conference 2: Architecture Media Politics, Woodbury University, Los Angeles CA
2014/07 Autonomy Conference, International Society for Architecture & Philosophy, Delft NL

T. Landrum (con't)

PUBLICATIONS (* = refereed) Sole Authored, unless noted.

Books:

2017 * *Midway Radicals & Archi-Poems* (Signature Editions)–reviewed by Jill Stoner for *Canadian Architect* (forthcoming 2017).

2014 *This City is Red | This City is Read*, w/ Lisa Landrum (chapbook for RAIC Fringe Fest).

Book Chapters:

2017 "Reversible Destiny" in *Warehouse 26*, ed. Mindy Dao & Emily Warsza (Univ. of Manitoba).

2017 * "*Eudaimonia*: A Pantomime Dream Play," w/ Lisa Landrum, in *Confabulations: Storytelling in Architecture*, ed. Carolina Dayer, Paul Emmons and Marcia Feuerstein. (New York: Routledge).

2016 "If Tower" in *Warehouse 25*, ed. Alena Rieger and Ally Pereira-Edwards. (Univ. of Manitoba).

2014 "Eudaimonia [Happiness]: a performance devised in honour of Marco Frascari," with Lisa Landrum, in *Warehouse* 23, ed. Liane Lanzar and Kevin Complido. Winnipeg: University of Manitoba.

Journals:

2016 * "Thank You Gertrude, Again," *Contemporary Verse 2* vol. 38, no. 3 (Winter).

2015 * "A Hunt for Optimism in the Middle or Thereabouts" + "On Reading" in *On Site review* #34 (Fall).

2015 * "Arch of Enjoyment ," *American Society for Aesthetics Newsletter*, vol. 35 no. 2 (Summer) (print + web).

2015 * "Shortcut Through a City Cemetery" + "Lit by Glass" in *Lemon Hound: Winnipeg Folio* (web).

2014 * "Thank You Gertrude" in *Contemporary Verse* 2 vol. 37, no. 2.

2014 * "Architecture & Language: a duologue" *Edge Condition* v.2, Presenting Architecture (June): 23-34.

2014 * "MOMA's Folk Art Dilemma: What, Who & How it Represents," *Brooklyn Rail* (March): 58 (print + web).

Academic Conference Presentations

2014 * *Eudaimonia*, Confabulations: Frascari Symposium-2, Virginia Tech, Alexandria VA

2013 * presentation: Urban Borders Case Studies, Urbanism-Architecture Biennale, Shenzhen China

Creative Research Presentations

2017/09-24 "ArchiPoetry," invited author for the *Thin Air: International Writers Festival,* Winnipeg.

2017/04-28 Book Launch: Reading & Talk, *Midway Radicals & Archi-Poems*, McNally Robinson Bookstore, Winnipeg

2015/10-19 "Ark the Fundations: Roving Renovations" at *Bowery Poetry Club*, New York City

2014/04-17 Introductory Talk on the film "La Sapienza" at *Architecture + Design Film Festival*, Winnipeg

2014/04-16 Introductory Talk: on the film "Citizen Lambert" at *Architecture + Design Film Festival*, Winnipeg

2014/09-19 "Archi-Poetry" at the 10x20x20 event, Winnipeg Art Gallery, Winnipeg MB

2014/05-01 Introductory Talk: on the film "Away From All Suns" at *Architecture + Design Film Festival*, Winnipeg

Press, Interviews, Reviews:

2017 "Author Interview: 20 Questions," *Rob McLennan's Canadian Literature Index*. http://robmclennan.blogspot.ca/2017/09/12-or-20-second-series-questions-with_10.html

2017 "Architecture Film Fest," *Winnipeg Metro News* (March 30).

2016 "ArchiShorts… Architecture + Design Film Festival 2016," *Winnipeg Metro News* (March 4).

2015 "Hands on Masonry" + "Spotlight on U of M Masonry Partnership," *The Troweller* (Summer).

2015/03-29 Radio Interview on FM101.5 about Architecture & Design Film Festival, Winnipeg MB

2015 Back Cover Review of Simon Unwin's *Twenty-Five Buildings Every Architect Should Understand* (Routledge)

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2017/04 Invited Thesis Critic, University of Manitoba, Dept. of Arch.

2008-pres. Frequent outside critic in architecture design studios, University of Manitoba, Dept. of Arch.

2015/10 Invited critic, architecture design studio reviews at Parsons School of Design, NYC

2015/04 Invited thesis critic, North Dakota State University, Dept. of Architecture, Thesis Reviews

Professional:

2014/05 Here + Now Exhibition (assisted w/ exhibition installation), *RAIC Festival*, Winnipeg MB

Public:

2015-pres. Co-Curator for Winnipeg's annual *Architecture + Design Film Festival* > www.adff.ca/

2015-pres. Coordinator for annual *ArchiShorts* (2 min. film contest) > www.adff.ca/archishorts/

2014/05 Introductory talk (with poetry & performance): Winnipeg *Architecture & Design Film Festival*

PROFESSIONAL MEMBERSHIPS

BTES (Building Technology Educators' Society)
MBEC (Manitoba Building Envelope Council)
MWG (Manitoba Writers' Guild)
NCARB

W. DEAN LEITH

Sessional Instructor | Associate, Architect, Stantec Architecture Ltd.

TEACHING RECORD

2016-17 *F:* EVAR 3014 Drawing: Freehand and Digital
W: EVDS 2800 Visual Media 2

2015-16 *F:* EVAR 3014 Drawing: Freehand and Digital
W: EVDS 2800 Visual Media 2

2014-15 *F:* EVAR 3014 Drawing: Freehand and Digital
W: EVDS 2800 Visual Media 2
EVDS 3740 Introduction to AutoCAD in Design

EDUCATION

2007 M.Arch, University of Manitoba
1998 B.E.D., University of Manitoba

PROFESSIONAL REGISTRATION

2012 Manitoba Association of Architects (MAA)

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

Design Practice Research:

2008-pres. Associate and Architect, Stantec Architecture Ltd., Winnipeg, Manitoba
2017 Holy Family Home Personal Care Home, Winnipeg MB
2017 245 Wellington Condominium Entry Revitalization, Winnipeg MB
2017 Norway House RCMP Detachment, Norway House MB
2017 Canadian Pacific Rail Parcec Garage, Winnipeg MB
2017 Thompson Wastewater Treatment Plant, Thompson MB
2017 * Fresh Hemp Foods Manufacturing Plant, Ste. Agathe MB
2017 Eden Memorial Hospital Pharmacy, Castro Valley CA
2017 Manitoba Hydro St. Vital Power Station, Winnipeg MB
2017 * Confederation College Technology Education & Collaboration Hub, Thunder Bay ON
2017 Bison Medical Clinic and Leila Pharmacy, Winnipeg MB
2017 Manitoba Hydro McPhillips Power Station, Winnipeg MB
2016 825 Sherbrook Health Office, Winnipeg MB
2016 ACCESS Fort Gary Health Centre, Winnipeg MB
2016 Seven Oaks General Hospital Renal Health Facility, Winnipeg MB
2016 Shoal Lake Water Treatment Plant, Shoal Lake MB
2016 * Harrow Child Care Centre, Winnipeg MB
2016 Centro Caboto Centre Pavilion, Winnipeg MB
2016 St. Boniface Pumping Station, Winnipeg MB
2015 Boeing Canada Aeronautics Manufacturing, Winnipeg MB
2015 Concordia Hospital CT Scanners, Winnipeg MB
2015 Health Sciences Centre CT Scanners, Winnipeg MB
2015 Manitoba Infrasturucture and Transportation Office, Winnipeg MB
2015 Ste. Anne Hospital, Ste. Anne MB
2015 Manitoba Hydro Rockwood Power Station, Rockwood MB
2015 Manitoba Hydro Riel Power Station, Springfield MB
2015 St. Vital ACCESS Health Centre, Winnipeg MB
2015 Horace Halcrow Park, Cross Lake MB
2001-pres. Sessional Instructor, University of Manitoba Faculty of Architecture

PROFESSIONAL MEMBERSHIPS

2012-pres. Manitoba Association of Architects (MAA); Member
2007-pres. Royal Architecture Institute of Canada (MRAIC); Member
2008-2012 Manitoba Association of Architects; Intern member
1999-2008 Saskatchewan Association of Architects; Intern Member

NEIL MCARTHUR

Associate Professor of Philosophy (tenured), Sessional Instructor in Architecture

TEACHING RECORD

2014-15 *F:* PHIL 1200 Introduction to Philosophy (Part A)
PHIL 2860 Philosophy of Law
W: PHIL 2190 Philosophy and Sexuality

2015-16 *F:* PHIL 1200 Introduction to Philosophy (Part B)
PHIL 2860 Philosophy of Law
W: PHIL 2190 Philosophy and Sexuality

2016-17 *F:* ARCH 7350 Legal [and Ethical] Aspects of Architectural Practice (Co-taught)
PHIL 2190 Philosophy and Sexuality
W: PHIL 2860 Philosophy of Law
PHIL 3440 Social and Political Philosophy
PHIL 7180 Political Philosophy (Equality)

EDUCATION

2004 Ph.D. Philosophy, University of Southern California
1996 M.A. Philosophy, University of Western Ontario
1995 B.A. Philosophy (First Class Honours), McGill University

HONOURS, AWARDS, GRANTS

2015 University of Manitoba Annual Outreach Award

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

2016-17 Writer, Director, Lead Actor, "Let Me Freeze Your Head" (Theatrical Play: Toronto Fringe Festival, Winnipeg Fringe Theatre Festival, Paris Fringe Festival, Prague Fringe Festival, Vancouver Fringe Festival)

2016 "The Rise of Digisexuality: Therapeutic Challenges and Possibilities", *Annual Meeting, Society for the Scientific Study of Sexuality* (Phoenix, AZ)

2016 "Why Don't We Eat Bugs? Entomophagy and the Socialisation of Affect," *A Taste for Feeling* Symposium, University of Manitoba (Winnipeg, MB)

2016 "Who's Afraid of Sex with Robots? Social, Legal and Ethical Considerations," Invited talk, University of Wisconson-Stout (Menomonie, WI)

2015 "Consent, Deception and Privacy", *Annual Meeting, Society for the Scientific Study of Sexuality* (Albuquerque, NM)

2015 "Malthus on Sexual Liberty: Autonomy and the State", *North American Society for Studies in Romanticism* (Winnipeg)

2014 "Author Meets Critic: David Hume's *Essays and Treatises*", *Hume Society Annual Conference* (Portland)

PUBLICATIONS (* = peer reviewed) Sole Authored, unless noted.

Books:

2017 * Co-Editor (with Arthur Schafer and Steven Lecce), *Fragile Freedoms: The Global Struggle for Human Rights* (Oxford University Press).

2017 Co-Editor (with John Danaher), *Sex Robots: Social and Ethical Implications* (MIT Press).

Book Chapters:

2017 "The Case for Sexbots," in John Danaher and Neil McArthur, eds., *Sex Robots: Social and Ethical Implications* (MIT Press)

2017 "Hume and Legal Philosophy," *The Human Mind*, eds. Angela Coventry and Alexander Sager (Routledge)

2015 "Political Philosophy", *The Oxford Handbook of David Hume*, ed. Paul Russell (Oxford University Press).

2015 "Civil Society", *The Routledge Handbook of Eighteenth Century Philosophy*, ed. Aaron Garrett (Routledge).

2014 "Taxation and Fiscal Policy", *The Continuum Companion to Thomas Hobbes*, ed. Sharon Lloyd (Continuum).

2014 "Reform and Revolution", *The Oxford Handbook of Eighteenth Century British Philosophy,* ed. James Harris (Oxford University Press, 2014)

Journals:

2014 * "Cosmopolitanism and Hume's General Point of View", *European Journal of Political Theory* 13, 321-40.

N. McArthur (con't)

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE (Select)

2015-pres. Director, Centre for Professional and Applied Ethics, University of Manitoba

PROFESSIONAL MEMBERSHIPS:

Society for the Scientific Study of Sexuality

MARK O'NEILL *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* ARCH 7350 Legal and Ethical Aspects of Architecture, Primary Instructor (23 students)

2015-16 *W:* ARCH 7350 Legal and Ethical Aspects of Architecture, Primary Instructor (25 students)

2014-15 *F:* ARCH 7350 Legal and Ethical Aspects of Architecture, Primary Instructor (26 students)

EDUCATION

1979 BA (Econ), University of Manitoba
1982 Llb University of Manitoba

PROFESSIONAL REGISTRATION

1983 Manitoba (Law Society)

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Professional:
2017 Bar Association mid winter professional conference Winnipeg

Public/Community:
2015-17 Board member Legal Aid Management Council of Manitoba
2015 Board member Legal Help Centre

PROFESSIONAL MEMBERSHIPS

Law Society of Manitoba
Canadian Bar Association (Manitoba Branch)

COLIN NEUFELD *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3, *Critical Path*
W: EVAR 4010 ED4/AMP2 Arch.Studio 4, *Critical Path*

2015-16 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3, *Next Urbanity*
ARCH 7070 M2 Design Research Studio (2 students)
W: EVAR 4010 ED4/AMP2 Arch.Studio 4, *Next Urbanity*
GRAD 7090 M2 Design Thesis (2 students)

2014-15 *F:* n/a
W: EVAR 4010, ARCH 7060 (Vertical Design Studio, ED4, M1), *Living with Water*
GRAD 7090 M2 Design Thesis (1 student)

EDUCATION

2002 B.Env.D., University of Manitoba
2004 M.Arch, University of Manitoba

PROFESSIONAL REGISTRATION

2010 Manitoba (MAA)

HONOURS, AWARDS, GRANTS

2016 548 Stradbrook . Architizer A+ Awards . Architecture + Glass . Finalist . 5468796 Architecture
OZ Condominiums . MCHAP.emerge . Finalist . 5468796 Architecture
youCUBE . Prairie Design Awards . Award of Merit . 5468796 Architecture
Crossroads Garden Shed . American Architecture Prize . Platinum . 5468796 Architecture
Tweener . Edmonton Infill Competition . Open Category . Winner . 5468796 Architecture
Arthur Residence . World Architecture Festival . Housing . Winner . 5468796 Architecture
Brewery at the Forks . Canadian Architect Award of Merit . 5468796 Architecture
2015 Table for 1200 . Spirit of Winnipeg Awards . Finalist . 5468796 Architecture
youCUBE . Architizer A+ Awards . Multi-Unit Housing . Special Mention . 5468796 Architecture
Windmill Developments Mixed-Use Tower . Competition Finalist . 5468796 Architecture
Canadian Canoe Museum . Competition Finalist . 5468796 Architecture
youCUBE . Premier's Award for Design Excellence . 5468796 Architecture
Bloc_10 . Premier's Award for Design Excellence . 5468796 Architecture
OMS Stage . Premier's Award for Design Excellence . 5468796 Architecture
2014 OMS Stage . Mies Crown Hall Americas Prize . Shortlist . 5468796 Architecture
Manitoba Start . Prairie Design Awards . Award of Merit . 5468796 Architecture
The Avenue on Portage . Prairie Design Awards . Award of Excellence . 5468796 Architecture
5468796 . Rice Design Alliance Spotlight Prize . 5468796 Architecture
62M . World Architecture Festival . Housing . Shortlist . 5468796 Architecture
AGGV . World Architecture Festival . Competition Entries . Winner . 5468796 Architecture
AGGV . World Architecture Festival . Future Project of the Year . 5468796 Architecture
Arthur Residence . Canadian Architect Award of Excellence . 5468796 Architecture

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

2015 Frontlines: The Future of Heritage . Presentation/Lecture . StorefrontMB . Winnipeg
AIAS Ryerson: Popularize . Presentation. Ryerson University . Dept of Architectural Science, Toronto
Ryerson DAS Lecture Series: Matter . Presentation/Lecture . Ryerson University . Dept of Architectural Science . Toronto
2014 NZIA Speaker Series . Wellington . NZ
NZIA Speaker Series . Christchurch . NZ
NZIA Speaker Series . Auckland . NZ
PrefabNZ . Presentation/Lecture . Auckland . NZ
Governor General Awards Presentations . Presentation/Lecture . Ottawa
IIT MCHAP.emerge Symposium . Presentation/Lecture . Chicago
NCC Urbanism Lab Event : Design Excellence . Presentation/Lecture

C. Neufeld (con't)

PUBLICATIONS (* = refereed/peer reviewed)

Press / Interviews / Citations;

2017 OMS Stage + Table for 1200 . Frame: Happening 2 . January . 5468796 Architecture
Tapped/Untapped | Toronto Offsite Design Festival . Canadian Interiors . January . 5468796 Architecture
Tapped/Untapped | Toronto Offsite Design Festival . Canadian Architect . January . 5468796 Architecture
Crossroads Garden Shed . Architect Magazine, Cover and Article . January . 5468796 Architecture
5468796 | 62m . Architectural Review . March . 5468796 Architecture
Parallelogram House . Lawrence Bird . Canadian Architect . April . 5468796 Architecture

2016 5468796 . Space . January . 5468796 Architecture
OZ Condominiums . Canadian Architect . March . 5468796 Architecture
Brewery at the Forks . Canadian Architect . December . 5468796 Architecture

2015 Tree House Condominiums . The Globe and Mail . February . 5468796 Architecture
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youCUBE . ID+C . April . 5468796 Architecture
Maples Chiropractic . Canadian Interiors . May . 5468796 Architecture
youCUBE . Yapi . September . 5468796 Architecture
OZ Condominiums . Architectural Record . October . 5468796 Architecture
5468796 . The Globe and Mail . December . 5468796 Architecture

2014 OMS Stage . Materials for Design 2 . January . 5468796 Architecture
Bloc_10 . The Architecture of Engagement . March . 5468796 Architecture
5468796 . The Globe and Mail . March . 5468796 Architecture
5468796 . MacLean's . March . 5468796 Architecture
OMS Stage . Architecture and Culture . April . 5468796 Architecture
OMS Stage . Canadian Architect . May . 5468796 Architecture
5468796 . The Globe and Mail . June . 5468796 Architecture
Centre Village . Braun . Courtyard Architecture . July . 5468796 Architecture
Migrating Landscapes . Braun . Exhibition Design . July . 5468796 Architecture
OMS Stage . Monocle Magazine . September . 5468796 Architecture
5468796 . Mark Magazine . October . 5468796 Architecture
Arthur Residence . Canadian Architect . December . 5468796 Architecture

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2011-current Design Studio Instructor . Faculty of Architecture . University of Manitoba
2011-current Sessional Instructor . Faculty of Architecture . University of Manitoba

Professional:

2001-02 LM Architectural Group
2003-06 Nejmark Architect
2006-2008 Stantec Architecture Ltd.
2008-current Principle at 5468796 Architecture Inc.

Public/Community:

2015-present Friends of Sherbrook Pool Building Committee . Member
2011-present Gracepoint Community Church . Board Chair

PROFESSIONAL MEMBERSHIPS

MAA

SASA RADULOVIC *Sessional Instructor*

TEACHING RECORD

2016-17 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3, *Critical Path*
W: EVAR 4010 ED4/AMP2 Arch.Studio 4, *Critical Path*

2015-16 *F:* EVAR 4004 ED4/AMP2 Arch.Studio 3, *Next Urbanity*
ARCH 7070 M2 Design Research Studio (1 student)
W: EVAR 4010 ED4/AMP2 Arch.Studio 4, *Next Urbanity*
GRAD 7090 M2 Design Thesis (1 student)

2014-15 *F:* ARCH 7020 Research Topics in History and Theory, *Prank!*
W: ARCH 7000 Advanced Tech Topics 1, *Prefabricated Systems*

EDUCATION

1992-94 Faculty of Architectural Engineering, University of Sarajevo
1994-96 Faculty of Architectural Engineering, University of Belgrade
1999 B.Env.D., University of Manitoba
2003 M.Arch . University of Manitoba

PROFESSIONAL REGISTRATION

2007 Manitoba (MAA); 2007 Ontario (OAA); 2014 Saskatchewan (SAA); 2015 Alberta (AAA); 2016 British Columbia (AIBC).

HONOURS, AWARDS, GRANTS

2016 548 Stradbrook . Architizer A+ Awards . Architecture + Glass . Finalist . 5468796 Architecture
OZ Condominiums . MCHAP.emerge . Finalist . 5468796 Architecture
youCUBE . Prairie Design Awards . Award of Merit . 5468796 Architecture
Crossroads Garden Shed . American Architecture Prize . Platinum . 5468796 Architecture
Tweener . Edmonton Infill Competition . Open Category . Winner . 5468796 Architecture
Arthur Residence . World Architecture Festival . Housing . Winner . 5468796 Architecture
Brewery at the Forks . Canadian Architect Award of Merit . 5468796 Architecture

2015 Table for 1200 . Spirit of Winnipeg Awards . Finalist . 5468796 Architecture
youCUBE . Architizer A+ Awards . Multi-Unit Housing . Special Mention . 5468796 Architecture
Windmill Developments Mixed-Use Tower . Competition Finalist . 5468796 Architecture
Canadian Canoe Museum . Competition Finalist . 5468796 Architecture
youCUBE . Premier's Award for Design Excellence . 5468796 Architecture
Bloc_10 . Premier's Award for Design Excellence . 5468796 Architecture
OMS Stage . Premier's Award for Design Excellence . 5468796 Architecture

2014 OMS Stage . Mies Crown Hall Americas Prize . Shortlist . 5468796 Architecture
Manitoba Start . Prairie Design Awards . Award of Merit . 5468796 Architecture
The Avenue on Portage . Prairie Design Awards . Award of Excellence . 5468796 Architecture
5468796 . Rice Design Alliance Spotlight Prize . 5468796 Architecture
62M . World Architecture Festival . Housing . Shortlist . 5468796 Architecture
AGGV . World Architecture Festival . Competition Entries . Winner . 5468796 Architecture
AGGV . World Architecture Festival . Future Project of the Year . 5468796 Architecture
Arthur Residence . Canadian Architect Award of Excellence . 5468796 Architecture

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY (* = peer-reviewed)

