

CERTIFICATION BOARD CONSEIL CANADIEN DE CERTIFICATION EN ARCHITECTURE

# **Architecture Program Report**

Master of Architecture Program University of Calgary\_2023

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## The text in this document is presented in three different colors:

- Black for the Conditions for Accreditation requirements
- Gold for the Program's responses to the Conditions for Accreditation



Accreditation Report

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## I. Introduction • CACB Accreditation

The CACB is a national independent non-profit corporation and is the sole organization recognized by the architectural profession in Canada to accredit professional degree programs in architecture that are offered by Canadian universities.

Professional accreditation of a Program means that it has been evaluated by the CACBand substantially meets the educational standards that comprise, as a whole, an appropriate education for an architect.

The Accreditation process is governed by the Conditions and Procedures for Accreditation, (current Edition 2017). PDF copies can be obtained at <a href="https://cacb.ca/accreditation/">https://cacb.ca/accreditation/</a>

Graduation from a CACB-accredited program is the first of three steps (education, experience, and examination) on the path to licensure as an Architect.

For more information on the CACB, please refer to the website at: www.cacb-ccca.ca

Accreditation Report



## III. The Program Report

## 1. Introduction to the Program

## 1.1 Program Identity and Mission

Accreditation requires an understanding of the specific scholastic identity and mission of the Program. The APR must:

- Include a summary of the Program's identity, uniqueness, strengths, and challenges;
- Include the Program's current mission statement, the date of its adoption or revision, and the date of its endorsement by the institution (if such a statement and objectives do not exist, the Program's plans for completing one must be outlined); and
- Demonstrate that it benefits from and contributes to its institutional context, including the Program's academic and professional standards for both faculty and students; the interaction between the Program and other programs in the institution;
- contributions by 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.

The Master of Architecture (MArch) Program in the School of Architecture, Planning and Landscape (SAPL) at the University of Calgary offers a three-year (seven semester) graduatelevel curriculum leading to a professional degree in architecture. This comprises a two-year (five semester) Masters component, with an additional Foundation year (two semester) for students without an undergraduate pre-professional degree in architecture. The Program is part of a School that offers pre-professional options (ARST Minor, BDCI), professional degrees (MArch, MLA, MPlan), and post-professional degrees (MEDes, PhD, DDes). Established in 1971 as the Faculty of Environmental Design, the unit opted to change its name in 2019 to the School of Architecture, Planning and Landscape in order to better capture the mandate of the programs, and to raise the visibility of the School.

The MArch Program enjoys strong support from the School and the University of Calgary, and also enjoys excellent relations with various units on campus, the architecture profession, the City of Calgary, local communities, and a broad range of organizations; the Program is committed to interdisciplinarity, innovation, and the environment.

The decision to establish a downtown presence for SAPL in 2019, in two floors (2,300 m2) of the former main public library building, has given SAPL a unique location adjacent to City Hall. This venue, known as the City Building Design Lab (CBDLab), is used for exhibitions, lectures/events, studios, research, and administration; securing the facility was generously supported by the Calgary Municipal Land Corporation and the City of Calgary. In 2023, as a result of the start of the new Bachelor of Design in City Innovation (BDCI) undergraduate degree program, the MArch Program has relocated all of its students to the CBDLab, and an additional floor (1,150 m2) has been acquired. The situation is temporary until a new location is secured and renovated in the downtown core; the CBDLab has greatly enhanced the visibility of SAPL.

The facility on the main campus remains a state-of-the-art one, due to continuous upgrades to spaces and equipment. With a total enrollment of approximately 170 students, The MArch



Program provides a supportive environment for teaching, learning, and research. The Program attracts a diverse range of high calibre students from across Canada and abroad.

As the professional degree is offered at the graduate level, students are required to have a Bachelor's degree for admittance, this can be an undergraduate degree from the University of Calgary (including a Minor in Architectural Studies option), the School's new Bachelor of Design in City Innovation (BDCI) degree, an undergraduate degree from a recognized post-secondary institution, or pre-professional or professional degrees from other institutions. This means that students come from a wide range of academic backgrounds, they tend to by highly qualified, mature, articulate, and often have previous work experience.