2017 Tapped/Untapped . Installation . Toronto Design Offsite Festival . Toronto
One Bucket at a Time . Installation . Mextrópoli 2017 . Mexico City
AIA Omaha Lecture Series . Omaha

2016 IIT MCHAP.emerge Symposium . Chicago
Mextrópoli Festival Panel . Mexico City

2015 BUILD . Exhibition . University of Manitoba Arch II Gallery . Winnipeg
Cornell University Lecture Series . Ithaca NY
University of Manitoba Lecture Series . Winnipeg

2014 T412 . University of Toronto . Exhibition . Toronto
Banff Sessions Keynote . Lecture . Banff

S. Radulovic (con't)

RAIC Festival . Lecture/Presentation . Winnipeg
Rice University: Spotlight: The RDA Prize Lecture . Houston
Woodbury University Lecture Series . San Diego
Governor General Awards Presentations . Lecture/Presentation . Ottawa
University of Manitoba TEDX . Winnipeg
Alaska Design Forum . Achorage, Fairbanks, Juno

PUBLICATIONS (* = refereed/peer reviewed)

Press / Interviews / Citations:

2017 OMS Stage + Table for 1200 . Frame: Happening 2 . January . 5468796 Architecture
Tapped/Untapped | Toronto Offsite Design Festival . Canadian Interiors . January . 5468796 Architecture
Tapped/Untapped | Toronto Offsite Design Festival . Canadian Architect . January . 5468796 Architecture
Crossroads Garden Shed . Architect Magazine, Cover and Article . January . 5468796 Architecture
5468796 | 62m . Architectural Review . March . 5468796 Architecture
Parallelogram House . Lawrence Bird . Canadian Architect . April . 5468796 Architecture

2016 5468796 . Space . January . 5468796 Architecture
OZ Condominiums . Canadian Architect . March . 5468796 Architecture
Brewery at the Forks . Canadian Architect . December . 5468796 Architecture

2015 Tree House Condominiums . The Globe and Mail . February . 5468796 Architecture
548 Stradbrook . The Plan . March . 5468796 Architecture
youCUBE . ID+C . April . 5468796 Architecture
Maples Chiropractic . Canadian Interiors . May . 5468796 Architecture
youCUBE . Yapi . September . 5468796 Architecture
OZ Condominiums . Architectural Record . October . 5468796 Architecture
5468796 . The Globe and Mail . December . 5468796 Architecture

2014 OMS Stage . Materials for Design 2 . January . 5468796 Architecture
Bloc_10 . The Architecture of Engagement . March . 5468796 Architecture
5468796 . The Globe and Mail . March . 5468796 Architecture
5468796 . MacLean's . March . 5468796 Architecture
OMS Stage . Architecture and Culture . April . 5468796 Architecture
OMS Stage . Canadian Architect . May . 5468796 Architecture
5468796 . The Globe and Mail . June . 5468796 Architecture
Centre Village . Braun . Courtyard Architecture . July . 5468796 Architecture
Migrating Landscapes . Braun . Exhibition Design . July . 5468796 Architecture
OMS Stage . Monocle Magazine . September . 5468796 Architecture
5468796 . Mark Magazine . October . 5468796 Architecture
Arthur Residence . Canadian Architect . December . 5468796 Architecture

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2005-pres. Design Studio . Master Studio Reviews . Daniels School of Architecture . University of Toronto
2003-pres. Design Studio Instructor . Faculty of Architecture . University of Manitoba
2003-pres. Sessional Instructor . Faculty of Architecture . University of Manitoba

Professional:

2012-current Board of Directors . Partners Program . FAUM . University of Manitoba . Member
2007-current Co-founder and Principle at 5468796 Architecture Inc.
2000 *NETPLAN . Assistant Urban Designer, University of Manitoba*
1996-1997 Cohlmeyer Architects Limited Associate

PROFESSIONAL MEMBERSHIPS

MAA . OAA . SAA . AAA . SAFA . AIBC . FRAIC . LEED a.p.
2003/2017 RAIC / FRAIC
2014-pres. Van Allen Institute International Council of Design Leaders

DEAN SYVERSON *Sessional Instructor*

TEACHING RECORD

2016-17 *W:* ARCH 7040 Professional Practice

2015-16 *F:* ARCH 7040 Professional Practice

1994-2007 Full time teaching load, including Graduate & Undergraduate Design Studios, 4 Graduate Design-Build Studios, numerous core and elective courses

EDUCATION

1981 B.A., University of Alberta
1989 M.Arch, University of Manitoba

PROFESSIONAL REGISTRATION

2015 Saskatchewan (SAA)
2014 Ontario (OAA)
1994 Manitoba (MAA)

HONOURS, AWARDS, GRANTS

2016 City of Winnipeg, 1919 General Strike Design Competition - Finalist, 2nd Place

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

Design Practice Research:

Current - Fortune Building, Main Street, Winnipeg (Historic, listed commercial building - adaptive reuse) $8 M, under construction 710 Westminster, Wpg - Mixed Use Bldg. - 44 res.units, 12,000 sq.ft. commercial, $10M, under construction.
Numerous public and private commissions in progress
2016-pres. Founder / Principal of Unit 7 Architecture
2016 City of Winnipeg, 1919 General Strike Design Competition - Finalist, 2nd Place
1994-2015 Co-founder/ Principal of Syverson Monteyne Architecture, Winnipeg

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Professional:

Past President, Manitoba Association of Architects

Public:

2017 Jury member, Commerce Design Awards Winnipeg
2011-15 Chair, West Broadway Biz
Past Board Member - Manitoba Historical Society,
- Winnipeg St. Norbert Arts Centre, Winnipeg
- Urban Idea Centre of Winnipeg

PROFESSIONAL MEMBERSHIPS

Manitoba Association of Architects (MAA),
Saskatchewan Association of Architects (SAA)
Ontario Association of Architects (OAA)
Royal Architectural Institute of Canada - Fellow (FRAIC)

LIANE VENESS *Sessional Instructor/CAST Coordinator*

TEACHING RECORD

2016-17 *F:* EVAR 3008, Arch Studio 1
EVAR 3014, Drawing Free Hand
ARCH 7010, Integrated Project Delivery
W: EVAR 3010, Arch Studio 2, ED3
EVAR 3006, Arch Tech 2, ED3
S: ARCG 7070, Rainbow Gardens Build Studio

2015-16 *F:* EVAR 3008, Arch Studio 1
EVAR 3014, Drawing Free Hand
W: EVAR 3010, Arch Studio 2
EVAR 3006, Arch Tech 2

2014-15 *F:* EVAR 3008, Arch Studio 1
EVAR 3014, Drawing Free Hand
W: EVAR 3010, Arch Studio 2
EVAR 3006, Arch Tech 2

EDUCATION

2006 M.Arch, University of Manitoba (including 2 terms study abroad at Technische Universitat, Berlin)
2001 B.Env.D. University of Manitoba

PROFESSIONAL REGISTRATION

2008 Manitoba Assocition of Architects (MAA), Manitoba
2006 LEED Accredited Professional, Canadian Green Building Council

HONOURS, AWARDS, GRANTS

2016 Named 1 of 14 "Emerging Talent(ed)" Architects' office in Canada - *Canadian Architect Magazine*. July 16, V.61 N.07
2016 Commerce Design Award - Project: Tiny Feast, Winnipeg, Manitoba
Design build by WORK/SHOP.
2016 Finalist. CBC Manitoba Future 40
2015 Twenty + Change Emerging Architect Award - Project: Fiskaoist, located in Gimli, Manitoba.
Design build by WORK/SHOP.
2015 Commerce Design Award - Project: Lunch Bell Bistro, Winnipeg, Manitoba
Design build by WORK/SHOP.
2014 Prairie Design Awards - Project: Fiskaoist, located in Gimli, Manitoba.
Design build by WORK/SHOP.
2014 RAIC National Urban Design Award - Project: University of Winnipeg Students' Association bikeLAB
Project Architect and head of project design team with Peter Sampson Architecture Studio

RESEARCH, SCHOLARSHIP AND CREATIVE/PROFESSIONAL ACTIVITY

Design Practice Research:

2016-present Centre for Architectural Structures and Technology (C.A.S.T.) - Coordinator/Technician
Responsible for coordinating initiatives and securing funding to promote and facilitate ongoing focused research within the centre.
Additional responsible include overseeing the general management of the facility.

2013-present WORK/SHOP Projects - Principal/Director
Winnipeg, Manitoba
Principal/founder of a collaborative design and Architecture research studio, focusing on design/build projects and the continual research of material, construction and fabrication techniques.

Exhibitions:

2015 Twenty + Change Next Generation: Emerging Canadian Design Practices Public Exhibition.
Urbansoace Gallery. Toronto, ON. November 20, 2015 – February 5, 2016

L. Veness (con't)

PUBLICATIONS

2015 Veness, Liane. "Emily Hermant: Spatial Drawings, A Critical Distance Response 20:4" http://www.aceart.org/emily-hermant-spatial-drawings-8-may-5-june-2015

Presentations:

2016 *PechuKucha*. (Vol 28) Invited Presenter. November 24th,Park Theatre

2015 *10x20x20.* (Event 13) Invited Presenter. September 19th, Winnipeg Art Gallery

Press on Professional Work:

2016 Marrey, Paige. *"Emerging Tanlent: Work/Shop" Canadian Architect Magazine. V.61 N.07, July 2016. pp. 24*

2015 Twenty + Change. *Twenty + Change Next Generation: Emerging Canadian Design Practices.* Toronto: Riverside Press, 2015

2014 Canadian Wood Council. *Celebrating Excellence in Wood Structures. Friesen, 2014.*

Press on Design Studios:

2017 *Carbuncle.* DOA Press. Faculty of Architecture, University of Manitoba.

2016 "Construc(ting) a Small Cabin," *ArchFolio*2016. Department of Architecture, University of Manitoba, 14-17.

ACADEMIC, PROFESSIONAL AND PUBLIC SERVICE

Academic:

2016/17 CAST Committee/Coordinator

Public/Community:

2015 Invited "Celebrity Designer" *Chair Your Idea.* Winnipeg, Manitoba

2015 *THE BENCH* Competition. STUFF, Winnipeg, Manitoba. Invited guest judge.12th of June

2015 Invited Guest Judge. *Table for 1201.* 23rd of May.

PROFESSIONAL MEMBERSHIPS

MAA, RAIC, LEED Accredited Professional

2015 Visiting Team Report

Master of Architecture Program
University of Manitoba

The Canadian Architectural Certification Board
1 Nicholas Street, Suite 710
Ottawa (Ontario) Canada K1N 7B7
Voice: (613) 241-8399
Fax: (613) 241-7991
E-mail: info@cacb.ca
Web Site: www.cacb-ccca.ca

Table of Contents

I. Introduction • CACB Accreditation 3

II. Summary of Team Findings 4

1. Team's General Comments 4
2. Conditions for Accreditation "met" and "not met": a summary 4
2. Program's Progress since the previous site visit (from 2009 VTR) 5
4. Program Strengths 8
5. Causes of Concern and Team's recommendations 9

III. Compliance with the Conditions for Accreditation 10

IV. Appendices 28

Appendix A: Program Information 28
1. Brief History of the University of Manitoba 28
2. Institutional Mission 28
3. Program History 30
4. Program Mission 32
5. Program Action Plan 34

Appendix B: The Visiting Team 36

Appendix C: The Visit Agenda 37

V. Report Signatures 40

I. Introduction • CACB Accreditation

The CACB is a national independent non-profit corporation, whose Directors represent the Canadian Architectural Licensing Authorities (CALA), the Canadian Council of University Schools of Architecture (CCUSA) and the Canadian Architectural Students Association (CASA). The CACB is both a decision-making and policy-generating body. It is the sole organization recognized by the architectural profession in Canada to assess the educational qualifications of architecture graduates (*Certification program*) and to accredit professional degree programs in architecture offered by Canadian Universities (*Accreditation program*).

By agreement of the Registration Authorities and Councils of nine Provincial Institutes and Associations, the CACB was established in 1976 to assess and certify the academic qualifications of individuals holding a professional degree or diploma in architecture who intend to apply for registration. The Ordre des Architectes du Québec joined the CACB in 1991. In 1991, the CACB mandate to certify degree credentials was reaffirmed and its membership was revised to reflect its additional responsibility for accrediting professional degree programs in Canadian University Schools of Architecture.

The CACB awards accreditation only to professional degree programs in architecture. These are normally:

- Master of Architecture degree with a related pre-professional bachelor's degree; requirement, typically amounting to five or six years of study;
- Master of Architecture degree without a pre-professional requirement, consisting of an undergraduate degree plus a minimum of three years of professional studies;
- Bachelor of Architecture degree requiring a minimum of five years of study, except in Quebec, where four years of professional studies follows two years of CEGEP studies.

The process of accreditation begins at the school with the preparation of the Architecture Program Report (*APR*). The *APR* identifies and defines the program and its various contexts, responding to the *CACB Conditions and Procedures for Accreditation*. The *APR* is expected to be useful to the planning process of the school, as well as documentation for the purposes of accreditation.

Upon acceptance of the *APR* by the CACB Board, an accreditation visit is scheduled. The CACB's decision on accreditation is based upon the capability of the program to satisfy the Conditions and Procedures for Accreditation, including the ability of its graduating students to meet the requirements for learning as defined in the Student Performance Criteria. During the visit, the team reviews student work and evaluates it against these requirements. The team also assesses the effectiveness and degree of support available to the architectural program through meetings with the institution's administrators at various levels, architecture and other faculty, students, alumni, and local practitioners.

At the conclusion of the visit, the Visiting Team makes observations and expresses compliments and concerns about the program and its components. It also offers suggestions for program enrichment and makes recommendations, which, in the judgment of the team, are necessary for the program's improvement and continuing re-accreditation. Following the visit, the team writes the following VTR, which is forwarded with a confidential recommendation to the CACB. The CACB then makes a final decision regarding the term of accreditation.

II. Summary of Team Findings

1. Team's General Comments

The CACB Visiting Team to the University of Manitoba encountered a series of challenges that were not normal. The incumbent Dean announced his intention not to seek reappointment the day before the Team arrived. Several senior faculty members had recently resigned. There was clear evidence of internal conflict.

The task was not made easier by the fact that the Architecture Program Report was poorly prepared. The Report betrayed signs of internal division. It was incomplete. The self–assessment was inadequate. Plans of the facilities were not properly presented. Courses from ED1 and ED2, which are not required of all students in the professional architecture program, were inappropriately cited as satisfying Student Performance Criteria. The CV's of faculty members were grouped in a way that mixed full and part-time appointments and members whose home was Environmental Design with those whose appointment was in the Department of Architecture.

That said, it was clear to all members of the Visiting Team that the faculty, support staff and students are dedicated to the pursuit of scholarly, professional and creative excellence. The students are engaged in a quality education.

2. Conditions for Accreditation "met" and "not met": a summary

	Met	Not Met
1. Program Response to the CACB Perspectives		
A. Architecture Education and the Academic Context	[x]	[ ]
B. Architecture Education and the Students	[x]	[ ]
C. Architecture Education and Registration	[x]	[ ]
D. Architecture Education and the Profession	[x]	[ ]
E. Architecture Education and Society	[x]	[ ]
2. Program Self-Assessment	[ ]	[x]
3. Public Information	[x]	[ ]
4. Social Equity	[x]	[ ]
5. Human Resources	[ ]	[x]
6. Human Resource Development	[x]	[ ]
7. Physical Resources	[x]	[ ]
8. Information Resources and Information Technology	[x]	[ ]
9. Financial Resources	[x]	[ ]
10. Administrative Structure	[ ]	[x]
11. Professional Degrees and Curriculum	[x]	[ ]
12. Student Performance Criteria (SPC)		
A1. Critical Thinking Skills	[x]	[ ]
A2. Research Skills	[x]	[ ]
A3. Graphic Skills	[x]	[ ]
A4. Verbal and Writing Skills	[x]	[ ]
A5. Collaborative Skills	[x]	[ ]
A6. Human Behavior	[x]	[ ]
A7. Cultural Diversity	[x]	[ ]
A8. History and Theory	[x]	[ ]

A9.	*Precedents*	[x]	[ ]
B1.	*Design Skills*	[x]	[ ]
B2.	*Program Preparation*	[x]	[ ]
B3.	*Site Design*	[x]	[ ]
B4.	*Sustainable Design*	[ ]	[x]
B5.	*Accessibility*	[x]	[ ]
B6.	*Life Safety Systems, Building Codes and Standards*	[x]	[ ]
B7.	*Structural Systems*	[x]	[ ]
B8.	*Environmental Systems*	[x]	[ ]
B9.	*Building Envelopes*	[x]	[ ]
B10.	*Building Service Systems*	[x]	[ ]
B11.	*Building Materials and Assemblies*	[x]	[ ]
B12.	*Building Economics and Cost Control*	[ ]	[x]
C1.	*Detailed Design Development*	[x]	[ ]
C2.	*Building Systems Integration*	[x]	[ ]
C3.	*Technical Documentation*	[x]	[ ]
C4.	*Comprehensive Design*	[ ]	[x]
D1.	*Leadership and Advocacy*	[x]	[ ]
D2.	*Ethics and Professional Judgment*	[x]	[ ]
D3.	*Legal Responsibilities*	[x]	[ ]
D4.	*Project Delivery*	[ ]	[x]
D5.	*Practice Organization*	[x]	[ ]
D6.	*Professional Internship*	[x]	[ ]

2. Program's Progress since the previous site visit (from 2009 VTR)

The 2009 Visiting Team Report identified four issues as Causes of Concern.

Concern 1
From the 2009 VTR: *Human and financial resources remain major areas of concern. Please refer to Sections III.5 (Human Resources) and III.9 (Financial Resources) of this report. The ability of the Department to continue to deliver the new program is a tribute to the dedication and professionalism of the faculty, but key personnel have candidly confessed to being dangerously close to burnout. Despite this, the Visiting Team encountered high levels of collegiality and optimism in the meetings with full-time and part-time academic staff and non-academic staff. Administrative and technical support staff members also appear to be, without exception, knowledgeable and dedicated, and obviously enjoy a cheerful and productive working relationship with their academic colleagues.*

Since the last Visiting Team Report two faculty members have been hired (Fantauzzi and Stern), while a total of four regular faculty members (Fantauzzi, Chard, West, Subotincic) have resigned or announced their intention to do so. An external search is underway for a new Department Head in the Department of Architecture. In light of the departure of several faculty members, the conclusion is inescapable that the present situation is considerably worse than at the time of the last VTR, with increased workloads and a heavier reliance on sessional staff.

There has been a reduction in the number of administrative support staff since the last VTR, but it appears that reorganization of positions and responsibilities has allowed coverage of all

essential services. In this process the Department of Architecture lost its Student Advisor, centralized support services in the form of administrative and financial assistance, although strained, appears to be adequate for the current number of academics and students. This comment is predicated on replacing the recent resignation of an administrative support staff member (Bohonos).

Financial resources appear to be adequate at the present time provided that baseline funding is available to bring the academic complement up to an acceptable level.

Concern 2
From the 2009 VTR: *The Team expresses another major concern regarding the tension that exists between the Department of Architecture and the Faculty regarding the curriculum of the ED2 (pre-architecture)year. Notwithstanding the fact that the matrix presented in the APR acknowledges certain Student Performance Criteria as addressed in the ED2 program, although to a much lesser extent than in the 2004 accreditation visit, the Department contends that the curriculum of the ED2 program bears little relevance to the new curriculum in architecture and has argued for direct entry into architecture at the ED2 level. The Team is sympathetic with the concerns expressed by the Department in this regard and recommends that the possibility of direct entry be more formally studied. However, the Team also believes that 'direct entry' into architecture at the ED2 level would not preclude other students continuing to use the ED2 program to explore other options, and that a negotiated curriculum in the ED2 year could address both the curricular concerns of the Department of Architecture and the desire of the Faculty and the other Departments for a multi-disciplinary common year.*

The 2014 APR notes that no action has been taken in response to the suggested changes to ED2 or the entry point to the architecture stream.

The problem of tension in the Faculty appears only to have worsened since the last visit.
Concern 3
From the 2009 VTR: The Team notes with some concern that although eight of the full-time and part-time faculty members are professionally licensed, only one full-time tenure-track faculty member is actually registered with the Manitoba Association of Architects. The Team recommends that steps be taken by the Department and the Faculty to promote a broader engagement with the profession by acknowledging the importance of practice in recruiting as well as in tenure and promotion review and by supporting faculty who are pursuing registration with release time and professional development subsidies.

There has been a significant improvement with regard to the number of registered professional architects in the faculty since the last accreditation cycle. The Program is to be commended in this regard and whilst no longer a "cause for concern" for this visiting team, we encourage the Program to continue to acknowledge and support faculty who are pursuing registration with release time and professional development subsidies.

Concern 4
From the 2009 VTR: *A final, less immediate, concern identified by the Team is related to the structure and two-term duration of the vertical studio sequence. Vertical studios are not common in professional programs, perhaps because of the infrastructural challenges generally associated with staffing and management; a professional program based entirely on vertical studios is unusual, even rare, but very exciting. The Team recognizes the enormous potential and the achievement to date of the new structure, but would like to suggest that the high*

potential for success is matched by equally high levels of albeit acceptable risk. The opportunity presented to students in the new program to plot their trajectories by selecting and possibly working for a second year with the same studio instructor develops relationships between teacher and student that are rarely possible in professional programs, but also makes both the teacher and the student equally accountable for the preservation of access to diversity in the educational experience.

Since the completion of the previous VTR in 2009 the Program has delivered all studio instruction in ED4, M1 and M2 (final year of the undergraduate degree and both years of The Master of Architecture) in the form of vertical studios, bringing together students at three levels of development in the Program. The current Visiting Team observes a number of conditions that represent both the success and risk anticipated in the 2009 VTR.

The studios appear to be generating work of considerable ambition and vitality. The Team recognizes the benefits of having senior students in a mentoring position vis-à-vis the more junior cohort, and the opportunity for students to work closely with faculty over extended periods of time, allowing them to pursue projects at a deeper level than might be possible in more conventional studio arrangements.

However, the Team recognizes that the vertical studios also present certain difficulties. Opinions proffered by both faculty and students include the observation that the research-intensive format primarily benefits strong students, while leaving behind students in ED4 and M1 who might benefit from more structured studios. Another observation was that due to the focus on research and experimentation of the fall semester studios, many students defer design propositions until the second term, leaving little time for adequate resolution. This is of particular concern at the M1 level, where students are expected to achieve the criterion of Comprehensive Design in the winter semester (ARCH 7060).

Projects vary widely from studio to studio, ranging from complex urban buildings to hypothetical interventions. The Team is concerned that these varying levels of complexity do not provide students with consistent expectations and requirements, and that weaker students could seek to avoid studios perceived as too challenging. This poses a particular difficulty in verifying that all students coming through the program are exposed to appropriate and consistent degrees of difficulty and areas of study. As noted above, this is of particular concern with respect to ARCH 7060, the winter studio in M1, which the APR identifies as satisfying all four SPCs under the rubric of Comprehensive Design.

The 2009 Visiting Team Report found the following Condition of Accreditation NOT MET

Condition 5. Human Resources
This condition is still not met. The number of regular faculty members in the Department of Architecture is not sufficient to mount the professional Program.

The 2009 Visiting Team Report found the following Student Performance Criteria NOT MET

CPR 12.14: Accessibility
Evidence provided demonstrated the Condition on Accessibility (B5) is now met.

CPR 12.20: Building Envelope Systems
Evidence provided demonstrated the Condition on Building Envelopes (B9) is now met.

CPR 12.21: Building Service Systems
Evidence provided demonstrated the Condition on Building Service Systems (B10) is now met.

CPR 12.22: Building Systems Integration
Evidence provided demonstrated the Condition on Building Systems Integration (C2) is now met.

4. Program Strengths

The professional program in Architecture is fortunate to have a group of highly qualified, accomplished and dedicated faculty members. The cohort includes core faculty in the Department of Architecture and the Program in Environmental Design. It also includes part-time faculty members, many of whom have long-standing associations to the Department and make a substantial contribution to the educational experience of Architecture students. The teaching staff is remarkably attentive to the individual development of students, the fulfillment of their potential and the formation of their professional skills and judgment.

The spirit and quality of the student body brings tremendous vitality to the Architecture Program. Students enter the Program at several different levels. They bring a broad range of academic background. They pursue individual research and avenues of design exploration. They establish a strong design culture and a lively environment rich in peer learning and creative accomplishment. The Team applauds the diversity and vitality of the student work, the range of forms of representation and the avenues for the dissemination of the creative outcomes such as the journal *Warehouse* and the ARCH2 Gallery.

The facilities are a strength of the Architecture Program. The Team was impressed by the continuous investment in the improvement of the physical fabric of the buildings, interior environments, furnishings and support functions such as FABLab, CADLab, the Workshop and the Library.

The senior administration of the University of Manitoba sees the Program in Architecture as a core component of the institution and a contributor to its profile. University leaders are well aware of the tradition of excellence and of the fact that some of the most important architects in the country graduated from this program. They appreciate the energy and vitality the Faculty brings to the University as a whole. The team was left with a sense of engagement and commitment from members of the central administration.

The graduates remain connected and committed to the Faculty of Architecture. The local practitioners, many of whom are graduates, support the program and participate as critics and instructors. They wish to see it flourish.

There is an admirable sense of breadth and outreach in the program. The efforts at external engagement and collaboration are exemplary. Field trips and off campus initiatives at the local, regional, national and international levels broaden and enrich the experience of the students

5. Causes of Concern and Team's recommendations

Governance was the issue most consistently raised over the course of our visit. The Team observed that the matter of Governance had been a central concern raised by the last two visiting teams. The situation does not seem to have improved, indeed things seem to have deteriorated. We cannot stress firmly enough that the members of the Programs in the Faculty of Architecture must take steps to develop an effective governance model that is transparent and representative of the interests of all the members. The Team is well aware that this issue will not be easily resolved, but it is imperative that the Faculty of Architecture develops systems of leadership and accountability that take into account the unique complexity and richness of this multi-layered, multi-disciplinary academic enterprise.

People are the strength of any institution. The Team must express deep concern about the apparent erosion of the human resource base in the Faculty and Department of Architecture. The departures of several members of the core faculty in the Department of Architecture is troubling. Key academic support staff members have departed. The student intake at the graduate level has been relatively consistent, but the Architecture Program is now the smallest in the country. These trends must be reversed for the continued health of the professional program.

The Team witnessed a situation in which there has clearly been a breakdown in the morale, sense of trust, respect and collegiality within the fabric of the Faculty of Architecture. While the individuals who make up that fabric appear to be deeply dedicated and passionately committed to the success of Program, there has been a failure to establish a context in which these people can work in concert for the overall good. This situation must be remedied.

There is a lack of clarity in the relationship between the professional programs and the interdisciplinary program, between the graduate and undergraduate levels in the Faculty of Architecture. This issue appears to lie at the root of the problems described above. The curricular and governance models must be reformed.

Finally, the Visiting Team must express alarm at the fact that many of the issues raised here have been noted by previous CACB teams. The on-going nature of some of these problems is of profound concern. Steps must be taken to engage the entire Faculty, in all its parts, in a concerted process of self-assessment and redefinition.

III. Compliance with the Conditions for Accreditation

1. Program Response to the CACB Perspectives

Programs must respond to the relevant interests of the constituencies that make up the CACB: educators (CCUSA) and regulators (CALA), as well as members of the practicing profession, students and interns, and the general public.

A. Architecture Education and the Academic Context

The program must demonstrate that it both benefits from and contributes to its institutional context.

Met	Not Met
[x]	[ ]

Team comments:

The University of Manitoba's senior administration expresses strong support for the Faculty and the Department of Architecture, which they recognize as integral to the university, both historically (the program was first established in 1913) and in the contemporary context. Academically, the impact of the Faculty of Architecture is felt across the university through the ED1 courses offered to students in U1, which expose a broad range of students – including many who have no intention of entering architecture as a profession – to the value of design and the importance of the built environment.

As with any program in architecture, there are significant benefits to being situated in a large multi-disciplinary research university, including opportunities for interdisciplinary research. However, the Team notes that despite the multi-disciplinary nature of the Faculty of Architecture, once students enter the ED3 level, at which point they specialize in one of three areas of study (Architecture, Landscape and Urbanism, and Interior Environments), there is little opportunity for cross-disciplinary study even within the Faculty, let alone across the university.

Senior administration expressed some concern regarding the apparent complexity of the professional program in architecture, which is seen to be highly idiosyncratic. While it is not unusual for architecture programs to be seen as "outliers" in the context of more conventionally structured academic programs, recent tensions within the Faculty of Architecture have brought its unorthodox nature into sharper focus. This has highlighted some issues with the complex governance model under which it operates (these issues emerge repeatedly in the APR and were specifically mentioned by numerous faculty members, administrators and students). The current Dean has announced he will not seek reappointment at the end of his current term in August 31, 2015. A search is currently underway for a Head for the Department of Architecture. These imminent changes in the Faculty's academic leadership provide the opportunity for a fresh look at establishing a more transparent governance model.

Senior administration confirmed the University was proceeding with an external search for the Program Head in the Department of Architecture. The search for a new Dean will begin shortly. Administration also confirmed their intention to retain and fill recently vacated faculty positions. There is firm institutional commitment to support what the academic leadership at the University of Manitoba describes as a highly valued core program within the university.

B. Architecture Education and the Students

The program must demonstrate that it provides support and encouragement for students to achieve their full potential during their school years and later in the profession, and that it provides an interpersonal milieu that embraces cultural differences.

Met	Not Met
[x]	[ ]

Team comments:
The Team found that the vertical studio structure implemented since the 2009 visit has created a situation in which students are enabled to achieve their potential. This structure provides students a high degree of choice in setting their academic course and to concentrate on particular areas of study for a full year. The high level of ambition of the studios, faculty and students create a stimulating learning environment. Faculty and students cited the presence of more experienced and less experienced students in the same studios as a great contributing factor to the collaborative atmosphere, liveliness, peer learning opportunities and overall performance of studios.

Students are involved in organizations at the local and national levels: SAS (Student Architectural Society, undergraduate); UMAAS (University of Manitoba Association of Architecture, graduate) and CASA (Canadian Architecture Students Association).

The work published in the high quality and award-winning annual catalogue *Warehouse* celebrates student achievements.

Based on reports by many students, the Visiting Team expresses concerns regarding how the tensions among the faculty have had a negative impact on the students' learning environment. Students also expressed concerns regarding the departure of key faculty members and the turnover of administrative personnel due to recent resignations.

C. Architecture Education and Registration

The program must demonstrate that it provides students with a sound preparation for the transition to professional life, including internship and licensure.

Met	Not Met
[x]	[ ]

Team comments:
There is evidence of a reasonable level of engagement between the educational structure and the next steps in the process of registration. At the most basic level of engagement, the Departments' Web Site clearly informs prospective students of the importance of accreditation in support of licensure.
"The Master of Architecture program is accredited by the Canadian Architectural Certification Board (CACB), with most graduates proceeding to professional registration and careers as practicing architects"

Students are introduced formally to professional requirements through a lecture on Regulation of the Profession – MAA Intern Development in ARCH 7040 Professional Practice. There are also structured relationships with the profession through the inclusion of 2 Interns and 1 Student (non-voting) on the MAA Council. Further to this, the Faculty provides space to the MAA for ExAC testing and ongoing recruitment sessions for student membership in the MAA through the student representation.

In addition, the Partners Program seeks to develop relationships between students and the profession though outreach and engagement. There was some suggestion that this program could be strengthened and needed more support within the faculty to ensure ongoing success.

Students reported that interaction with recent graduates who return to the school as studio consultants provided an opportunity to gain awareness of the internship process and the steps that must be taken to gain licensure.

D. Architecture Education and the Profession

The program must demonstrate how it prepares students to practice and assume new roles within a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base.

Met	Not Met
[x]	[ ]

Team comments:
The MAA liaises with the Faculty of Architecture through a position on Council as set out in the MAA bylaws. This sends a message to students and other stakeholders that the value of professional licensure is shared and supportable in the public interest.

The two courses, ARCH 7040 Professional Practice and 7350 Legal Aspects of Architectural Practices, provide students with an understanding of the broad range of professional roles and responsibilities, introduce them to practice issues and a range of diverse forms of practice.

The Partners Program provides a liaison with industry leaders in the fields of design and building. The Partners Program has established a Partner-in-Residence position at the Faculty of Architecture with a mandate to “exist as a vehicle for dynamic, relevant, interdisciplinary, and accessible investigation of the critical design issues facing our built environment” (excerpt from the APR). The regular instructional faculty has been augmented with practicing MAA members who teach Vertical Studios and deliver various courses and lectures.

It is also possible that the Partners Program or some parallel initiative could assist the students in finding employment during and after their university careers.

E. Architecture Education and Society

The program must demonstrate that it equips students with an informed understanding of social and environmental problems and that it also develops their capacity to help address these problems with sound architecture and urban design decisions.

Met	Not Met
[x]	[ ]

Team comments:
The program addresses social and environmental issues at a number of levels, both curricular and extra-curricular. Studios often address issues of social agency, sustainability, community health, disaster relief, etc. in both local and international contexts, including opportunities to participate in summer elective design-build projects in the developing world (Turkey, Ghana and Uganda) through Architects Without Borders Canada. Technology courses and seminars address issues of sustainable practice and building performance.

The program also takes advantage of and makes connections to its location in Winnipeg, situating many of the studio projects within the city and dealing with issues that include poverty, urban sprawl and environmental conditions such as flooding and extreme cold, providing students with direct exposure to social and environmental concerns in their immediate urban environment.

Outreach into the wider community is facilitated by strong connections with alumni, many of whom remain closely connected with the program and are involved in organizing public events that help connect the program to the wider public and that address local architectural, environmental and urban issues.

2. Program Self-assessment

The program must provide an assessment of the degree to which it is fulfilling its mission and achieving its action plan.

Met	Not Met
[ ]	[x]

Team Comments

The Conditions for Accreditation include the following:

"The CACB encourages absolute candor in conducting and reporting the self-assessment so that, if well done, it will largely anticipate the VTR."

The reporting on Program self-assessment in the current APR is neither candid nor rigorous enough to meet this standard. The content is largely descriptive in nature and fails to provide a clear articulation and understanding of strengths and weaknesses of the Program. Aside from a passing mention concerning the lack of clarity in governance of the Environmental Design Program, the self-assessment does not reflect the profound challenges facing the Program with respect to governance and administrative tensions.

Additionally, the Program self-assessment is encumbered by a tri-partite organization that addresses the Faculty of Architecture, the Environmental Design Program, and the Department of Architecture. These appear to have been prepared independent of one another and do not present a coherent and consistent representation of the Program. This is consistent with observations made throughout the APR, and confirmed by evidence encountered by the Team, that the absence of a clear governance model within the Faculty is contributing to confusion and lack of clarity.

3. Public Information

The program must provide clear, complete, and accurate information to the public by including in its academic calendar and promotional literature the exact language found in the CACB 2010 Conditions (Appendix A-1), which explains the parameters of an accredited professional degree program.

Met	Not Met
[x]	[ ]

Team comments:

It is easy to gain access to the Faculty of Architecture's Academic Handbook, Vision, Mission and Tenets, Governance, Matters relating to Academic Staff, Tenure and Promotion, Matters Relating to Teaching Evaluation on the website. The description of the Department of Architecture program is also found easily on the website, an essential tool in supporting recruitment and access to applicants to the program.

However, the information about professional accreditation, and link to CACB Professional Accreditation Terms Appendix A1 does not appear to be consistent and the accreditation status of the program is not easily accessible. Public access to consistent and current information and status of the program is essential to maintain public confidence in the institution and the program.

4. Social Equity

The accredited degree program must provide a summary of provincial and institutional policies that augment and clarify the provisions of the Charter of Rights and Freedoms as they apply to social equity.

Met	Not Met
[x]	[ ]

Team comments:
The Department of Architecture and University of Manitoba websites provide access to information about equity related procedures, policies and regulations as they relate to respectful work and learning environment. The Visiting Team recognizes the institutionally established criteria to achieve fairness and diversity in faculty appointments. Student admissions standards are not well described. Given the complexity of access into the Masters Program, this lack of clarity and consistency affects the public's understanding of the wide range of program choices and entry points into the Program.

Human Resources

The program must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient faculty complement, an administrative head devoting not less than fifty percent of his/her time to program administration, administrative and technical support staff, and faculty support staff.

Met	Not Met
[ ]	[x]

Team comments:
The contingent of regular and continuing part-time faculty in the Architecture Program are well qualified, dedicated, passionate and clearly committed to the quality of the student experience. The entire ethos of the program is dedicated to the formation of each individual student. The research and creative production of the core faculty is of high quality, though recent resignations have removed two very productive researchers.

The loss of full-time faculty members through resignation and secondment has left the Department of Architecture seriously short-staffed. It does not appear that the present faculty cohort is sufficient to deliver the full professional curriculum and administer the undergraduate and graduate components of the Program in Architecture. The hiring of several new faculty members, including a Program Chair, should take place as soon as possible.

The part-time faculty members are crucial to the delivery of both undergraduate and graduate programs. Some have been teaching in the program for many years. The reliance on long-term part-time faculty is not in itself a problem. However some of the individuals involved are effectively teaching full course loads and are key members of the Program. These individuals have no consistent appointment status in the Faculty and do not appear to be treated equitably. The appointment status of such individuals should be reviewed and regularized where appropriate.

The students are clearly committed to their education and the community of the school. They value their experience and share in the 'project' of architectural education, contributing to an environment that is rich in opportunities for peer learning. Students enter the program by various routes, bringing a diversity of academic backgrounds and creating a student body that is mature and self motivated. All students in the graduate program have passed through several steps of evaluation. They are well qualified based on academic performance and portfolio review.

The Program has made great progress in reducing time to completion for the Master of Architecture. The number of applicants for the admissions streams (ED, AMP and MArch) has remained relatively stable the number of students admitted has fluctuated and remains quite low. Steps should be taken to assure quality through increasing both the number of applicants and the number accepting offers of admission. This will require a thorough review of recruitment and outreach programs in the Faculty.

The administrative and technical support staff members in the Faculty of Architecture are integral to the process of education. Some team members are long serving, and all appeared to be fully dedicated to the success of the academic enterprise. The number of support staff appears adequate, but there is a serious morale problem arising from workload and the stress that has occurred as a result of conflict and issues of governance within the Faculty of Architecture.

6. Human Resource Development

Programs must have a clear policy outlining both individual and collective opportunities for faculty and student growth within and outside the program.

Met	Not Met
[x]	[ ]

Team comments:

A formal annual performance review process is in place for tenured and tenure track faculty with submissions of activity reports by each faculty member, a follow up meeting, and a submission of a recommendation for annual salary increment. The program at both the undergraduate and graduate levels are deeply steeped in a tradition of personal growth and exploration for both faculty and students.

7. Physical Resources

The program must provide physical resources that are appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each full-time student; lecture and seminar spaces that accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space.

Met	Not Met
[x]	[ ]

Team comments:

The Team was impressed with the considerable ongoing investment in the Department's physical resources and facilities available to students in the Architecture Program. Since the last accreditation visit renovations and upgrades include: envelope and landscape improvements to the Russell Building, replacement of the Art and Architecture Library floor structure, renovations to reception areas in both the Library and Administration, upgrades to the tunnel structures and improvements to the Wireless network capacity within ARCH2. The Team does note however that ARCH2 is in need of an upgrade to finishes and life safety systems.

After an extended period of temporary occupancy, the ED Studio has been able to take permanent ownership of the lower Level of the Education Building. While this has presented some challenges related to physical connectivity with ARCH2 and Russell, the change has enabled the Faculty of Architecture to invest in the space and plan for future renovations.

Numerous stakeholders noted the poor quality of HVAC systems and controls in the Russell Building, and the ventilation in the ED studio and the Arch 2 studios. This observation was also made in the 2009 VTR.

The extension of the underground tunnel system through the ARCH2 building and the development of a University-wide scheduling system bring more outside students into the spaces that are normally the preserve of students in the Faculty of Architecture. A thorough review of security arrangements would seem appropriate at this time.

The Visiting Team notes that the APR failed to meet the requirement of properly prepared plans, which provide a clear description of spaces with a clear legend. Notwithstanding the above, the written description of the facilities and the Team tour adequately demonstrated the merits of the physical infrastructure.

Resources such as the library, the woodshop, Material Library, CAD lab and FABLab provide strong support to the curriculum and research activity. Further to this, the recently commissioned Global Survey of Innovative Technologies in Digital Fabrication demonstrates a continuing investment. The student investment through the Technology Fund is noteworthy.

8. Information Resources and information technology

The architecture librarian and, if appropriate, the staff member in charge of visual resource or other non-book collections must prepare a self-assessment demonstrating the adequacy of the architecture library. For Information Technology Resources, the program must also provide the information technology infrastructure and corresponding staff support in order to effectively contribute to the delivery of the curriculum, as well as supporting activities of staff and faculty.

Met	Not Met
[x]	[ ]

Team comments:

The Architecture and Fine Arts Library is one of several libraries serving the students of the University of Manitoba. Since 1930 the library has been a convenient resource to the students and, under the leadership of head librarian Mary Lochhead, it is a strength of the Program. Although there is a university-wide funding cut of 4% being applied to all units as well as reduction in gift donations to the library, the Program is to be commended for maintaining the collection and the hours of operation (approaching 70hrs per week). The visiting team encourages the Library to continue its archival activities and the uploading to a stable digital repository of images, building plans, etc.

The Program requires students to purchase laptop computers (either PC or Apple platform). This allows the Faculty of Architecture to maintain a CadLab of only 19 high-end dual platform iMacs. Staff and students pointed to the fact that the purchase of a laptop occurs early on in the Environmental Design Program before students may be fully aware of the computing power they will need for graphics and rendering. The purchase of a “lower horsepower” platform may result in students abandoning their own computers, leading to an overburdening of the CadLab.

Consideration could be given to developing a method of matching hardware requirements with program requirements at the time students enter their final stream of study.

9. Financial Resources

Programs must have access to sufficient institutional support and financial resources.

Met	Not Met
[x]	[ ]

Team comments:

In the context of the size of the program and current academic staffing and number of students, the financial resources appear to be adequate. However, the issues of restoring tenure-track positions to former levels and regularizing term positions may not be resolvable with the current financial resources.

10. Administrative Structure (Academic Unit & Institution)

The program must be part of, or be, an institution accredited by a recognized accrediting agency for higher education. The program must have a degree of autonomy that is both comparable to that afforded to the other relevant professional programs in the institution and sufficient to assure conformance with all the conditions for accreditation.

Met	Not Met
[ ]	[x]

Team comments:

The Dean of the Faculty of Architecture reports to the Vice President (Academic). The Faculty consists of four departments (Architecture, City Planning, Interior Design, Landscape Architecture) each administered by a Department Head. Each of these departments is responsible for a graduate level program in their respective disciplines. In addition, an undergraduate program in Environmental Design is administered by the Faculty under the leadership of a Program Director. The Program Director is also an Associate Dean (Academic). There is also an Associate Dean (Research) who oversees research activities within the Faculty. All Heads and Associate Deans report to the Dean. A Council of Deans and Heads meets approximately bi-weekly.

Aspects of the governance model of the Faculty that relate to the present review are the following:

- The graduate program in Architecture, which leads to the M.Arch degree, is administered by the Department of Architecture.
- The APR claims that the Program in Environmental Design is administered by an Environmental Design Program Advisory Committee (EDPAC). However, based on the evidence we examined, the program appears to be administered by the Program Director who also served as Associate Dean (Academic) – the EDPAC appears to have no formal powers.
- The last two years of the Environmental Design degree comprise three completely independent professional Options, each of which prepares students for graduate level professional programs in Architecture, Interior Design, or Landscape Architecture and City Planning. In the case of Architecture, these last two years of the Environmental Design program are formally termed "Environmental Design Architectural Option" (ED3 ARCH and ED4 ARCH) and all the courses in this option (except for one elective) bear EVAR3XXX or EVAR4XXX course numbers. These courses are formally approved through the Architecture Department Council, and are budgeted and staffed through the Department of Architecture. Architecture also administers two other

Options AMP1 and AMP2 that prepare students to apply for admission to the Master of Architecture.