There is a comprehensive program of awards, scholarships, and teaching assistantships available to support studies. The Program and School offers a host of innovative learning opportunities and a wide range of enrichment opportunities including lectures, exhibitions, field trips, workshops, and the like. The study abroad options in Barcelona (established in the early 1990s) and Tokyo are an essential part of the Program's identity. Recent changes to the curriculum involved adding a seventh (Spring/Summer) semester to accommodate the study abroad program, and the addition of a dedicated Work-Integrated Learning semester in the Fall of the final year. The development of a broadened slate of elective courses was also included in the overall changes. The Block Week courses offered three times a year provide a unique opportunity for the delivery of required and elective courses. The new Bachelor of Design in City Innovation (BDCI) is expected to attract many students interested in "global citizenship" and urbanism. The following five areas define the distinctive strengths of the MArch Program reflected in teaching, research, and practice: Digital Design and Fabrication; Contemporary Urbanism; Critical Practice; Sustainable Design; and History and Theory.

The Program comprises a community of educators, practitioners, students, and staff dedicated to teaching, research, and practice. The teaching faculty continues to be renewed with new hires, and an evolving range of expertise. The faculty cohort is highly productive and is engaged in a wide range of research and creative-practice activities. An important group of local professionals supports the Program as sessional instructors. The success of the Program can be measured by the careers of its graduates, including those working and running professional offices, those employed as academics, and those working in related fields (development/real estate, public institutions, construction, etc.).

The MArch Program's mission statement is as follows (It was adopted in September 2023): In the Master of Architecture Program at the University of Calgary we embrace the challenges and complexities facing contemporary architecture with a forward-thinking and dynamic curriculum. Our mission is to cultivate innovative, responsive, and critically thinking architects who excel on both local and global stages. With a focus on addressing pressing design challenges of today's world, our students learn to think from multiple perspectives and develop creative and sustainable solutions. We recognize the significance of crucial issues, such as climate change, evolving demographics in urban and rural communities, mass migration, material availability, and the potential of architecture to respond to changing needs. Students achieve these objectives by mastering and deploying powerful digital tools for design, evaluation, and fabrication. These tools



are supported by workshops, staff and a curriculum that acknowledge the rapid changes taking place in technology and see the opportunities for students to be strong contributors to these changes upon graduation.

We are committed to nurturing a culture of inquiry, exploration, and innovation within our diverse community of learners. Our mission is to foster an environment that encourages students to push the boundaries of architectural possibilities and envision a future that combines creativity, functionality, and sustainability. We aspire to empower our graduates to become visionary leaders capable of influencing architectural discourse, shaping cities, and leaving a lasting impact on society. Report Link: <u>https://saplaccreditation2023.squarespace.com/12-program-action-plan-and</u>

## **1.2 Program Action Plan and Objectives**

The APR must include:

- the Program's action plan and objectives developed in accordance with institutional norms;
- its measures of success and a timeline for executing the plan.

The MArch Program's strategic initiatives are discussed and developed at the Program level and then forwarded to the Dean's office; the Program action plan both harmonizes with the SAPL Strategic Plan 2022-2027 (the most recent strategic plan was adopted in 2023, see: <u>https://sapl.ucalgary.ca/sites/default/files/teams/1/SAPL%20Strategic%20Plan%202022-2027.pdf</u>). The SAPL Strategic Plan 2022-2027 identifies four strategic priorities: 1) Optimize Location, 2) Build BDCI, 3) Intensify Research, and 4) Enrich Programs. It also identifies four values: 1) Climate Action, 2) Social Justice, 3) Community Impact, and 4) Value-Informed Innovation.

The 32 specific goals identified in the plan aligns with the action plan subsequently developed by MArch Program. Previously, a five-year plan was adopted by the Program in 2015, with adjustments made in 2016 and after the 2017 CACB accreditation visit. In 2023 a new action plan was adopted by the Program (normal strategic planning was interrupted by the uncertainty created by the COVID pandemic).

The MArch Program action plan (2023-2028) identifies the following priorities: The Master of Architecture Program in the School of Architecture, Planning and Landscape (SAPL) has, over the last 10 years, undergone changes in curriculum and expanded research and teaching capacity in an ongoing effort to prepare students for a future that will require designers to deploy their knowledge and skills in a rapidly changing and increasingly unpredictable context. Over the next period of growth and development the program will strive to build upon SAPL's strategic plan and the newly launched University of Calgary strategic plan, both of which contextualize a focus on the the future might demand of our students and academic institutions.