- Despite the fact that students who are entering one of the "Options" are still formally administered by the Program Director, it appears that the Director plays no formal role in admitting students to the Options.

The Team has three concerns with the governance structure. The first concern is that the common naming of the Faculty and a Department (Architecture) has led to confusion, both inside and outside of the Faculty, as to where the responsibility resides for administration of the professional program in architecture.

The second concern is that degrees with significantly distinct content (potentially 66% of the courses) share a common name. An important aspect of this concern is that the specialty is not at all obvious as it appears on neither the parchment nor the transcript.

The third concern is that, although the Department of Architecture is academically responsible for the content of the ED3 ARCH and ED4 ARCH courses, they do not appear to have a formal position in the administration of the Environmental Design program. Conversely, the Program Chair, who is formally responsible for the Environmental Design program, appears to have no role in the progress of students to the last two "Option" years.

There is overwhelming evidence that the lack of clarity in this governance model has been a major source of stress and conflict in both the Faculty and Department of Architecture.

11. Professional Degrees and Curriculum

The CACB awards accreditation only to first-professional degree programs in architecture. These include:

- *Master of Architecture degree with a related pre-professional bachelor's degree; requirement, typically amounting to five or six years of study;*
- *Master of Architecture degree without a pre-professional requirement, consisting of an undergraduate degree plus a minimum of three years of professional studies.*
- *Bachelor of Architecture degree requiring a minimum of five years of study, except in Quebec, where four years of professional studies follows two years of CEGEP studies;*

The curricular requirements for awarding these degrees must include three components: general studies, professional studies, and electives that respond to the needs of the institution, the architecture profession, and the students respectively.

Met	Not Met
[x]	[ ]

Team comments:
The University of Manitoba Faculty of Architecture offers the following two degrees towards a career path in architecture:
- A two-year first-professional Master of Architecture (M.Arch.)
- A four-year non-professional Bachelor of Environmental Design (B.Env.D.)

The B.Env.D. Degree is a four year program of studies consisting of two years of common 'Foundation Studies' (U1/ED1 and ED2) followed by two years of pre-professional 'Intermediate Studies' (ED3 and ED4). This is followed by the M.Arch. Degree, consisting of two years of professional studies (M1 and M2). This equates to a 2+2+2 model, which has entered its sixth year

of implementation, since the restructuring of 2008/09. The first two years (U1/ED1 and ED2) are common years shared with the rest of the Faculty (including Interior Design, City Planning, and Landscape Architecture) the curriculum of which satisfies the requirements for general studies (notwithstanding that the APR lists many of these courses as fulfilling Student Performance Criteria; the Team notes that since not all students entering the professional program in architecture at the ED3 level are required to take these courses, they cannot be considered to address any SPCs). The next two years (ED3 and ED4) commence the professional studies that culminate with the final two years (M1 and M2), and contain the curriculum that addresses the CACB Student Performance Criteria. The Department of Architecture is responsible for the curriculum in ED3, ED4, M1, and M2.

There are multiple entry pathways leading to the M.Arch. Degree: entry into the first year of ED studies (U1); entry into the second year of ED studies (ED2) from another UMan U1 year; entry into the third year (ED3) as an AMP1 student with an unaffiliated Bachelor Degree; entry into the fourth year (ED4) as an AMP2 student with an affiliated Bachelor Degree; and entry into the first year of M.Arch. studies (M1) with the B.Env.D. Degree, or an equivalent accredited Bachelor Degree from another institution.

There are also multiple selection gateways to admission to the M.Arch. Degree: at the first year of ED studies (U1); at second year of ED studies (ED2); at the third year of ED studies (ED3); and at the first year M.Arch studies (M1). The first two gateways are based on GPA; whereas the last two gateways are based on portfolio with GPA.

There is also elision of Undergraduate and Graduate studies that occurs with the current implementation of the ‘vertical studios’ which combine ED4, M1 and M2 students into single studios overseen by one instructor.

Seen in its totality, the multiplicity and verticality of the program structure allows for diverse interactions within the Department, but perhaps at the cost of over complexity and the lack of horizontal interaction within the Faculty. One particular concern that arises from this situation is the difficulty encountered by the Team in ascertaining how students enrolled in different sections of the vertical studios are meeting the stated criteria set out for the various levels (ED4, M1, M2); consequently it’s difficult to understand the degree to which students at each level are exposed to clear, consistent and appropriate expectations.

12. Student Performance Criteria (SPC)

Each architecture program must ensure that all its graduates possess the skills and knowledge defined by the performance criteria set out below, which constitute the minimum requirements for meeting the demands of an internship leading to registration for practice. (See CACB 2010 Conditions for further detail regarding the SPC categories and criteria).

Met	Not Met
[X]	[ ]

General Team comments:

The Team is satisfied that the Program meets a sufficient number of the Student Performance Criteria to maintain that Condition 12 is met. It also appeared that the students were doing ambitious and competent work that was taken seriously by the practitioners who met Team members. These practitioners also indicated that the latest generation of graduates is prepared to enter the profession.

That said the Team must raise particular concerns around two SPC's indicated as Not Met. It is the Team's view that a more rigorous and explicit structure should be developed in order to fulfill the requirements of criterion C4: Comprehensive Design. Linking Comprehensive Design to a Vertical Studio with students of differing levels, graduate and undergraduate, even thesis students, appears to work against the focus required in a comprehensive studio. The second anomaly appears with the inadequate evidence provided to substantiate the criterion in Sustainable Design (SPC B4). This is difficult to understand in a Faculty whose undergraduate degrees have the title Environmental Design.

The Team must also note that it could not consider courses in the first and second year of the Environmental Design Program as satisfying any SPC's since students admitted to the third and fourth year Architecture Theme curriculum, that is the AMP 1 and AMP 2 Programs, do not take these courses.

A1. Critical Thinking Skills

Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well reasoned conclusions, and test them against relevant criteria and standards.

Met	Not Met
[x]	[ ]

Team comments:
The team noted that the vertical studio structure and the personal lines of inquiry students have to develop in them are major contributing factors to developing ability in critical thinking skills.

A2. Research Skills

Ability to employ basic methods of data collection and analysis to inform all aspects of the programming and design process.

Met	Not Met
[x]	[ ]

Team comments:

A3. Graphic Skills

Ability to employ appropriate representational media to convey essential formal elements at each stage of the programming and design process.

Met	Not Met
[x]	[ ]

Team comments:
Use of different media and drawing techniques (hand drawing, CAD, models, photography, collage, etc.) in individual studio projects demonstrates a deep understanding and freedom of expression in representation skills.

A4. Verbal and Writing Skills

Ability to speak and write effectively on subject matter contained in the professional curriculum.

Met	Not Met
[x]	[ ]

Team comments:
Students write in every level of the program. The précis exercises in 3000 and 3002 are particularly effective.

A5. Collaborative Skills

Ability to identify and assume divergent roles that maximize individual talents, and to cooperate with others when working as members of a design team and in other settings.

Met	Not Met
[x]	[ ]

Team comments:
Collaborative skills are met through vertical studios at many levels.

A6. Human Behavior

Understanding of the relationship between human behavior, the natural environment and the design of the built environment.

Met	Not Met
[x]	[ ]

Team comments:

A7. Cultural Diversity

Understanding of the diverse needs, values, behavioral norms, and social/spatial patterns that characterize different cultures and individuals, as well as the implications of this diversity on the societal roles and responsibilities of architects.

Met	Not Met
[x]	[ ]

Team comments:
The Program meets this SPC through a deliberate and well structured approach to collaborative local and international field trips, lectures, seminars and design studios varying in perspectives of scale, population, socio-economic, historical and cultural diversity.

A8. History and Theory

Understanding of diverse global and local traditions in architecture, landscape, and urban design, as well as the factors that have shaped them.

Met	Not Met
[x]	[ ]

Team comments:
The Team concludes that there is sufficient evidence to conclude that this criterion is met. The Team notes, however, that the APR lists two semester courses in History of Culture, Ideas & Environment (EVDS 1660/1670), but not all students entering the professional program in architecture are required to take these courses, hence they cannot be considered as contributing to fulfillment of the SPCs. A series of curated courses in Pre-Modern Architectural History and Theory (EVAR 3000/3002) and in Modern Architectural History and Theory (EVAR 4000/4006) are core courses taken by all program students. While the curated EVAR courses (EVAR 3000/3002/4000/4006) provide opportunity for depth in specific areas of study, the evidence suggests that this occurs at the expense of breadth. As the opportunity for depth in focused areas of study occurs in graduate seminars (ARCH 7020/7030), the EVAR courses could provide greater breadth to ensure that key aspects of history and theory currently absent from the curated courses are included.

A9. Precedents

Ability to make a comprehensive analysis and evaluation of a building, building complex, or urban space.

Met	Not Met
[x]	[ ]

Team comments:
It is noteworthy that the comprehensive understanding and ability of using precedents, developed in History and Theory, have been incorporated into design studios.

B1. Design Skills

Ability to apply organizational, spatial, structural, and constructional principles to the conception and development of spaces, building elements, and tectonic components.

Met	Not Met
[x]	[ ]

Team comments:
Evidence of early development of design skill is presented in EVAR 3010.

B2. Program Preparation

Ability to prepare a comprehensive program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws and standards, and site selection and design assessment criteria.

Met	Not Met
[x]	[ ]

Team comments:
Program preparation is met through studio research at many levels.

B3. Site Design

Ability to analyze and respond to context and site conditions in the development of a program and in the design of a project.

Met	Not Met
[x]	[ ]

Team comments:

There is ample evidence to demonstrate an accomplished, even exemplary, level of site analysis and the investigation of context. However, there is little evidence demonstrating design of sites beyond the building footprint. There are few studio projects that convey manipulation of the built environment beyond the immediate footprint of the building or principle structures. There are clear examples of Site Design in several ED 2 studio projects but this is not evident in the majority of AMP 1/ ED 3 studios and dwindles as studios progress to the senior levels. The concern here is that not all students in the professional program in architecture take the ED 2 Studio course, hence projects done in ED 2 cannot be considered to address the Criterion.

B4. Sustainable Design

Ability to apply the principles of sustainable design to produce projects that conserve natural and built resources, provide healthy environments for occupants/users, and reduce the impacts of building construction and operations on future generations.

Met	Not Met
[ ]	[x]

Team comments:

The team found little convincing evidence that the ability to apply the principles of sustainable design was met. While some studios and courses address these issues it is unclear that all students are exposed to the material.

B5. Accessibility

Ability to design both site and building to accommodate individuals with varying physical and cognitive abilities.

Met	Not Met
[x]	[ ]

Team comments:

The team commends the hands-on approach to having students experience varying physical disabilities at 1:1 scale.

B6. Life Safety Systems, Building Codes and Standards

Understanding the principles that inform the design and selection of life-safety systems in buildings and their subsystems; the codes, regulations, and standards applicable to a given site and building design project, including occupancy classifications, allowable building heights and areas, allowable construction types, separation requirements, occupancy requirements, means of egress, fire protection, and structure.

Met	Not Met
[x]	[ ]

B7. Structural Systems

Understanding of the principles of structural behavior in withstanding gravity and lateral forces, and the evolution, range and appropriate applications of structural systems.

Met	Not Met
[x]	[ ]

Team comments:
Students have a sound theoretical knowledge of structural components. The projects demonstrate a comprehensive understanding of this topic.

B8. Environmental Systems

Understanding of the basic principles that inform the design of environmental systems, including acoustics, illumination and climate modification systems, building envelopes, and energy use with awareness of the appropriate performance assessment tools.

Met	Not Met
[x]	[ ]

Team comments:
There is limited, but adequate coverage of environmental systems in EVAR 3004. EVAR 4002 mentions environmental systems in the course outline and there is evidence of drawings in assignments that supports the claim that "Understanding" is achieved. Environmental systems do appear in some design work done in Vertical Studios, but the Team saw minimal evidence that the principles of HVAC are explored in a comprehensive manner.

B9. Building Envelopes

Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

Met	Not Met
[x]	[ ]

Team comments:
This material is covered in EVAR 3004 Architectural Technology 1 – Structural and Sustainable Materials and used in studio projects.

B10. Building Service Systems

Understanding of the basic principles that inform the design of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection systems.

Met	Not Met
[x]	[ ]

Team comments:
The background principles of building services systems integration are covered and included in projects although it is not clear that the students have sufficient understanding of these systems to do detailed designs.

B11. Building Materials and Assemblies

Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance.

Met	Not Met
[x]	[ ]

Team comments:

This material is covered in a number of courses and is applied throughout the projects and studios.

B12. Building Economics and Cost Control

Understanding of the fundamentals of development financing, building economics, construction cost control, and life-cycle cost accounting.

Met	Not Met
[ ]	[x]

Team comments:

In the APR, coverage is claimed in ARCH7040 – Professional Practice and ARCH 7350 Legal Aspects of Architectural Practice. However, no claims are made in the SPC matrix or in the course outline. Examination of these courses showed coverage of fees and hour-requirements for jobs but does not discuss any aspects of development financing, building economics, construction cost control, and life-cycle cost accounting. Although some of these topics are referenced in some of the studios, there is no comprehensive coverage of these topics.

C1. Detailed Design Development

Ability to assess and detail as an integral part of the design, appropriate combinations of building materials, components, and assemblies.

Met	Not Met
[x]	[ ]

Team comments:

The studio courses ARCH 7060, 7070, and 7090, along with the associated technical reports, show a presented level of materials, components, and assemblies, within the design, that demonstrate this criterion, across all of the vertical studios. The course ARCH 7000, Advanced Technology Topics 1, although presented in support of this criterion, was dismissed as irrelevant as the course outline and the student work are not reflective of the course level or title. The course ARCH 7010, Advanced Technology Topics 2, neither the outline nor the work could be found.

C2. Building Systems Integration

Ability to assess, select, and integrate structural systems, environmental systems, life safety systems, building envelopes, and building service systems into building design.

Met	Not Met
[x]	[ ]

Team comments:

Course EVAR 4002, Architectural Technology 3 – Building Systems, provides evidence to support this criterion.

C3. Technical Documentation

Ability to make technically precise descriptions and documentation of a proposed design for purposes of review and construction.

Met	Not Met
[x]	[ ]

Team comments:
Course EVAR 4008, Architectural Technology 4, Comprehensive Design Technology Report, along with the various studio courses, provides evidence of this criterion.

C4. Comprehensive Design

Ability to project a comprehensive design based on an architectural idea, a building program and a site. The design or designs should integrate structural and environmental systems, building envelopes, building assemblies, life-safety provisions, and environmental stewardship.

Met	Not Met
[ ]	[x]

Team comments:
The courses presenting evidence for this criterion, EVAR 4008, EVAR 4010, ARCH 7050, and ARCH 7060, all contain partial documentation, but there is no comprehensive presentation of all of the required documentation within a design. Further, there is inconsistency between the vertical studios with respect to the level and content of the documentation presented.

D1. Leadership and Advocacy

Understanding of the techniques and skills for architects to work collaboratively with allied disciplines, clients, consultants, builders, and the public in the building design and construction process, and to advocate on environmental, social, and aesthetic issues in their communities.

Met	Not Met
[x]	[ ]

Team comments:
This SPC is met in ARCH 7040 and is well integrated into the design studios.

D2. Ethics and Professional Judgment

Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

Met	Not Met
[x]	[ ]

Team comments:

D3. Legal Responsibilities

Understanding of the architect's responsibility to the client and the public under the laws, codes, regulations and contracts common to the practice of architecture in a given jurisdiction.

Met	Not Met
[x]	[ ]

Team comments:
The students are exposed to the legal aspects of architecture presented in the context of ARCH 7350. The Program is encouraged to update course material to include reference to current and diverse regulatory frameworks of architectural practice.

D4. Project Delivery

Understanding of the different methods of project delivery, the corresponding forms of service contracts, and the types of documentation required to render competent and responsible professional service.

Met	Not Met
[ ]	[x]

Team comments:

The coursework reviewed to substantiate this outcome was ARCH 7040 and ARCH 7350. Upon reviewing the course outline and work output by the students, there was only partial evidence to support this SPC as being met. Whilst ARCH 7040 and ARCH 7350 demonstrated good understanding of delivering a project from a stipulated price client-architect perspective, there was little to no evidence showing an understanding of delivering a project from any other form of professional service, types of contractor procurement, the role of the architect in administering a construction contract, bidding and negotiation etc. The Program is encouraged to update course material to include reference to current and diverse regulatory frameworks of architectural practice.

D5. Practice Organization

Understanding of the basic principles of practice organization, including financial management, business planning, marketing, negotiation, project management, risk mitigation and as well as an understanding of trends that affect practice.

Met	Not Met
[x]	[ ]

Team comments:

D6. Professional Internship

Understanding of the role of internship in professional development, and the reciprocal rights and responsibilities of interns and employers.

Met	Not Met
[x]	[ ]

Team comments:

IV. Appendices

Appendix A: Program Information

The following is condensed from the Program's Architecture Program Report

1. Brief History of the University of Manitoba

Welcome to the University of Manitoba. For more than 135 years, we have delivered life-changing learning experiences for our students, have conducted world-class research and shared our knowledge and discovery to shape our province, country and world. Our University is located on Treaty One territory, on the traditional territory of the Anishinaabe peoples and the homeland of the Metis Nation. The University and the Forks of the City of Winnipeg sit at the crossroads of the Anishinaabe, Metis, Cree, Dakota and Oji-Cree Nations.

Our students, faculty, staff and alumni have thrived at this unique place at the centre of the continent. Rather than bending to the forces of circumstance, we defy them, innovate around them and embrace them as part of who we are.

Among our nearly 130,000 living alumni are our province's and some of our country's most influential leaders. This includes chief executive officers at some of Canada's most successful companies; worldclass physicians; exceptional researchers; groundbreaking artists; National Chiefs of the Assembly of First Nations, jurists on provincial, Canadian and international courts; and senior government and elected officials at the highest levels.

As Manitoba's only medical-doctoral university, we offer programs in areas as diverse as the humanities, the visual and performing arts, science, medicine, law, agriculture, engineering and architecture. This strong learning environment has helped nurture a climate of academic excellence. During our history, 97 students have been named Rhodes Scholars, the most from any university in Western Canada.

We are also proud that our outstanding researchers have distinguished themselves through award-winning discovery with Manitoba roots and a global impact. Whether it is preventing the spread of HIV-AIDS, promoting and defending human rights at home and throughout the globe or uncovering the causes and effects of climate change, our research teams seem to thrive when the stakes are at their highest.

At the University of Manitoba, education has no borders or barriers. We support a climate of respect where all people are valued and where individuals from all communities, ages and cultures are welcome.

Thank you again for your interest in the University of Manitoba. We are proud to share our knowledge,

2. Institutional Mission

Mission

To create, preserve and communicate knowledge, and thereby, contribute to the cultural, social and economic well-being of the people of Manitoba, Canada and the world.

Vision
Our students, staff and alumni will have an association with the University of Manitoba that is transformative and their discoveries will be of the greatest possible benefit to their own lives, and to the lives of others.

Values
Excellence, Equity and Diversity, Accountability, Innovation, Integrity, Humanity, Responsibility to Society, Environmental Sustainability, Selectivity, Academic Freedom.

This framework will guide the major decisions made at the University of Manitoba in the coming years. It encourages us to look at opportunities to focus on areas of particular relevance in today's world, while remaining true to our commitment to teaching and research excellence across our broad range of disciplines.

Four priorities have been identified that will guide our approach:
• Academic Enhancement;
• Exceptional Student Experience;
• Aboriginal Achievement;
• Outstanding Employer.
[
For further details please access the web @
http://umanitoba.ca/admin/president/strategic_plan/index.html]

Our Future
This will be the framework upon which we build our future. Throughout the university community, work is underway to transform these broad directions into specific action; to proceed with initiatives that address our priorities. The strength of our aspiration is limitless – we will reach for greatness, and work together as a community to achieve it.

President's Priorities and Objectives
Every year in June, the Board of Governors approves the President's priorities for the year. For the year beginning July 1, 2013, the Board of Governors approved a series of priorities and objectives based on the following:

1 Working with the executive team to improve team effectiveness. The team is strong but improvement is always possible.

2 Working on the capital campaign. This will be a top priority for me, working with the Vice-President (External), for the next several years.

3 Moving ahead on the change agenda for UM. Work on simplifying the academic structure will continue.

4 Encouraging alignment of effort and resources with the university's institutional priorities, which form a three-fold narrative: 1) Strategic Planning Framework, 2) the broad academic mission of learning, discovery and engagement, and 3) the re-investment in institutional infrastructure (processes, structures, leadership development, good governance, physical space, and information technology).

5 Overseeing collective bargaining. The University is engaged in an important bargaining process with the University of Manitoba Faculty Association this year, and will pursue this while striving to be an outstanding employer as our Strategic Planning Framework emphasizes, and meeting the University's full range of obligations.

6 Developing a longer term vision for the University of Manitoba. Our existing Strategic Planning Framework establishes a vision and priorities for a five-year period, but a larger conversation should occur about what the University of Manitoba should strive to achieve over the long term –perhaps twenty-five years – and how we might fulfill this vision. This should include a synthesis of academic and non-academic planning

7 Speaking out on issues of public importance. The University`s reputation is enhanced as the President functions as a citizen in the public square.

3. Program History

The teaching of Architecture at the University of Manitoba began in 1913. At that time it was established as a department within the Faculty of Arts. The curriculum was organized as a four-year program leading to the degree of Bachelor of Architecture. In 1920 it became a part of the newly established Faculty of Engineering and Architecture. In 1933 the first postgraduate instruction in architecture was instituted with the degree of Master of Science in Architecture; in 1935 the graduate degree was changed to Master of Architecture. Since then the following changes have occurred:

1938: a three-year diploma program in Interior Decoration was established to meet the growing demand for training in this professional field.

1945: the Departments of Architecture and Interior Decoration were combined under the name School of Architecture and Fine Arts.

1948: the entire school was reorganized under the name School of Architecture, and both undergraduate curricula were revised: Architecture became a five-year program, and a new four- year program leading to the degree of Bachelor of Interior Design replaced the former three-year diploma program.

1949: a one-year graduate program in community planning, open to graduates in Architecture or Civil Engineering was established.

1954: an Act of Manitoba Legislature officially recognized the Interior Design profession through the establishment of the Interior Designers' Institute of Manitoba.

1957: the Manitoba Legislature approved a capital grant for the construction of a building for the School of Architecture, the first in Canada to be designed for the exclusive use of a School of Architecture.

1963: the School was reconstituted as the Faculty of Architecture with two departments of undergraduate study: Architecture and Interior Design. Authorization was also given for the reorganization of the postgraduate program in Community Planning into a two-year postgraduate program leading to the degree, Master of City Planning.

1966: Senate authorized the reorganization of the curriculum in Architecture to include a three-year program leading to the degree of Bachelor of Environmental Studies as a prerequisite to one of (a) a three-year program leading to the degree of Bachelor of Architecture; (b) a two-year program leading to the degree of Bachelor of Landscape Architecture.

1970: Senate approved the new curriculum leading to the first professional degree, Master of Architecture, which replaced the three-year Bachelor of Architecture program.

1972: Senate approved the new curriculum leading to the degree of Master of Landscape Architecture, which replaced the original Bachelor of Landscape Architecture program.
In the early 1970's, the two-year Architecture Pre-Masters Qualifying (PMQ) program of study was initiated. This avenue of education allowed students with previous degrees from diverse non-design disciplines (i.e. philosophy, fine arts, science, etc.) and who met the admission requirements of the Faculty of Graduate Studies to enter two years of architectural studies in order to become eligible to apply to the Master of Architecture program. As well, students wishing to transfer to Architecture with backgrounds from different design disciplines (i.e. Interior Design, Landscape Architecture, etc.) completed only one year of Architecture Pre-Master Regular (PMR) studies.

1990: Senate approved new programs of study in Environmental Studies and Interior Design commencing in September 1992. These new programs of study are preceded by an Admission Year of 30credit hours of Arts and Science courses in specific areas.

1992: Senate approved a name change from the Department of Environmental Studies to Department of Environmental Design.

1994: Senate approved the new curriculum leading to a post-professional degree, Master of Interior Design, a research based degree building upon the first-professional Bachelor of Interior Design.

1998: Senate approved a revised program of study for the Masters Program in Architecture.

1998: Senate approved a structural reorganization of the Faculty of Architecture resulting in the conversion of the former Department of Environmental Design to the Faculty of Architecture Program in Environmental Design (ED). The major difference between the old and new pedagogical concepts was the consolidation of ED 1 and ED 2 years into a two-year foundation program of common study followed by one-year of specialized study in the following options: Architecture, City Planning, Interior Design or Landscape Architecture. These specialized study streams are referred to within this report as the "option" years. The
third year specialized study in architecture, for instance, is commonly referred to as the "ED 3 Architecture Option". Entrance requirements to the Program in Environmental Design were also modified at this time to harmonize with the University 1 Program.

1999: the Master of Interior Design program was introduced which resulted in the phasing out of the former four-year Bachelor of Interior Design degree program. All of the Faculty's professional programs are now Masters level programs. Each department is responsible for teaching both undergraduate and graduate level courses.

2008: The Faculty completed a major restructuring of the undergraduate Environmental Design Program between 2005-2008 (partially in response to issues raised in the last accreditation of the Department of Architecture). The restructuring of Environmental Design into four years has created a

2+2+2 Architecture Program. The first two years (U1/ED1 and ED2) in Environmental Design provide an introduction to University level courses and to the field of design in general. The studio courses in ED2 are intended to be interdisciplinary and to introduce the students to the basics of design culture and to the specialized fields. The next two years are Intermediate Years (ED3 and ED4) in which students specialize in one of the three options: Architecture, Interior Environments, or Landscape + Urbanism. In effect, students are now exposed to architecture for two years of the undergraduate program, rather than the one-year that was offered in the previous Environmental Design Program. In the architecture program ED3 studio is a Foundation year for architectural design, and ED4 studio partakes in vertical studios, or studios that combine ED4, M1 and M2 students. The Architecture Pre-Master Program was also replaced at this time with the Architecture Masters Preparation (AMP) Program. Individuals with a previous degree who successfully complete this two-year AMP 1 undergraduate program now receive an Environmental Design degree and are eligible to apply to the graduate Master of Architecture program. Those wishing to transfer to Architecture with backgrounds in different design disciplines (i.e. Interior Design, Landscape Architecture, etc.) complete only the second year of AMP studies (AMP 2) in order to become eligible to apply to graduate studies in architecture. The final two years (M1 and M2) of professional architectural education at the University of Manitoba occur at the graduate level and require graduate admission. Senate approved this restructuring and the new program was phased in during the 2008/09 academic session.

The professional nature of the Department of Architecture leads to many unique opportunities in teaching, research and service. The pedagogical mode is often project-based research with relevance to pressing community-related issues. Practitioners are invited to review the work produced and teach in the Faculty, forming a close and critical bond between academia and practice. Research pursuits are linked directly and indirectly to vital issues in the profession and related industries. The professional cast of the Faculty enhances its authority and responsibility to engage in community (local, national, global) affairs, to positively influence direction in practice and to seek funding alliances for critical research.

4. Program Mission

The following appears in the current Academic Calendar for the Department of Architecture:

Architecture deals with a complex intertwining of artistic, social, cultural and practical concerns. The M. Arch Program provides students with the opportunity to learn the tools to synthesize these issues and develop the conceptual, practical and formal skills to take command of the subject. Much of the study is research based with an emphasis on structured learning through finding out, rather than prescriptive instruction. The program offers a diverse range of research areas and offers a choice of studios and seminars for M. Arch students. All of our highly motivated professors are engaged in active research and/or practice. Rather than having an emphasis on either the conceptual or practical side of architecture, our program concentrates on the relationship between the two, with many studios undertaking various forms of critical making as part of their teaching. Many of the studios run study trips abroad. The Department offers a lively environment to study the subject with diverse studios, history and theory seminars as well as innovative and engaging technology courses. An international array of lecturers augments the internal lecture program. The series combines world famous architects, artists and designers with emerging young talents. The Faculty of Architecture also runs an exceptional exhibition program.

The Design Studio is at the core of our program and provides the setting for faculty to advance research that addresses critical issues facing the discipline and profession today including design

excellence; social and environmental sustainability; flood architecture; interdisciplinary explorations; rural to urban design; northern and First Nations communities; historical contexts and theoretical questions; technological, materials and construction innovation; digital fabrication and new media; and community engagement, locally and regionally. Emerging areas of integrated practices and globalization are also of interest to us. Academic freedom, intellectual commitment, personal and professional responsibility are foundational ambitions of the program. We seek to empower and support students to take risks that lead to discovery and self-actualization. After a Foundation Studio in the ED3 and AMP1 Architecture Option, undergraduate and graduate students work alongside each other in the studio sequence, experimenting with ideas and methods while developing critical approaches to architectural design in a mutually supportive learning environment.

Mission [ratified by DoA Council August 28, 2014]
The Department of Architecture supports and builds upon the Faculty of Architecture's Vision, Mission and Tenets and the University of Manitoba's Mission. The Department upholds an architectural education that encourages the intellectual, artistic, technical and professional development of students by providing exceptional teaching, scholarship and community service in architecture and emerging areas of design education and professional practice.

Tenets
To foster excellence from instructors and students in an open and equitable teaching and learning Environment

To support diverse positions and interests within the Department and with allied disciplines

To foster a learning environment in which faculty research contributes to student education and to a research culture within the department

To cultivate an aptitude for critical research and making in the design studio and related disciplinary studies

To provide students the opportunity to determine their course of studies together with the ambitions of the program and the profession

To empower students to take intellectual risks that lead to discovery, self-actualization, and professional
growth

To contribute to interdisciplinary teaching and research within the university and with allied institutions locally and globally.

To support a culture of open discourse of work through collective reviews, public lectures / exhibitions and the dissemination of knowledge both locally and globally

To advance professional perspectives and expertise in the program by engaging local and international practitioners, community groups and industry partners

To advance societal and environmental well being by preparing our students to take leadership roles in the practice and the community

5. Program Action Plan

The following is excerpted from the APR. Like most of the other sections in the APR three 'plans' appear, one from the Faculty of Architecture, one from the Environmental Design Program and one from the Department of Architecture. This is the Action Plan presented by the Department of Architecture.

This Plan was agreed upon in principle by the Department of Architecture Council, August 28th, 2014: The Department of Architecture has faced a number of resignations [Frank Fantauzzi (2014), Nat Chard (2012), and Peter Hasdell (2008)] in recent years. These vacancies, combined with the fact that two members of the Department have release for administrative duties (T. Fuglem and R. Stern) and one is on 40% secondment to the University of Winnipeg (research allocation), has left the unit in a vulnerable position in terms of being able to develop a detailed action plan, particularly because resources are stretched and time is limited to do so, and especially if new ventures will increase teaching or service loads on the remaining faculty members. The current circumstances have affected our admissions numbers, which the Department is struggling to maintain despite high application numbers. In this regard, the Department's number one priority is the replacement of recent resignations so that we are able to set about continuing to develop and build a vital professional architecture program. There is currently an external search underway to fulfill a Head position for the Department of Architecture, whose role has been assumed by an Acting Head for over two years now. The aim is to fill this position by July 2015. Securing this position, and potentially 2-3 new positions, will enable the Department to regain its strength and focus on "action," – i.e. moving forward in an exciting global context, rather than "reaction," - i.e. 'making do' in the face of budget cuts and administrative restructuring.

The following outlines the three areas of focus that new positions in the Department would support:

Building Technology / Digital Fabrication position

"Integrated Practice" position

Sustainability and Northern Studies position

a) Building Technology / Digital Fabrication position
The building technology / digital fabrication position is essential to maintain and further develop this area of the program as it affects many aspects of the curriculum. Currently 75% of the technology stream is taught by sessional instructors and our technology coordination is therefore jeopardized whenever the designated single full-time faculty member goes on leave. A well positioned candidate for this role would complement and help coalesce the research and teaching of Lancelot Coar in his flexible structures, Patrick Harrop's research into digital technologies, and Mark West's form-finding approaches to concrete construction. This position would complement and advance development in the realm of New Materials and Technologies, one of the six areas of the University of Manitoba's Academic Enhancements.

b) An "Integrated Practice" position
Given the low pay structure of sessionals, it is remarkable that we are at present able to hire exceptional practitioners to teach studio and other courses. The Department would be interested in developing a position for which the research component would be an accomplished licensed practice, the teaching component would relate to current opportunities facing practice, and the service component would be to coordinate the professional and legal aspects of the curriculum. This would

allow the Department to designate another curricular “stream” (similar to the history/theory and technology “streams”) that would address current trends in professional practice and liaise the licensing bodies. This position could also spearhead a placement system for students and graduates into viable professional jobs.

c) A Sustainability and Northern Studies position
As noted in the CACB 2009 VTR, the architecture program at the University of Manitoba is uniquely positioned to investigate cold-climate issues, and the social and cultural challenges the Manitoba context faces. Members of the Department are already engaged in rural and northern community research; this is an area of potential strength in one of the six areas of the University of Manitoba’s Academic Enhancements: Sustainable Prairie and Northern Communities. This role would also address the issues that Aboriginal societies face with respect to architectural concerns. The University has a policy to increase Aboriginal student admissions and the Department of Architecture would like to meet or exceed these goals. In June 2013 the Senate and the Board of Governor’s approved a Strategic Enrolment Management (SEM) Plan for the University of Manitoba that aims to achieve an Aboriginal student enrolment by 2018 and 2023 should increase to 5% and 8%, respectively, in graduate enrolment.

At the moment the Department desires to grow both in admissions and faculty. The Department of Architecture is currently the smallest certified architecture program in Canada in terms of student enrolment (with the exception of Laurentian, which is not yet accredited). Enrolment targets have yet to be determined in an official way, pending a viable Action Plan.

Related to the above, the Department also has ambitions to better disseminate its research and student work through publications and website development; however, resources at present are limited. Similarly, facilities upgrades to the studios in Arch2 are badly needed; there are monies set aside by the Dean’s Office for improvements, pending a plan to be formulated and put forward by the Department. It is expected plans can be approved and effected in the coming year.

Measures of Success, and a Time Line for Executing the Plan
It would be expected that a viable Action Plan can begin in earnest with the acquisition of a new Department Head, whose position will commence in July 2015

Appendix B: The Visiting Team

Team Chair

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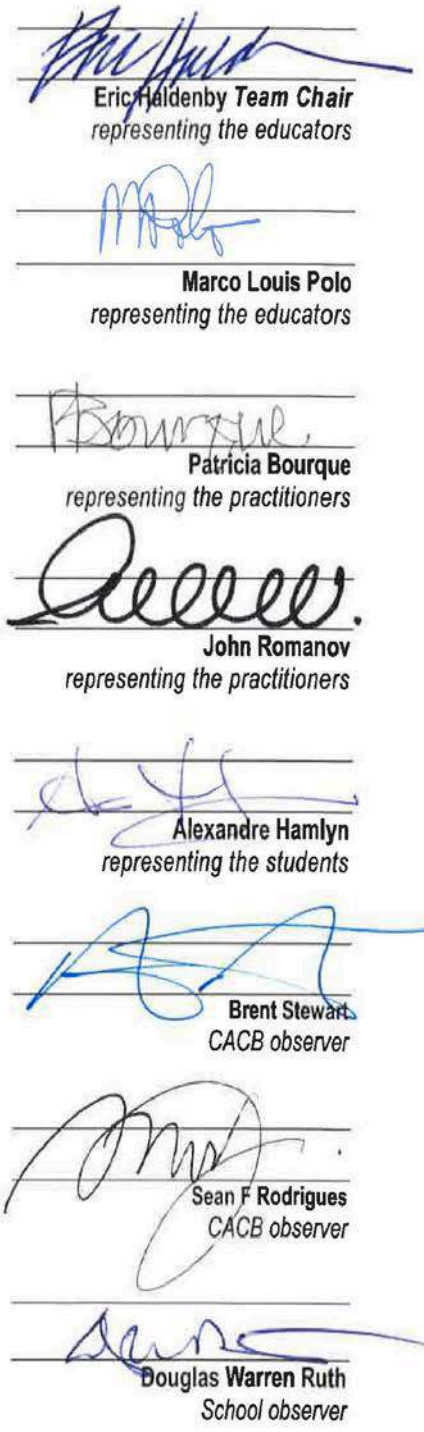
Appendix C: The Visit Agenda

TIME	EVENT	LOCATION	PARTICIPANTS
Saturday, February 28, 2015			
AM	Haldenby Arrival		
12:00	Meet/lunch with Dean Ralph Stern	Hotel	Haldenby, Stern
2:00	Team Room visit	Team Room	Haldenby, Stern, Fuglem, Eaton
PM	Team arrival		
17:30	Team Introductions, Orientation, Assignments	Team Chair's Room	All team
19:00	Team dinner (casual)	The Palm Lounge, Lobby in the Fort Garry Hotel	All team
Sunday, March 1, 2015			
8:00	Breakfast	Hotel	All team
9:00	travel to UMAN campus: J Lot, Dafoe Road, off at Crescent Drive		
9:30	Facilities tour	UMAN	All team, Stern, Fuglem, Eaton, Wiese, Hare, Millian, Leigh, Richards
11:00	Team orientation, review of APR	Team Room	All team
11:30	Preliminary review of exhibits	Team Room	All team
12:30	Lunch with UMAN faculty members- mandatory attendance	Partners Office, Rm 212, JAR	All team, academic staff
13:30	Presentation by faculty members. Discussion with team.	Team Room	All team, academic staff
15:30	*break*		
16:00	Review of student work exhibits	Team Room	All team
17:30	travel to Reception	via taxi	All team
18:00	Reception - Welcome by Dean Ralph Stern, Faculty of Architecture	Frame Arts Warehouse, 318 Ross Ave	Alumni, practitioners, staff,faculty, students, Admin
19:30	Dinner and de-briefing	Peasant Cookery, 282 Bannatyne Ave, PH 204-989-7700	All team

Monday, March 2, 2015			
7:30	Breakfast with Dean Ralph Stern	Hotel	All team, Stern
8:30	travel to UMAN	via taxi	
	ENTRY MEETINGS:		
9:00	Administrative staff	Partners Office, Rm 212, JAR	Team members, Robbin Watson, Philippa Alexiuk and Brandy O'Reilly
9:30	Travel time to Dr. Doering's Office		Laura to escort
9:45	Dr. Jay Doering: Vice-Provost (Graduate Education) and Dean, Faculty of Graduate Studies	524 Treherne - 5th floor University Centre	Team members
10:15	Dr. David Collins, Vice-Provost (Integrated Planning and Academic Programs), Dr. Joanne Kesselman, Vice- President (Academic) and Provost	524 Treherne - 5th floor University Centre	Team members
10:45	break and travel time back Centre Space		Laura to escort
11:15	Open forum with Architecture Students (ED1 - M2)	Centre Space, JAR	Team, students
12:15	Lunch with student leadership (Student Architectural Society and University of Manitoba Association of Architecture Students)	Partners Office, Rm 212, JAR	All Team; student exec.
13:00	Terri Fuglem, Acting Head, Department of Architecture	Partners Office, Rm 212, JAR	Team members
13:30	Dr. Marcella Eaton, Chair, Environmental Design Program and Associate Dean Academic	Partners Office, Rm 212, JAR	Team members
14:00	Support Staff	Partners Office, Rm 212, JAR	Team members,Yvonne Halden, Carrie Johnson. Donna Mamott, Laura Kryger, Richard Bars, Jason Hare and Keith Millan
	Library tour	Rm 206, JAR	Team members, Mary Lochhead
	IT meeting	Partners Office, Rm 212, JAR	Team members, Chris Leigh , Sean Watson
15:30	*break*		
16:00	Work Session	Team Room	All team
19:00	Viewing Faculty Exhibition	Arch 2 Gallery	All team
20:00	Dinner	Cibo, 339 Waterfront Drive (204) 594-0339	All team

Tuesday, March 3, 2015			
7:30	Breakfast	Hotel	All team
8:30	travel to UMAN	via taxi	
9:00	Work Session	Team Room	All team
	Class/Studio observation		
12:00	Working Lunch	Team Room	All team
12:30	Meeting with President David Barnard		
13:00	Meeting with Dean Stern	Lounge	Haldenby, Ruth
13:00	Work Session	Team Room	All team
	Class/Studio observation		
13:15	Meeting with faculty members in the Department of Architecture	Lounge	Haldenby, Ruth
13:45	Meeting with Program Chairs in Interior Design and Urban Planning	Lounge	Haldenby, Ruth
19:00	Working Dinner	Team Room	All team
Wednesday, March 4, 2015			
7:30	Breakfast	Hotel	All team
8:30	travel to UMAN		All team
	EXIT MEETINGS:		
9:00	Terri Fuglem, Acting Head, Department of Architecture, and Dr. Marcella Eaton, Chair, Environmental Design Program and Associate Dean Academic	Partners Office, Rm 212, JAR	All team
9:30	Dean Ralph Stern, Faculty of Architecture	Office of the Dean, Rm 201 JAR	All team
10:00	*BREAK and travel to Dr. Doering's Office*		Laura to escort
10:30	Dr. Jay Doering: Vice-Provost (Graduate Education) and Dean, Faculty of Graduate Studies	524 Treherne - 5th floor University Centre	All team
11:00	Dr. David Collins, Vice-Provost (Integrated Planning and Academic Programs), Dr. Joanne Kesselman, Vice- President (Academic) and Provost	524 Treherne - 5th floor University Centre	All team
11:30	*BREAK and travel back to Centre Space*		Laura to escort
12:00	School exit meeting	Centre Space, JAR	All team
12:30	travel from UMAN to airport	via taxi	

V. Report Signatures



Eric Haldenby ***Team Chair***
representing the educators

Marco Louis Polo
representing the educators

Patricia Bourque
representing the practitioners

John Romanov
representing the practitioners

Alexandre Hamlyn
representing the students

Brent Stewart
CACB observer

Sean F Rodrigues
CACB observer

Douglas Warren Ruth
School observer

Maintenance Accreditation Visit

University of Manitoba

Degree Program: Master of Architecture
Visit: February 28-March 4, 2015

Program's Response to the final VTR

UNIVERSITY OF MANITOBA

Faculty of Architecture

Architecture
City Planning
Environmental Design
Interior Design
Landscape Architecture

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May 29, 2015

Mourad Mohand-Said
Executive Director
Canadian Architectural Certification Board
1, rue Nicholas Street. Street, Suite 710
Ottawa, Ontario K1N 7B7

Dear Mourad Mohand-Said,
Dear Members of the CACB Board,

As per the email correspondence of the past days, the Program provides this response for the review of the CACB Board of Directors in accordance with the provisions of Section 3.2.3 of the Procedures for Accreditation:

> 3.2.3: The Program may provide a response for the Board of Directors of the CACB for its review when making their accreditation decision. Any such response forms a permanent attachment to the VTR, and should be sent directly to the Executive Director of the CACB.

Attached to this cover letter is a copy of the “Issues of Interpretation”, originally submitted to the Team Chair on March 31, 2015 (original date and pagination retained). The Program had hoped for some clarification from the Visiting Team perspective on these items.

In order to assist in clarification, from our perspective, of the issues of interpretation and potential inconsistencies in Program assessment and accreditation process, attached please find the following:

1. Student Performance Criteria (SPC) matrices from the 2008 Architecture Program Report (APR) indicating years ED1 & ED2 of the “4 + 2” Program to be integral to the Program.
2. Student Performance Criteria (SPC) matrices from the 2014 Architecture Program Report (APR) indicating years ED1 & ED2 of the “4 + 2” Program to be integral to the Program, but determined in the VTR to be “inappropriately cited”.
3. “Architecture Program Report (APR) Review Form” issued by the original VTR Chair (Loraine Fowlow); received by the Program on October 31, 2014. This does not indicate concerns about the 2014 APR later raised in the 2015 VTR.
4. Memo (May 22, 2015) from the Vice-President (Academic) and Provost announcing the appointment of Dean Beddoes as Interim Dean from September 01, 2015 to June 30, 2017 and the appointment of Prof. Eric Haldenby as special advisor to Dean Beddoes.
5. A brief Appendix of supporting material demonstrating timelines in the accreditation process (including the initial submission of issues of clarification).

With regard to Points 1 and 2 above: given the consistent reporting of SPCs for the two periods reviewed (2008; 2014) and the inconsistent assessments, the Program does not agree with the conclusion that ED1 & ED2 SPCs were “inappropriately cited” (page 4). While it is accurate that not all students graduating from the professional (masters) program take ED1 & ED2 courses, the Program has always considered the minority of students entering at ED3, ED4, or M1 levels to have advanced standing. By far the majority of students take ED1 & ED2 courses and the Visiting Team acknowledges the importance of ED2 in its assessment of the physical resources related to the “ED Studio” (page 16, top). Excluding resources (both human and physical) allocated to the architecture program at the ED1 & ED2 levels does not present a balanced perspective on the total support given to the “4 + 2” Architecture Program.

The Program also has two questions about the accreditation process:

With regard to Point 3 above: none of the points raised on page 4 of the VTR were raised in the Architecture Program Report (APR) Review Form of October 31, 2014. Had these issues been raised in this venue, the Program would certainly have worked to respond accordingly and appropriately prior to the Team Visit. It would appear that the timelines associated with the accreditation process are intended to guarantee that all stakeholders have an appropriate opportunity to respond to potential concerns with regard to the APR in advance of the Team Visit and VTR.

With regard to Point 4 above: the Program has not been notified of a change in current or pending status of Prof. Haldenby in his role as Visiting Team Chair. Under the circumstances, the Program would greatly appreciate information from the CACB Board as to how it anticipates the completion of this Maintenance Accreditation Visit process, the annual reporting requirements and processes, as well as any potential Focused Evaluation processes.

The Program truly respects and admires the diligent efforts made by all involved with the accreditation process. We therefore wish to present the attached information, which we believe is pertinent to the accreditation process, to the Board for its consideration and deliberation. If there are any questions, the Program will gladly respond.

Thanking you in advance for your consideration,

Sincerely,

Ralph Stern, MAA, MRAIC, RA, AIA
Dean, Faculty of Architecture
Professor, Department of Architecture

RES/pa

From: Ralph Stern <Ralph.Stern@umanitoba.ca>
Subject: Re: CACB Draft Visiting Team Report
Date: March 31, 2015 at 11:06:06 PM CDT
To: Eric Haldenby <erhaldenby@uwaterloo.ca>
Cc: Terri Fuglem <Terri.Fuglem@umanitoba.ca>, Mourad Mohand-Said <mmohandsaid@cacb.ca>, Marcella Eaton <Marcella.Eaton@umanitoba.ca>

Dear Professor Haldenby,

The Visiting Team did a remarkable job during their recent site visit. Moreover, we thank you most sincerely for your efforts at transitioning from the original Chairpersonship of the Visiting Team to your own. We are very aware of how this is representative of a deep commitment to excellence in Canadian architectural education.

In the spirit of this shared commitment, please find the attached response to the Draft VTR. As noted in the opening of the document, it is divided into two parts: Issues of Fact and Issues of Clarification Please feel free to forward it as appropriate with all Visiting Team Members.

Please let me know if you have any questions and
thank you again for all of your insight and expertise,

Ralph Stern

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http://umanitoba.ca/faculties/architecture/facstaff/faclist/Stern.html

On Mar 21, 2015, at 2:58 PM, Eric Haldenby <erhaldenby@uwaterloo.ca> wrote:

> Dear Dean Stern,
>
> I attach the final draft Visiting Team Report that presents the findings of the recent CACB accreditation visit to the University of Manitoba.
>
> As established in section 3.2 of the CACB Procedures for Accreditation, you have ten calendar days in which to respond to the draft VTR, indicating only errors in fact. You should send your comments directly to me.
>
> Should you suggest amendments to the report that are other than corrections of fact, you must copy your response to all Visiting Team members as well as to the CACB Executive Director.
>
> Thank you again for your hospitality and the support of the staff, faculty and students at the Faculty of Architecture.
>
> Yours truly,
>
> Rick Haldenby
>
> Rick Haldenby FRAIC
> Professor
> Waterloo Architecture
> 7 Melville St. S.
> Cambridge, Ontario
> Canada
> N1H 2S4
>
> e: erhalden@uwaterloo.ca

Issues of Interpretation:

Section 1: Team's General Comments

The CACB Visiting Team to the University of Manitoba encountered a series of challenges that were not normal.

01: With regard to assessing a situation as "normal", it might be appropriate to also mention that there was a change in the Chairpersonship of the Visiting Team just prior to the visit. The new Chair was confirmed on February 10th, 2015, less than three weeks before the site visit. A truly admirable job was done in assessing a substantial document and addendum, the later a response to the requests made by the original Chair of the of the Visiting Team who had been in this position since the submission of the APR to the CACB on September 15th, 2014 until (to our knowledge) February 9th, 2015. This said, it appears as if divergent understandings about the completeness and appropriateness of the APR and its information arose in conjunction with the change in Chairs. It would be greatly appreciated if some light could be shed on this matter.

There was clear evidence of internal conflict. …

02: We note that the September 27, 2013 (ca. one year prior to the submission of the 2014 APR) letter from David Covo, Chair of the 2009 University of Manitoba Visiting Team to the CACB Executive Director states (APR, page 493) that: *"Department Heads Terri Fuglem, Frank Fantauzzi and Nat Chard, Dean Stern and the full-time and part-time staff and faculty of the school have been highly successful in their combined efforts to address the concerns of the 2009 Visiting Team."* Considering much of the 2015 VTR, how is it possible for two CACB assessments just 16 months apart to be so divergent?

The task was not made easier by the fact that the Architecture Program Report was poorly prepared. The Report betrayed signs of internal division. It was incomplete. The self–assessment was inadequate. Plans of the facilities were not properly presented. Courses from ED1 and ED2, which are not required of all students in the professional architecture program, were inappropriately cited as satisfying Student Performance Criteria. The CV's of faculty members were grouped in a way that mixed full and part-time appointments and members whose home was Environmental Design with those whose appointment was in the Department of Architecture.

03: We request clarification with regard to this paragraph for several reasons:

03.1: Fundamentally, we request clarification from the CACB as to its understanding of the structure of our Program. In conversation with the Executive Director of the CACB in June 2014, it was explained to us that we are considered by the CACB to be a "4 + 2" program; i.e., 4 years of undergraduate education plus 2 years of graduate education. The APR was prepared accordingly. It is for this reason that the Student Performance Criteria addressed in ED1 and ED2 were included as well as the CVs for the faculty members delivering these SPCs.

Underscoring the appropriate (rather than inappropriate) inclusion of the ED1 and ED2 SPCs, David Covo notes (APR, page 511) the hire of Dr. Araji in his September 28th, 2012 assessment of the Program to the CACB Executive Director. This

assessment follows on the Acting Department Head's (Fuglem) assertion (APR, page 504) that the *"recent hire in the Environmental Design Program of Dr. Mohamad Araji, who is LEED certified and who specializes in the area of green technologies will have considerable impact on the students' understandings of sustainable practices. There is also a soon-to-be-filled position in Ecology in the Environmental Design program"*. From this it appears clear that the Acting Department Head (Fuglem), the Chair of the Environmental Design Program (Eaton) and the Dean (Stern) have been working over the past years on the understanding that this is a "4 + 2" Program. If this is not the case, why was this not flagged in the course of the annual reports to the CACB?

With regard to the accreditation itself, the APR was prepared as a "Program" accreditation (including all those working to deliver aspects of the Program"), not a "Department" accreditation. Clarification on this matter would be greatly appreciated.

03.2: Further, there are references throughout the VTR that appear to be contradictory. There is an apparent request for addressing "direct entry" into ED2 (Concern 2 under "Program's Progress since the previous site visit"), but the opening paragraph indicates that those SPCs delivered in ED2 are "inappropriately cited" even though ED2 SPCs were included in the last two APRs. What has changed?

03.3: The current VTR states (under point 11. Professional Degrees and Curriculum) that *"since not all students entering the professional program in architecture at the ED3 level are required to take these courses, they cannot be considered to address any SPCs".* From the UM perspective, students do not enter to "professional program" at the ED3 level; they remain students of the Environmental Design Program until they complete their undergraduate studies. However, the current VTR appears to imply that the CACB understands the UM Architecture Program to be a "2+4" Program rather than a "4+2" Program. Clarification as to the position of the CACB would be greatly appreciated.

03.4: The APR was submitted in accordance with CACB timelines and requests for clarification were, in turn, submitted to the Faculty for response. In consultation with the original Chair of the Visiting Team, all of the clarifications were delivered within requested timelines. In addition, the CACB Board accepted the original APR. Here, too, it is important to note that the plans of the facilities were the same that were used in the previous APR with no issues raised. In all of these CACB processes, none of the issues raised in the paragraph above were mentioned. Why were these issues not brought forward so the Faculty could address them prior to the site visit?

Section 3: Program's Progress Since the previous Site Visit (from 2009 VTR)

In light of the loss of faculty positions, the conclusion is inescapable that the present situation is considerably worse than at the time of the last VTR, with increased workloads and a heavier reliance on sessional staff.

04: As noted under "issues of fact", Fantauzzi was *not* a faculty member at the time of the last VTR and both West and Subotincic are currently ("present situation") members of staff and will be replaced after their departure. Studio numbers (student/faculty ratios) are within CACB standards and we are unclear how the "heavier reliance on sessional staff" was assessed when we believe that our sessional numbers have decreased.

Additionally, what does not appear to be reflected in the "conclusion" cited is the decrease in student numbers since the last VTR. This enrolment direction was proposed by the Department of Architecture and supported by both Faculty Council and the University of Manitoba Senate.

Therefore, we respectfully request clarification on how the Visiting Team arrived at this conclusion that the "present situation is considerably worse that at the time of the last VTR".

There has been a reduction in the number of administrative support staff since the last VTR, but it appears that reorganization of positions and responsibilities has allowed coverage of all essential services. In this process the Department of Architecture lost its Administrative Assistant, centralized support services in the form of administrative and financial assistance, although strained, appears to be adequate for the current number of academics and students.

05: We are unclear as to how the Visiting Team has arrived at the conclusion that our centralized support services are "strained" and respectfully request clarification.

Condition 5. Human Resources
This condition is still not met. The number of regular faculty in the Department of Architecture is not sufficient to mount the professional Program. The number of graduate students in the Architecture Program has diminished.

06: Page 7; Section Paragraph 1 (2009 VTR Condition NOT MET, 2014 "still not met")
The number of regular faculty in the Department of Architecture was a matter for the "focused evaluation" status that the Architecture Program received following the 2009 VTR. It is our understanding that this condition was subsequently identified by the CACB as having been met. One member of faculty (Chard) has left since that time. We are unclear as to how the Visiting Team has now concluded that the number of regular faculty is "not sufficient to mount the professional Program" and request clarification on what the Visiting Team would consider as a sufficient number of Faculty. If this statement is anticipating the departure of Professors West and Subotincic, it should also anticipate their replacements being hired.

ACADEMIC YEAR 2007 / 2008 - OLD CURRICULUM

Course Name	ED. No.	Arch. No.	Verbal and Writing Skills	Graphic Skills	Research Skills	Critical Thinking Skills	Fundamental Design Skills	Collaborative Skills	Human Behaviour	Human Diversity	Use of Precedents	Western Traditions	Non-Western Traditions	National and Regional Traditions	Environmental Conservation	Accessibility	Site Conditions	Formal Ordering Systems	Structural Systems	Environmental Systems	Life-Safety Systems	Building Envelope Systems	Building Service Systems	Building Systems Integration	Legal Responsibilities	Building Code Compliance	Building Materials and Assemblies	Building Economics and Cost Control	Detailed Design Development	Technical Documentation	Comprehensive Design	Programme Preparation	The Legal Context of Architecture Practice	Practice Organization and Management	Contracts and Documentation	Professional Internship	Architects' Leadership Roles	The Context of Architecture	Ethics and Professional Judgement
Foundation Program																																								
ED 1																																								
1. Theory of Design 1	EVDS 1610																																							
2. Theory of Design 2	EVDS 1620																																							
3. History of Culture, Ideas & Environment 1 / General History of Architecture	EVDS 1660	ARCH 6320																																						
4. History of Culture, Ideas & Environment 2 / Tectonic Precedents	EVDS 1670	ARCH 6430																																						
5. Design Studio 1	EVDS 1630																																							
6. Design Studio 2	EVDS 1640																																							
7. Communication + Information Technology 1	EVDS 1650																																							
8. Visual Literacy	EVDS 1602																																							
9. Construct., Materials & Assemb. 1 / Structural Concepts in Architecture 1	EVDS 1690	ARCH 6480																																						
10. Construct., Materials & Assemb. 2	EVDS 1700																																							
ED 2/ Pre-Masters Qualifying																																								
11. Theory of Design 3	EVDS 2610																																							
12. Theory of Design 4	EVDS 2620																																							
13. Design Studio 3	EVDS 2630																																							
14. Design Studio 4	EVDS 2640																																							
15. Communication + Information Technology 2	EVDS 2650																																							
16. Computer Aided Design		ARCH 6370																																						
17. Studio One		ARCH 6380																																						
18. Studio Two		ARCH 6390																																						
19. Drawing as Making		ARCH 6532																																						
20. Environmental Controls; Arch. Tech. 1 / Lighting & Accoustics	EVDS 2670	ARCH 6520																																						
21. Construction, Materials & Assemblies 3 / Building Science 1	EVDS 2700	ARCH 6530																																						
ED 3/ Pre-Masters Regular																																								
22. Design Studio 5 / Studio Three	EVAR 3680	ARCH 6400																																						
23. Design Studio 6 / Studio Four	EVAR 3690	ARCH 6410																																						
24. Process, Method, Theory 1 / Inquiry by Design	EVAR 3470	ARCH 6450																																						
25. Process, Method, Theory 2 /Cultural Theory of Architecture	EVAR 3480	ARCH 6440																																						
26. History of Modern Architecture / History of Modern Architecture	EVAR 3700	ARCH 6460																																						
27. History of Canadian Architecture / Canadian Architecture	EVAR 3330	ARCH 6470																																						
28. Technology 4 / Building Science II	EVAR 3560	ARCH 6500																																						
29. Technology 5 / Integrated Environmental Systems	EVAR 3570	ARCH 6510																																						
Professional Program																																								
Masters - Core Courses																																								
30. Studio Five		ARCH 7550																																						
31. Contemporary Theory and Criticism		ARCH 7580																																						
32. Studio Six		ARCH 7560																																						
33. Urbanism		ARCH 7590																																						
34. Studio Seven		ARCH 7570																																						
35. New Building		ARCH 7600																																						
36. Structural Concepts in Architecture II		ARCH 7610																																						
37. Professional Practice		ARCH 7340																																						
38. Legal Aspects		ARCH 7350																																						
39. Program Preparation		ARCH 7360																																						
40. Comprehensive Examination		GRAD 7010																																						
41. Thesis																																								
Electives																																								
42. Introduction to Autocad in Design	EVDS 3740 A01																																							
43. Advanced Computing in Environmental Design	EVDS 3250																																							
44. History of the City	EVCP 3340																																							
45. Service Learning in the Global Community: Uganda 2008	EVDS 3710 T60/61	ARCG 7102 T60																																						
46. Manitoba Heritage		ARCG 6102 T04																																						
47. History B: Theory of Technology		ARCG 7070																																						
48. Travelling Concepts in Photography		ARCG 7080 A02																																						
50. History A		ARCG 7070 T01																																						

note: moved to EVAR 4008 08/09

KEY

- AWARENESS ☐
- UNDERSTANDING ☒
- ABILITY ■

ACADEMIC YEAR 2008 / 2009 - NEW CURRICULUM

CACB STUDENT PERFORMANCE CRITERIA			Environmental Design - Foundation Program (two years)			Environmental Design / Architecture Option (two years) - Intermediate			Masters of Architecture Professional Program (two years)			
			University 1 / EVDS 1		EVDS 2	EVAR 3 / Pre-Masters 1		EVAR 4 / Pre-Masters 2		Masters 1		Masters 2	Electives
Course Name	ED. No.	Arch. No.											
1. Introduction to Environmental Design	EVDS 1600												
2. Visual Literacy	EVDS 1602												
3. History of Culture, Ideas & Environment 1	EVDS 1660												
4. History of Culture, Ideas & Environment 2	EVDS 1670												
5. Elective- Faculty of Arts/Environment	elective												
6. Elective-Faculty of Arts/Environment	elective												
7. Elective-Faculty of Science/Environment	elective												
8. Elective-Faculty of Science/Environment	elective												
9. Elective-Faculty of Arts/Science/Environment	elective												
10. Elective-Faculty of Arts/Science/Environment	elective												
11. Urban Media Lab (Pre-Fall)	EVDS 2100												
12. Ecology and Design	EVDS 2200												
13. Materials, Structures + Assemlbies	EVDS 2300												
14. Visual Media 1	EVDS 2400												
15. Visual Media 2	EVDS 2800												
16. Design Studio 1	EVDS 2500												
17.Design Studio 2	EVDS 2900												
18. Tectonic Precedent	EVDS 2600												
19. Natural + Human Systems	EVDS 2702												
20. Arch Studio 1		EVAR 3008											
21. Arch Studio 2		EVAR 3010											
22. Arch Tech 1 - Structural & Sustainable Use of Materials		EVAR 3004											
23. Arch Tech 2 - Building Construction, Structures, Envelopes		EVAR 3006											
24. Modern Architecture History and Theory 1		EVAR 4000											
25. Modern Architecture History and Theory 2		EVAR 4006											
26. Elective		elective											
27. Drawing - Freehand/Digital (Pre-Masters 1 students only)		EVAR 3014											
28. Arch. Tech. Prep.: Structural Concepts (Pre-Masters 1 students only)		EVAR 3012											
29. Arch Studio 3		EVAR 4004											
30. Arch Studio 4		EVAR 4010											
31. Arch Tech 3 - Building Systems		EVAR 4002											
32. Arch Tech 4 - Comprehensive Design Technology Report		EVAR 4008											
33. Modern Architecture History and Theory 1		EVAR 4000											
34. Modern Architecture History and Theory 2		EVAR 4006											
35. Elective		elective											
36. Arch Studio 5 & Comprehensive Program Reprt		ARCH 7050											
37. Arch Studio 6		ARCH 7060											
38. Advanced Technology Topics 1		ARCH 7000											
39. Research Topics: History and Theory 1		ARCH 7020											
40. Professional Practice		ARCH 7340											
41. Legal Aspects		ARCH 7350											
42. Design Research Studio		ARCH 7070											
43. Design Thesis		GRAD 7010											
44. Advanced Technology Topics 2		ARCH 7010											
45. Research Topics: History and Theory 2		ARCH 7030											
46. Technology Thesis Report		ARCH 7080											
47. Manitoba Heritage	EVDS 3710 T03												

KEY	
AWARENESS	☐
UNDERSTANDING	☒
ABILITY	■

3.12.2 STUDENT PERFORMANCE CRITERIA (SPC) MATRIX

ACADEMIC YEARS 2013/14 and 2014/15 - CURRICULUM MATRIX

			Environmental Design - Foundation Program (two years)																Environmental Design / Architecture Option (two years) - Intermediate																Masters of Architecture Professional Program (two years)													
			University 1 / EVDS 1					EVDS 2											EVAR 3 / AMP 1										EVAR 4 / AMP 2								Masters 1		Masters 2									
		Arch. No.																	EVAR 3000	EVAR 3002	EVAR 3004	EVAR 3005	EVAR 3008	EVAR 3010	EVAR 3012	EVAR 3014		EVAR 4000	EVAR 4002	EVAR 4004	EVAR 4006	EVAR 4008	EVAR 4010		ARCH 7000	ARCH 7040	ARCH 7050	ARCH 7060	ARCH 7350		ARCH 7010	ARCH 7020	ARCH 7030	ARCH 7070	ARCH 7080	GRAD 7090
		ED. No.	EVDS 1500	EVDS 1602	EVDS 1660	EVDS 1670		EVDS 2100	EVDS 2200	EVDS 2300	EVDS 2400	EVDS 2500	EVDS 2600	EVDS 2702	EVDS 2800	EVDS 2900																																	
CACB STUDENT PERFORMANCE CRITERIA	Student Performance Criteria numbers	Course Name	Introduction to Environmental Design	Visual Literacy	History of Culture, Ideas & Environment 1	History of Culture, Ideas & Environment 2		Urban Media Lab (Pre-Fall)	Ecology and Design	Materials, Structures + Assemblies	Visual Media 1	Design Studio 1	Tectonic Precedent	Natural + Human Systems	Visual Media 2	Design Studio 2		Pre-Modern Architectural History and Theory 1	Pre-Modern Architectural History and Theory 2	Architectural Technology 1 - Structural and Sustainable Use of Materials	Architectural Technology 2 - Building Construction, Structures and Envelopes	Architectural Design Studio 1	Architectural Design Studio 2	Architecture Technology Preparation: Structural Concepts	Drawing: Freehnd and Digital		Modern Architecture History and Theory 1	Architecture Technology 3 - Building Systems	Architecture Design Studio 3	Modern Architecture History and Theory 2	Architecture Technology 4 - Comprehensive Design Technology Report	Architecture Studio 4		Advanced Technology Topics 1	Professional Practice	Architecture Studio 5 & Comprehensive Program Report	Architecture Design Studio 6	Legal Aspects		Advanced Technology Topics 2	Research Topics: History and Theory 1	Research Topics: History and Theory 2	Design Research Studio	Technology Thesis Report	Design Thesis
A: CRITICAL THINKING AND COMMUNICATION																																															
A1: Critical Thinking Skills	1		■	■	■	■		■	■	☒	☒	☒	■	■	■	■	☒		■	■			☒	■				☒		■	■		■			■		■	■		■	■	■	■	■	■	■
A2: Research Skills	2		■	■	■	■		■	■	■	☒	■	■	■	■	■	☒		■	■			☒					■		■	■		■			■		■	■		■	■	■	■	■		
A3: Graphic Skills	3		■	☒	☒	☒		■	■	■	■	■	☒	■	■	■					☒	☒	■	☒	■					■		■	■				■		■	■		■	■	■	■	■	■	■
A4: Verbal and Writing Skills	4		☒	■	■	■		■	■		☒		■	■	■		■	■				☒					■				■			■	■	■		■		■	■	■	■			
A5: Collaborative Skills	5		■	☒	☒	☒		■	■	☒	☒	☒	■	■	■	☒					☒	☒						■				■															
A6: Human Behaviour	6			☒	☒	☒		☒	■			☒		■		☒		■	■			☒	■				☒		■	☒		■					■	■					■			
A7: Cultural Diversity	7		■	☒	☒	☒		■	☒			☒	■	☒		☒		☒	☒			☒					☒			☒							■					■	■	■		
A8: History and Theory	8			■	☒	☒		☒				☒	■			☒		■	■			☒					☒		■	☒							■					■	■			
A9: Precedents	9		☒	■	☒	☒		☒	■	■	☒	☒	■	■	■	☒		■	■			☒					■	■		■		■		■	■	■	■	■	■		■	■	■	■			
B: DESIGN AND TECHNICAL SKILLS																																															
B1: Design Skills	10		■	☒				■	☒	■		☒	☒				☒					☒	■					☒		■	■		■			■	■		■			■	■	■	■	
B2: Preparation	11		■	■				■	☒			☒	☒			☒						☒	■					☒		☒	■						■					■				
B3: Site Design	12		■						☒			☒				■				☒	■	☒	■					☒			■						■	■				■				■
B4: Sustainable Design	13		■	☒				■	■	■		☒	☒	☒		■				☒	☒	☒	■					☒		☒	☒						■	■		■			■				■
B5: Accessibility	14			☒								☒	☒			■						☒	☒				■			■	☒							■									
B6: Life-Safety Systems, Building Codes and Standards	15															■						☒	☒				■			■	☒							■									
B7: Structural Systems	16			☒				☒		☒			☒			☒				☒		☒	☒				■			■	☒							■						■	■		
B8: Environmental Systems	17		☒	☒				■	☒	☒			☒			☒				☒	☒		☒				■			■	☒							■									■
B9: Building Envelopes	18									☒						☒				☒	☒	☒		☒			■			■	☒							■									■
B10: Building Service Systems	19																				☒						■			■	☒							■									
B11: Building Materials and Assemblies	20		■							■						☒				☒	☒	☒	☒	☒			■			■	☒			■				■				■		■	■		
B12: Building Economics and Cost Control	21			☒				☒																																							
C: COMPREHENSIVE DESIGN																																															
C1: Detailed Design Development	22																														☒	☒			■			■			■			■	■	■	
C2: Building Systems Integration	23																											■			☒	☒						■									
C3: Technical Documentation	24									■																		☒			■	☒			■			■			■			■	■	
C4: Comprehensive Design	25			☒				■																							■	☒						■									
D: LEADERSHIP AND PRACTICE																																															
D1: Leadership and Advocacy	26			■				■																												■				■							
D2: Ethics and Professional Judgement	27		☒	■				■																												■				■							
D3: Legal Responsibilities	28																																			■				■							
D4: Project Delivery	29			■				■																																							
D5: Practice Organization and Management	30			■				■																																							
D6: Professional Internship	31																																														

LEGEND
UNDERSTANDING ☒
ABILITY ■

From: Mourad Mohand-Said <mmohandsaid@cacb.ca>
Subject: APR Review-Missing Information
Date: October 31, 2014 at 10:15:09 AM CDT
To: Ralph Stern <sternr@cc.umanitoba.ca>

Dear Ralph,

The Visiting Team Chair has reviewed University of Manitoba's APR and she is requiring additional information on certain sections.
Attached are the required information to be received prior to the visit.

All the Best,

Mourad Mohand-Said, B.Arch, M.Sc.A, Hon.MRAIC
Executive Director | Registrar/Directeur général | Registraire
Canadian Architectural Certification Board/Conseil canadien de certification en architecture
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ARCHITECTURE PROGRAM REPORT (APR) REVIEW FORM
Supplemental Requested Information

Institution: **University of Manitoba**
Accreditation Cycle: **2015**
Team Chair: **Loraine Fowlow, MRAIC**

Section Information Missing & Requested

1.2 **Program Action Plan and Objectives**
Program's measures of success and a time line for executing the plan

2 **Progress Since Last Visit**
Program's response to Financial Resources comments/ concerns, 2009 VTR

3.3 **Public Information**
Evidence that all faculty and incoming students have been provided with a printed or digital copy of the most up to date Guide to Student Performance Criteria.

3.5 **Human Resources**
Faculty: Description of the distribution of effort between teaching and other responsibilities of each faculty member and evidence that students evaluate individual courses and faculty

3.8 **Information Resources and IT**
3.8.3 Library statistics report (Appendix A-3 contains a form for reporting library data)
3.8.4 Description of the hardware, software, networks and other computer resources available to students, faculty and staff
3.8.5 Current action plan outlining recurring levels of staff support, renewal of hardware and infrastructure and student software access, as well as anticipated modifications to current installation
3.8.6 Demonstration of sufficient funding to execute the action plan

3.9 **Financial Resources**
More detailed budget needed, indicating breakdown of expenditures (e.g. student awards, exhibitions, faculty travel, etc.)
Faculty budget
Development activities

3. 10 **Administrative Structure**
Comparison of this structure with those of other professional programs in the institution

3. 11 **Professional Degrees and Curriculum**
A chart clearly showing the courses counting towards SPCs and Accreditation, within the framework of the program structure. The Team needs to be able to clearly and easily comprehend the accredited program components.

208 Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
Telephone (204) 480-1408
Fax (204) 275-1160

UNIVERSITY OF MANITOBA | Office of the Vice-President (Academic) & Provost

May 22, 2015

TO: Faculty, Staff and Students, Faculty of Architecture

FROM: Dr. Joanne C. Keselman, Vice-President (Academic) and Provost

RE: **Appointment: Dr. Jonathan Beddoes, Interim Dean, Faculty of Architecture**

I am very pleased to advise that, at its May 19, 2015 meeting, the Board of Governors approved the appointment of Dr. Jonathan Beddoes as Interim Dean, Faculty of Architecture for the period September 1, 2015 to June 30, 2017. Dr. Beddoes will continue to hold the position of Dean of Engineering and retain his tenured professorial appointment in the Faculty of Engineering's Department of Mechanical Engineering.

Dr. Beddoes was appointed Dean of Engineering on July 1, 2011. Prior to joining our university, he was a professor in the Department of Mechanical and Aerospace Engineering in the Faculty of Engineering and Design at Carleton University. From 2002-2008, he served as Chair of the Department. Under his leadership as Chair, the Department experienced significant growth in its faculty and staff complement, saw a doubling of its graduate enrolment and the establishment of new facilities to support its expanding research program. Dr. Beddoes also championed the development of new undergraduate programs and program streams in engineering, and played a key role in the development of several new inter-disciplinary programs both with other units at Carleton and other universities. Prior to joining Carleton, he enjoyed a successful career in private industry as a researcher, engineer and engineering manager.

Since joining our university, Dr. Beddoes has continued to demonstrate his exceptional skills as an academic administrator. He has and continues to provide outstanding leadership to the Faculty of Engineering and to play a key role in the development of major university-wide initiatives including, for example, the recent development of an updated university strategic plan and strategic enrolment management planning. He has also developed strong relationships with the professional engineering community, spearheading the establishment of several new collaborative educational and research partnerships.

To assist Dr. Beddoes in his new role, I am also pleased to announce that Professor Eric (Rick) Haldenby has agreed to serve as special advisor to Dr. Beddoes during this interim period. Professor Haldenby is known within the Faculty of Architecture and well known within the broader professional architectural community. He is currently Professor of Architecture at the University of Waterloo and served as the School of Architecture's Director from 1988 to 2013. Professor Haldenby is a fellow of Royal Architectural Institute of Canada, past chair of the Council of Canadian University

Schools of Architecture, twice member of the Board of the Royal Architectural Institute of Canada, and has served on the Board of the Association of Collegiate Schools of Architecture and the Canadian Architectural Certification Board. In 2013, he received the Lifetime Achievement Award from the Canadian Council of University Schools of Architecture.

I am very pleased that Dr. Beddoes has agreed to serve the Faculty of Architecture in this interim role. Based on his leadership skills and abilities, his strong commitment to professional education and his demonstrated record of working in partnership with professional associations/organizations, I have every confidence that the Faculty of Architecture will be well served by his leadership during this interim period. I also want to thank Professor Haldenby for agreeing to lend his academic and professional expertise and support to Dr. Beddoes during this interim period.

Append

From: Mourad Mohand-Said <mmohandsaid@cacb.ca>
Subject: APR and Accreditation Visit Preparation
Date: November 17, 2014 at 1:48:30 PM CST
To: Ralph Stern <sternr@cc.umanitoba.ca>
Cc: "terri.fuglem@ad.umanitoba.ca" <terri.fuglem@ad.umanitoba.ca>, "Loraine Fowlow" <lfowlow@ucalgary.ca>, "Sean F. Rodrigues" <seanro@graham.ca>

Dear Ralph,

At its Fall meeting (Nov.14-15, 2014), the Board accepted University of Manitoba's Architecture Program Report and instructed to schedule the maintenance accreditation site visit within the date proposed by the program: **February 28-March 4, 2015.** The Board is also expecting the Program to provide CACB office prior to the visit with the requested additional information by the Team Chair.

The Visiting Team composition for the program acceptance will follow son.

Also, to help to prepare for the visit we have prepared the attached Handbook foe Accreditation and a Pager on Team Room Preparation.
We hope these documents will be of help and interest,

Best Regards,

Mourad Mohand-Said, B.Arch, M.Sc.A, Hon.MRAIC
Executive Director | Registrar/Directeur général | Registraire
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From: Mourad Mohand-Said <mmohandsaid@cacb.ca>
Subject: Visit at University of Manitoba
Date: February 9, 2015 at 8:32:09 AM CST
To: "Ralph Stern (Ralph.Stern@umanitoba.ca)" <Ralph.Stern@umanitoba.ca>
Cc: Loraine Fowlow <lfowlow@ucalgary.ca>, "terri.fuglem@ad.umanitoba.ca" <terri.fuglem@ad.umanitoba.ca>, "Sean F. Rodrigues" <seanro@graham.ca>, Colin Ripley <cripley@ryerson.ca>, Therese Leblanc-NSAA <tleblanc@nycum.com>

Dear Dean Ralph Stern,

This is to inform you that Mrs. Loraine Fowlow is stepping down as Chair of the Visiting Team due to medical reasons.
We wish Loraine our Best and a full recovery.

We have started looking for an experienced Chair to fit Loraine's position and will get back to you as soon as possible.

All the Best,

Mourad Mohand-Said, B.Arch, M.Sc.A, Hon.MRAIC
Executive Director /Directeur général
Canadian Architectural Certification Board/Conseil canadien de certification en architecture
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From: Mourad Mohand-Said <mmohandsaid@cacb.ca>
Subject: RE: Visit at University of Manitoba
Date: February 10, 2015 at 11:30:23 AM CST
To: Ralph Stern <Ralph.Stern@umanitoba.ca>
Cc: Terri Fuglem <Terri.Fuglem@umanitoba.ca>, "Sean F. Rodrigues" <seanro@graham.ca>

Dear Dean Stern,

I'm following on my previous e-mail to inform you that Professor Rick Haldenby has been appointed to chair the visiting team to University of Manitoba's Architectural Program in replacement to Professor Loraine Fowlow who has stepped down for medical issue.

I will send you soon an updated list of the visiting team.

Best Regards,

Mourad Mohand-Said, B.Arch, M.Sc.A, Hon.MRAIC
Executive Director /Directeur général
Canadian Architectural Certification Board/Conseil canadien de certification en architecture
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From: Ralph Stern [mailto:Ralph.Stern@umanitoba.ca]
Sent: Tuesday, February 10, 2015 10:58 AM
To: Mourad Mohand-Said
Cc: Terri Fuglem; Sean F. Rodrigues
Subject: Re: Visit at University of Manitoba
Importance: High

Dear Mourad!

Thank you for the quick turnaround on this, we greatly appreciate it.

We would welcome Prof. Haldenby as Chair of the Visiting Team.

From: Eric Haldenby <erhaldenby@uwaterloo.ca>
Subject: Re: CACB Draft Visiting Team Report
Date: April 1, 2015 at 7:03:39 AM CDT
To: Ralph Stern <Ralph.Stern@umanitoba.ca>
Cc: Terri Fuglem <Terri.Fuglem@umanitoba.ca>, Mourad Mohand-Said <mmohandsaid@cacb.ca>, Marcella Eaton <Marcella.Eaton@umanitoba.ca>

Dear Ralph,

Thank you for your thorough and thoughtful review of the Visiting Team Report. I will study it, discuss it Mourad and make appropriate adjustments before returning the final version to you within 10 days.

All the best,

Rick

Rick Haldenby FRAIC
Professor
Waterloo Architecture
7 Melville St. S.
Cambridge, Ontario
Canada
N1H 2S4

e: erhalden@uwaterloo.ca
w: www.architecture.uwaterloo.ca
t: 519-888-4544
f: 519-622-3525

Si duri puer ingeni videtur
Praeconem vel architectam facias

WATERLOO | ARCHITECTURE

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4.6 Annual Reports

The appendix of the APR must include copies of all ARs (including the Annual Statistics Report) that have been submitted to the CACB since the previous site visit. Only the most recent school academic calendar should be submitted.

UNIVERSITY OF MANITOBA | Faculty of Architecture

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Telephone (204) 474-9458
Fax (204) 474-7532

Mourad Mohand-Said
Executive Director/Registrar
Canadian Architectural Certification Board
1 Nicholas Street, Suite 710
Ottawa, ON
K1N 7B7

June 29, 2017

Dear Mourad,

Please find enclosed the 2016-17 Annual Report to the Canadian Architectural Certification Board for the Architecture Program at the University of Manitoba.

Since our program is hosting a Maintenance Accreditation Visit in Spring 2018, we have not submitted a narrative section of the report. As requested, the report contains:

- Human Resources statistics; and
- Current academic school calendar.

We are in the process of compiling our Architecture Program Report for the September 15th deadline. We look forward to sharing our Program's progress with the Visiting Team.

Please let us know if you require any further information at this time.

Sincerely,

Dr. Lisa Landrum
Associate Professor and Associate Head
Department of Architecture
Faculty of Architecture
204-480-1037
Lisa.Landrum@umanitoba.ca

cc. Dr. Carlos Rueda, Head, Department of Architecture

A-4• Human Resources Statistics Report • 2016– 2017

School or Program: University of Manitoba – Master of Architecture

Professional Degree Accredited	Total nb of credits / degree	Total nb of terms / degree	Nb of credits / term	Nb of hours / credit	Total nb of hours / degree
• **Master of Architecture degree**	48	4	12 -15		48
with a related pre-professional bachelor's degree					
• **Master of Architecture degree**					
without a pre-professional requirement, and consisting of an undergraduate degree plus a minimum of three years of professional studies					
• **Bachelor of Architecture degree**					
minimum of five years of study, except in Quebec, where four years of professional studies follow two years of CEGEP studies					

Faculty Data	Faculty Credentials (highest degree only) Full-time (FT) + Part-Time (PT)													
	Ph.D or D.Arch		Post-Prof Ms		Prof. M.Arch		B.Arch		Other		Licensed architects		Studio teaching	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Regular Faculty														
Men	2		1		4						3		7	
Women	1		1								1		2	
Total FT Equivalent (FTE) Regular Faculty: Number of FT Regular Faculty + a figure equating PT Regular Faculty	9													
Typical FT teaching load / year	Two Studios + one or two courses													
Other Faculty														
• Visiting														
• Adjunct • Sessional • Lecturer		1		2		8				3				
• Ph.D Candidate														
Men		1		2		6				2	5		5	
Women						2				1	2		2	
Total FT Equivalent (FTE) Other Faculty: a figure equating other faculty on the basis of a typical FT teaching load	4.6													
Total FTE Regular + Other Faculty	13.6													
Total Regular and Other Faculty who are licensed architects											11			
Total Regular and Other Faculty teaching in studio													16	
Nb of pre-professional studios taught by all Faculty for the year													16	
Nb of Masters studios taught by all Faculty for the year													6 (+9 thesis advisors)	

Student Data	Pre-professional degree ED3&4-Arch Option + AMP1&2 Only				Master of Architecture degree or Bachelor of Architecture degree			
	Fall	Winter	Summer	Mean/yr	Fall	Winter	Summer	Mean/yr
Full-Time Students	84	80		82	46	45		47
Men (optional)	40	38			29	28		30
Women (optional)	44	42			17	17		17
Part-Time Students								
Men (optional)								
Women (optional)								
Total Full-Time Equivalent (FTE) Students [1]					46	45		47
FTE Foreign Students [2] *(optional)*					7	7		7
Students in Design Studio	84	80		82	44	43 (incl. M2/Thesis)		32.5
Studio Ratio (Students in Design Studios / Nb studios taught for a year)	84/8 (Fall); 80/8 (Winter)				M1: 22/3 (Fall) M2: 24/9 (Fall)		M1: 21/3 (Winter) M2 24/9 (Winter)	
	Fall	Winter	Summer	Total/yr	Fall	Winter	Summer	Total/yr
Number of applicants for a given term and total for a year			91	91	0	124		124
Number of entering students for a given term and total for a year	41			41	22			22
With advanced standing (optional)								
Total Degrees Awarded-Expected for a given term and total for a year			39	39	24			24
Men (optional)			19				15	15
Women (optional)			22				9	9
Graduation Rate (%) [3]			95%	95%			100%	100%

Note: the Pre-professional data provided is ONLY for architecture-option students in years 3 and 4 of the Environmental Design Program. (Previous Annual Reports included all students in all options, including the interdisciplinary foundation levels).

1 Full-Time Equivalent Students (FTE): Number of full-time students reported above + number of full-time equivalent for part-time students calculated on the basis of a full course load required to complete the program in the normal number of terms.

2 FTE Foreign Students : Students included in Total FTE Students who are not Canadian citizens or landed immigrants.

3 No of degrees awarded or expected / No of entering students at the beginning of the degree.

2016-17 Annual Report to CACB — June 29, 2017

ACADEMIC CALENDAR

GRADUATE COURSE DESCRIPTIONS FOR 2016-17

Course and Credit Requirements for a Master of Architecture (M.Arch)

Course No.	Course Name	Credits Required	Credit Hours
ARCH 7000	Advanced Technology Topics 1	Two 1.5 cr. hr. Tech. Topics required	1.5
ARCH 7010	Advanced Technology Topics 2		1.5
ARCH 7020	Research Topics: History and Theory 1	Two 1.5 cr. hr. History Theory Topics req'd	1.5
ARCH 7030	Research Topics: History and Theory 2		1.5
ARCH 7040	Professional Practice		3
ARCH 7050	Arch Studio 5 and Comprehensive Program Report		9
ARCH 7060	Arch Studio 6		9
ARCH 7070	Design Research Studio		9
ARCH 7080	Technology Thesis Report		3
ARCH 7350	Legal Aspects of Architectural Practice		3
GRAD 7090	Design Thesis		0
	Electives (or Topics Courses)		6

TOTAL PROGRAM CREDIT HOURS: 48

Students are expected to take the courses in the sequence they are advised.
Second language reading requirement: none.
Expected time to graduation: two years.

GRADUATE Calendar – Course Descriptions:

ARCH 7000 – Advanced Technology Topics 1
ARCH 7010 – Advanced Technology Topics 2

One five-week seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

1.5 Credit hours each

ARCH 7020 – Research Topics: History and Theory 1
ARCH 7030 – Research Topics: History and Theory 2

One five-week lecture, seminar and/or project-based topics offering an in-depth study of an historical and/or theoretical subject. Options are grounded in faculty research and build upon foundation history/theory courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

1.5 Credit hours each

ARCH 7040 – Professional Practice

Is concerned with the duties and responsibilities of an architectural practice; its divisions, office organization and administration, in Manitoba and Canada. The lectures relate in scope and standard to

current models of practice and their requirements, including issues of building economics and construction cost control.

3.0 Credit hours

ARCH 7050 – Arch Studio 5 and Comprehensive Program Report

Develop design explorations and seek to clarify relations between architectural criteria and the urban/natural environments in national or international contexts. Conceptual, programmatic, material, technological, economic, and political principles and systems employed are to be evident in the Comp. Prog Report.

9.0 Credit hours

ARCH 7060 – Arch Studio 6

The previous term's investigations are further developed into a comprehensive architectural design proposal. The thorough integration of design and programming criteria, with building and environmental systems and assemblies are examined.

9.0 Credit hours

ARCH 7070 – Design Research Studio

This final design studio involves concerted research and design explorations of an individually defined subject of inquiry, within a selected studio thematic focus. These investigations are intended to prepare students for their final Design Thesis.

9.0 Credit hours

ARCH 7080 – Technology Thesis Report

Technology Thesis Report is an advanced project-based course done in conjunction with the Design Thesis project. The report is related to an individual student's design thesis topic, focusing on specific aspects of technology and applied tech. research. Advisor supervision and external engineering consultancy or agreed equivalent are required.

9.0 Credit hours

ARCH 7350 – Legal Aspects of Architectural Practice

Discusses the importance of the knowledge of law as it relates to professional practice of architecture, including a discussion of the historical development of legal responsibilities of a practicing professional generally and of architects specifically. There is also discussion of trends in the development of professional responsibility and liability.

3.0 Credit hours

GRAD 7090 – Design Thesis

The Design Thesis is an independently driven creative work developed within a focused subject of inquiry and directed by architectural questions. It is carried out through intensive research, study, and design explorations that culminate in a thoroughly developed architectural proposition. It is to be fully recorded in a final document.

0.0 Credit hours

UNDERGRADUATE COURSE DESCRIPTIONS FOR 2016-17

Course and Credit Requirements for a Pre-Professional Bachelor of Environmental Design (B.Env.D.)

FOUNDATION STUDIES (Years 1 and 2):

Course No.	Course Name	Credit Hours
EVDS 1600	Introduction to Environmental Design	3
EVDS 1602	Visual Literacy	3
EVDS 1660	History of Culture, Ideas and Environment 1	3
EVDS 1670	History of Culture, Ideas and Environment 2	3
	Faculty of Arts Elective(s)	6
	Faculty of Science Elective(s)	6
	Faculty of Arts/Science Elective(s)	6
EVDS 2100	Urban Media Lab (Pre-Fall)	3
EVDS 2600	Tectonic Precedent	3
EVDS 2200	Ecology and Design	3
EVDS 2300	Materials, Structures and Assemblies	3
EVDS 2702	Natural and Human Systems	3
EVDS 2400	Visual Media 1	3
EVDS 2800	Visual Media 2	3
EVDS 2500	Design Studio 1	6
EVDS 2900	Design Studio 2	6

INTERMEDIATE STUDIES – ARCHITECTURE OPTION (Years 3 and 4):

EVAR 3012	Arch Tech Prep – pre term block course (for AMP students only)	(3)
EVAR 3000	Pre-Modern History and Theory I	3
EVAR 3002	Pre-Modern History and Theory II	3
EVAR 3004	Architectural Technology 1- Structural and Sustainable Use of Materials	3
EVAR 3006	Architectural Technology 2 – Building Construction, Structures and Envelopes	3
EVAR 3008	Architecture Design Studio 1	9
EVAR 3010	Architecture Design Studio 2	9
EVAR 3014	Drawing: Freehand & Digital	3
EVAR 4000	Modern Architectural History and Theory I	3
EVAR 4002	Architectural Technology 3 - Building Systems	3
EVAR 4004	Architecture Design Studio 3	9
EVAR 4006	Modern Architectural History and Theory II	3
EVAR 4008	Architectural Technology 4 – Comprehensive Design Technology Report	3
EVAR 4010	Architecture Design Studio 4	9
	Elective	3

TOTAL PROGRAM CREDIT HOURS: 129

FOUNDATION STUDIES (Years 1 and 2):
UNDERGRADUATE Calendar – Course Descriptions

EVDS 1600 – Introduction to Environmental Design
An introduction to the philosophy and pragmatics of design and designing processes and methods. The focus will be on design as a creative, aesthetic and scientific endeavor, and will examine the challenges and roles of environmental designers in society. Available to non-Environmental Design students only.

3 Credits hours | Fall

EVDS 1602 – Visual Literacy
This course examines the contemporary visual environment, its critical historical influences, and more recent cultural impacts. Optics, the structure of images, and the importance of materiality will be examined through various modes of cultural production including emerging media and information networks.

3 Credits hours | Fall

EVDS 1660 – History of Culture, Ideas and Environment 1
A brief history of the western creative imagination, part 1. Interdisciplinary survey of cultural periods and key works from the Foundations of Civilization to the Enlightenment, including literary readings, film screenings, and illustrated lectures and discussions. Available to non-Environmental Design students only.

3 Credits hours | Fall

EVDS 1670 – History of Culture, Ideas and Environment 2
A brief history of the western creative imagination, part 2. Interdisciplinary survey of cultural periods and key works from the 19th to the 21st centuries, including literary readings, film screenings, and illustrated lectures and discussion. Prerequisite: EVDS 1660. Available to non-Environmental Design students only.

3 Credits hours | Winter

EVDS 2100 – Urban Media Lab
An introduction to visual methods of representation and related media including drawing, photography and video. The intention is to critically engage the urban and suburban contexts as a laboratory for investigating cultural values, aesthetic issues, design principles, and representational techniques, 'prerequisite' to undertaking design studio work.

3 Credits hours | Pre-Fall

EVDS 2200 – Ecology and Design
An examination of principles of Ecology and Design works in which these tenets are considered, engaged, and/or demonstrated. Topics fundamental to the science of Ecology will theoretically structure the course content. Emphasis will be placed on understanding the forces and systems working within and between natural, social and human environments.

3 Credits hours | Winter

EVDS 2300 – Materials, Structures and Assemblies
This course provides an introduction to applied statics, construction materials and construction system assemblies for landscape, building, and interior constructions. Construction material properties and applications, including impacts on resource depletion and on sustainable building practices will be introduced along with basic strategies and methods to analyze and calculate forces in simple structures.

3 Credits hours | Winter

EVDS 2400 – Visual Media 1
An introduction to technical and free-hand drawing processes and techniques, and in various media - to develop, to express, and to communicate design intentions. The focus will be directed to abstract and concrete methods of representation. Emphasis will be placed on the integral relationship between thinking, drawing, and making in relation to critically observing the world at large, and in relation to design studio work.

3 Credits hours | Fall

EVDS 2500 – Design Studio 1
Introduction to the elements and principles of visual and spatial design, design process and techniques, requisite methods of representation and communication, and design intentions. Studio work will explore different ways of space and form-making, beginning at the site of the body, in both abstract and environmental contexts.

6 Credits hours | Fall

EVDS 2600 – Tectonic Precedent
An examination of seminal built works of environmental design, at a range of scales, from the 19th and 20th centuries, with an emphasis on examples that are representative of diverse positions of key issues in contemporary design practice. Methodologically, this course endeavors to critically evaluate the relationships between perception, intention, and making through the exploration of the material and tectonic nature of the work(s).

3 Credits hours | Fall

EVDS 2702 – Natural and Human Systems
An application of the scientific principles embodied in the natural laws which govern environmental design. Aspects of the bio-physical factors, energy, human physiology and perception, comfort, and resource management are reviewed in the context of sustainable planning and design practices.

3 Credits hours | Fall

EVDS 2800 – Visual Media 2
This course bridges technical and freehand drawing introduced in Visual Media 1, with computer/digital media. This course advances contemporary digital media in relation to emerging modes of 2, 3, and 4 dimensional modes of representation, in the context of design studio work, and in relation to graphic standards associated with professional design practice.

3 Credits hours | Winter

EVDS 2900 – Design Studio 2
An exploration of the fundamental relationships between space, form and order in the context of the built environment, from body to place. Pedagogical emphasis will be directed towards design process, cultural intentions, and environmental accountability.

6 Credits hours | Winter

INTERMEDIATE STUDIES – ARCHITECTURE OPTION (Years 3 and 4):
Undergraduate Calendar - Course Descriptions

EVAR 3012 – Architecture Technology Preparation (pre term block course for AMP students only)
A preparatory block course introducing the fundamentals of structural concepts in architecture that prepares students for the foundation technology courses in architecture.

3 Credits hours | Pre-Fall

EVAR 3000 – Pre-Modern History and Theory I
Provides a historical and theoretical understanding of early Greek, Roman, Gothic and non-western architectural topics and their influence. Content is explored using primary texts where possible, and through critical analysis of selected topics.

3 Credits hours | Fall

EVAR 3002 – Pre-Modern History and Theory II
Provides a historical and theoretical understanding of Gothic and Renaissance architectural topics and their influence, up to the work of Claude Perrault. Content is explored using primary texts where possible, and through critical analysis of selected topics.

3 Credits hours | Winter

EVAR 3004 – Architectural Technology 1- Structural and Sustainable Use of Materials
Construction materials and structural theory in the analysis and design of simple wood-frame, masonry and light steel construction; fundamental passive energy systems and design strategies for material and energy reduction.

3 Credits hours | Fall

EVAR 3006 – Architectural Technology 2 – Building Construction, Structures and Envelopes
Architectural, environmental and technical aspects of construction focusing on low-rise and medium sized wood, steel and masonry construction including issues of material production/manufacturing, soils, foundation, envelope systems, basic mechanical systems and their integration and acoustic concerns.

3 Credits hours | Winter

EVAR 3008 – Architecture Design Studio 1
An architectural study of the human condition in relation to the natural and built environment through design oriented research exploration, analysis, evaluation and interpretation of a selected subject of inquiry. Various ways of seeing and making are applied as tools for critical thinking to align content with modes of representation.

3 Credits hours | Fall

EVAR 3010 – Architecture Design Studio 2
Building upon first term explorations, architectural propositions are developed that seek to clarify relations between human inhabitation and the physical environment in a regional context. Design principles influenced by programmatic, theoretical, historical, technological material and environmental criteria are examined. Prerequisite: EVAR 3008.

3 Credits hours | Winter

EVAR 3014 – Drawing: Freehand & Digital
An introduction to drawing skills that allows students to become articulate in proposing and studying architecture through drawing. The course covers a range of media.

3 Credits hours | Fall

EVAR 4000 – Modern Architectural History and Theory I
Provides a historical and theoretical understanding of the origins of modernity in architecture. Content is explored using primary texts where possible, and through critical analysis of selected topics.

3 Credits hours | Fall

EVAR 4002 – Architectural Technology 3 - Building Systems
Integrated building systems focusing on multi-story steel and concrete construction including: passive and active heating, cooling, and ventilation methods, strategies and designs, electrical, water, communication, security, fire protection, and vertical transportation systems; and building code constraints.

3 Credits hours | Fall

EVAR 4004 – Architecture Design Studio 3
This studio focuses on the broader cultural implications of social interaction and the collective inhabitation of the built and natural environments. Architecture design explorations are influenced by a thorough examination of programmatic, theoretical, historical, technological, material and environmental criteria.

3 Credits hours | Fall

EVAR 4006 – Modern Architectural History and Theory II
Provides an historical and theoretical understanding of 20th century topics in architecture (western and non-western). Content is explored using primary texts where possible, and through critical analysis of selected topics.

3 Credits hours | Winter

EVAR 4008 – Architectural Technology 4 – Comprehensive Design Technology Report
A technical knowledge project-based course integrating with Arch Studio 4. Comprehensive technology issues include: site; material; energy; structures; construction; sustainability; environmental factors; building code; life safety. Student's work will include analysis, technical drawings and calculations. Corequisite: EVAR 4010 Arch Studio 4.

3 Credits hours | Winter

EVAR 4010 – Architecture Design Studio 4
The previous terms investigations are further developed and synthesized into a comprehensively designed environment. Architectural propositions seek to clarify specific relations between details and the overall design, through the integration of complex social, cultural, programmatic, theoretical, historical, technological, material and environmental principles, systems and criteria. Prerequisite: EVAR 4004 Architecture Design Studio 3.

3 Credits hours | Winter

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from:
The University of Manitoba Graduate Academic Calendar 2016-17, pp. 133-135:
http://umanitoba.ca/student/records/media/2016_2017_Graduate_Calendar.pdf

The University of Manitoba Undergraduate Academic Calendar 2016-17: 167-172.
http://umanitoba.ca/student/records/media/2016_2017_Undergraduate_Calendar_Final.pdf

The same information is available on the University of Manitoba, Faculty of Architecture, websites:

Department of Architecture (graduate courses):
http://umanitoba.ca/faculties/architecture/programs/architecture/courses.html

Environmental Design Program (undergraduate courses):
http://umanitoba.ca/faculties/architecture/programs/edesign/EDcourses.html

Annual Report: 2016

From: **Carlos Rueda** Carlos.Rueda@umanitoba.ca
Date: Wednesday, June 29, 2016 at 1:59 PM
To: **Mourad Mohand-Said** mmohandsaid@cacb.ca
Subject: **Re: Remider-2015-2016 Annual Report**

Dear Mourad
Please find attached the required HR Statistics Report for the years 2015-2016, as required. Concerning our current Calendar, as per with our telephonic conversation, please follow the links:

Pre-Profesional: our undergraduate component corresponds with the Architecture Option (two last years) of an Environmental Design Program whose calendar is available at:
http://umanitoba.ca/faculties/architecture/programs/edesign/EDcourses.html

As to our Professional Program, the Calendar is available at:
http://umanitoba.ca/faculties/architecture/programs/architecture/courses.html

Sincerely,

Carlos Rueda, M.ArchII, PhD
Head, Department of Architecture
Faculty of Architecture,
University of Manitoba

From: **Mourad Mohand-Said** mmohandsaid@cacb.ca
Date: Tuesday, May 10, 2016 at 3:26 PM
To: **Carlos Rueda** Carlos.Rueda@umanitoba.ca
Subject: **Re: Remider-2015-2016 Annual Report**

Dear Carlos Rueda,

The Annual Report (AR) is expected no later than **June 30, 2016.**

Since your Faculty has hosted a Maintenance Accreditation Visit last year (spring 2015), you do not need to submit the narrative section of the Annual report. Only the following documents are expected by June 30:

- Human Resources statistics report; and
- Current academic school calendar.

Best Regards,

Mourad Mohand-Said, B.Arch, M.Sc.A, Hon.MRAIC
Executive Director /Directeur général
Canadian Architectural Certification Board/Conseil canadien de certification en architecture
1, rue Nicholas Street. Street, Suite 710
Ottawa, Ontario K1N 7B7
Tel/Tél.: 613-241-8399. Fax/ Télécopie: 613-241-7991.
Web/Internet: www.cacb-ccca.ca

A-4• Human Resources Statistics Report • 2015– 2016

School or Program : University of Manitoba

Professional Degree Accredited	Total nb of credits / degree	Total nb of terms / degree	Nb of credits / term	Nb of hours / credit	Total nb of hours / degree
• **Master of Architecture degree**					
with a related pre-professional bachelor's degree	48	4	15-18	3-9	48
• **Master of Architecture degree**					
without a pre-professional requirement, and consisting of an undergraduate degree plus a minimum of three years of professional studies					
• **Bachelor of Architecture degree**					
minimum of five years of study, except in Quebec, where four years of professional studies follow two years of CEGEP studies					

Faculty Data	Faculty Credentials (highest degree only) Full-time (FT) + Part-Time (PT)													
	Ph.D or D.Arch		Post-Prof Ms		Prof. M.Arch		B.Arch		Other		Licensed architects		Studio teaching	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Regular Faculty														
Men	2		3		1						2		5	
Women	1		1								1		2	
Total FT Equivalent (FTE) Regular Faculty: Number of FT Regular Faculty + a figure equating PT Regular Faculty	8 FTE													
Typical FT teaching load / year	Two Studios +one/two course/s + other combinations													
Other Faculty														
• Visiting														
• Adjunct • Sessional • Lecturer		1	1		2	14				3	1	8	2	5
• Ph.D Candidate														
Men														
Women														
Total FT Equivalent (FTE) Other Faculty: a figure equating other faculty on the basis of a typical FT teaching load	2 FTE Other Faculty													
Total FTE Regular + Other Faculty	33 (25 total of Other Faculty, two of them FTE)													
Total Regular and Other Faculty who are licensed architects											11			
Total Regular and Other Faculty teaching in studio													15	
Nb of pre-professional studios taught by all Faculty for the year													7	
Nb of Masters studios taught by all Faculty for the year													4	

Student Data	Pre-professional degree				Master of Architecture degree or Bachelor of Architecture degree			
	Fall	Winter	Summer	Mean/yr	Fall	Winter	Summer	Mean/yr
Full-Time Students	296	295			55	54		54.5
Men (optional)	128	128		128	34	33		33.5
Women (optional)	168	167			21	21		21
Part-Time Students								
Men (optional)								
Women (optional)								
Total Full-Time Equivalent (FTE) Students [1]								
FTE Foreign Students [2] *(optional)*	6	4			6	6		6
Students in Design Studio	76	76			54	54		130
Studio Ratio (Students in Design Studios / Nb studios taught for a year)	11.81 (130/11)							
	Fall	**Winter**	**Summer**	**Total/yr**	**Fall**	**Winter**	**Summer**	**Total/yr**
Number of applicants for a given term and total for a year	175			175	111			111
Number of entering students for a given term and total for a year	106			106	24			24
With advanced standing (optional)								
Total Degrees Awarded-Expected for a given term and total for a year		88		88	15	1		16
Men (optional)		40		40	10	1		11
Women (optional)		48		48	5			5
Graduation Rate (%) [3]		85%			94%			

[1] Full-Time Equivalent Students (FTE): Number of full-time students reported above + number of full-time equivalent for part-time students calculated on the basis of a full course load required to complete the program in the normal number of terms.

[2] FTE Foreign Students : Students included in Total FTE Students who are not Canadian citizens or landed immigrants.

[3] No of degrees awarded or expected / No of entering students at the beginning of the degree.

Annual Report: 2015

A-4• Human Resources Statistics Report • 2014– 2015

School or Program : University of Manitoba - Dept. of Architecture

Professional Degree Accredited	Total nb of credits / degree	Total nb of terms / degree	Nb of credits / term	Nb of hours / credit	Total nb of hours / degree
• **Master of Architecture degree**	48	4	12-15	3-9	48
with a related pre-professional bachelor's degree					
• **Master of Architecture degree**					
without a pre-professional requirement, and consisting of an undergraduate degree plus a minimum of three years of professional studies					
• **Bachelor of Architecture degree**					
minimum of five years of study, except in Quebec, where four years of professional studies follow two years of CEGEP studies					

Faculty Data	Faculty Credentials (highest degree only) Full-time (FT) + Part-Time (PT)													
	Ph.D or D.Arch		Post-Prof Ms		Prof. M.Arch		B.Arch		Other		Licensed architects		Studio teaching	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Regular Faculty	2		7		1						4		8	
Men	1		5		1						3		5	
Women	1		2								1		3	
Total FT Equivalent (FTE) Regular Faculty: Number of FT Regular Faculty + a figure equating PT Regular Faculty	10 FTE (including one on full year research leave, one on 40% secondment (research percentage), and the Dean of the Faculty)													
Typical FT teaching load / year	Two Studios + One/Two Course/s + Other Contributions													
Other Faculty														
• Visiting														
• Adjunct • Sessional • Lecturer		1		1	2	7				4	1	6	2	1
• Ph.D Candidate														
Men		1		1	1	6				4		6	1	1
Women					1	1					1		1	
Total FT Equivalent (FTE) Other Faculty: a figure equating other faculty on the basis of a typical FT teaching load	Two FTE "Other" (sessionals)													
Total FTE Regular + Other Faculty	10 Regular FTE plus 2 FTE Other plus 13 PT Other (sessionals)													
Total Regular and Other Faculty who are licensed architects											11			
Total Regular and Other Faculty teaching in studio													11	
Nb of pre-professional studios taught by all Faculty for the year													6 + 13	
Nb of Masters studios taught by all Faculty for the year													13	

Student Data	Pre-professional degree				Master of Architecture degree or Bachelor of Architecture degree			
	Fall	Winter	Summer	Mean/yr	Fall	Winter	Summer	Mean/yr
Full-Time Students	282	282		282	45	45		45
Men (optional)	116	116		116	29	29		29
Women (optional)	117	117		117	16	16		16
Part-Time Students								
Men (optional)								
Women (optional)								
Total Full-Time Equivalent (FTE) Students [1]	282	282		282	45	45		45
FTE Foreign Students [2] *(optional)*	25	25		25	3			
Students in Design Studio EVAR 3rd & 4th yr - ARCH M1 & M2	38 & 36			37	45	45		45
Studio Ratio (Students in Design Studios / Nb studios taught for a year)	EVAR 3 12.6				Vertical Studios EVAR4, M1& M2 13.5			
	Fall	**Winter**	**Summer**	**Total/yr**	**Fall**	**Winter**	**Summer**	**Total/yr**
Number of applicants for a given term and total for a year	195				116			
Number of entering students for a given term and total for a year	95				27			
With advanced standing (optional)								
Total Degrees Awarded-Expected for a given term and total for a year		82					18	
Men (optional)		34					11	
Women (optional)		48					6	
Graduation Rate (%) [3]		86%					100%	

[1] Full-Time Equivalent Students (FTE): Number of full-time students reported above + number of full-time equivalent for part-time students calculated on the basis of a full course load required to complete the program in the normal number of terms.

[2] FTE Foreign Students : Students included in Total FTE Students who are not Canadian citizens or landed immigrants.

[3] No of degrees awarded or expected / No of entering students at the beginning of the degree.

Photo Credits

Front Cover: Evan Schellenberg, "Constructive Play," preliminary study toward a *Clownmade City* (M.Arch Design Thesis, 2017).

Divider 1 (front): ED3/AMP1 students collaboratively designing *Carbuncle* in CAST (January 2017). Photo by ED3 student Dylan Hewlett (incoming ED4 Arch-Option in Fall 2017).
(back): Artifacts in C.A.S.T. Photos by Ilana Elbaze (B.Env.D.-Arch Option graduate, 2017).

Divider 2 (front): Building *Carbuncle* in CAST (January 2017). Photo by ED3 student Dylan Hewlett.
(back): Bryan He, *Radical Note: a place of concord and discord - a Chamber Music Hall for UManitoba* (M1 *Radical Campus* studio, winter 2017).

Divider 3 (front): Final reviews of ED4/AMP2 studio *Analysis as Design* (April 2017). Photo by ED2 student Janine Kropla (incoming ED3 Arch-Option in Fall 2017).
(back): Evan Schellenberg, a laundromat, central vacuum station, bath house and balloon tower for a *Clownmade City* (M.Arch Design Thesis, 2017).

Divider 4 (front): Evan Kettler, *Analyzing Rietveld, Designing Exchange* (ED4 studio work, April 2017).
(back): Xue Wei, *Cultivating Cloud* (M.Arch Design Thesis, 2017).

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