The Master of Architecture Program will continue to apply a critical lens to our future focused curriculum, our move to downtown Calgary, and our support of applied research and community engagement. The areas of focus will continue to be developed using contemporary tools, expansion of our teaching and research capacity, and multi-disciplinary collaborations within SAPL and the University of Calgary.

- 1. Optimize Program Move to Downtown Calgary
  - a. Identify key architecture firms, civic organizations, and City of Calgary initiatives for potential partnership opportunities.
  - b. Expand Work-Integrated Learning opportunities and support through creation of a dedicated team of faculty and staff.
  - c. Develop and support applied research that engages the challenges/opportunities of downtown Calgary.
  - d. Capitalize on opportunities to demonstrate commitments to sustainable, inclusive, and innovative design practices to a larger audience.

2. Expand Teaching and Research Capacity through staff SAPL is hiring a large cohort of new faculty members to support our interdisciplinary undergraduate degree in Building Design and City Innovation (BDCI). As part of this expansion the Master of Architecture Program can expect to add up to 10 new faculty members by 2024.

- a. Identify key areas of the curriculum and research agendas of the program that need support through new faculty.
- b. Increase diversity of faculty cohort in full and part time positions and support this process with increased attention to recruiting and retention.
- c. Expand opportunities for vertically integrated teaching between the professional program and the undergraduate design degree.
- d. Formalize positions that include teaching and technical research functions previously siloed in separate staffing streams.
- 3. Build on Strengths in Computation, Experiential Learning, and Applied Research
  - a. Expand required development of digital skills into M1 year.
  - b. Formalize block week thematic structure: i. Tools and Techniques ii. Human Behavior, Indigenous Design, Sustainable Practices, Design Justice iii. Energy/Material/Life Cycle Performance and Simulation iv. History Theory v. Field Studies
  - c. Integrate applied research projects into curriculum where appropriate, including Work-Integrated Learning Studios, Block Weeks, Electives, and student led projects.
- 4. Increase Program Visibility.
  - a. Actively promote research work to potential students, faculty, and general audiences.
  - b. Host conferences, symposia, exhibitions, and events that engage local, national, and international audiences.
  - c. Support platforms for dissemination of design research in the faculty.
  - d. Continue to engage alumni to be active participants in the promotion of the program.
- 5. Evaluate Curriculum Continuously
  - a. Thematic Cluster Development
  - b. Expand City Studio/Study Abroad Options
  - c. Engage Profession to Identify Gaps The action plan outlines our intentions to continue to build a program that evolves to meet the shifting challenges architects and design professionals will face in the coming decades. Report Link: <u>https://saplaccreditation2023.squarespace.com/11-program-identity-and-mission</u>



## 2. Program progress Since the Last Visit

The APR must include:

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

Conditions and Student Performance Criteria (SPC) Not Met B2. Program Preparation Program Response: This category was changed to A4: Program Analysis in the current CACB Conditions and Terms for Accreditation, changing the emphasis from preparation to analysis. Program analysis is addressed in increasing levels of complexity throughout the curriculum. In ARCH 514: Studio II students looking at housing unit design, and the development of a housing projects; students often develop their own specific programs in this studio. In ARCH 606: Intermediate Studio students address larger urban projects, and typically has students develop the program for their projects. The complexity of the program in the ARCH 616: Comprehensive Studio was noted in the VTR, it is currently the basis of detailed program analysis. As also noted in the VTR the study abroad city studios (ARCH 688) address building program as well. Course instructors are now encouraged to include more deliverables related to communicating the program objectives and implementation within given projects. B12. Building Economics and Cost Control Program Response: This previous criterium is now part of E5: Project Management in the current CACB Conditions and Terms for Accreditation. The VTR notes that adding information relative to life cycle analysis/costing would be an improvement to the introduction of building economics in the Professional Practice course.

The professional practice SPCs are now delivered across three inter-related courses: Leadership in Architecture (ARCH 604), the Senior Research Studio in Architecture I (Work-Integrated Learning, ARCH 700), and Architectural Professional Practice (ARCH 618). The material on building economics/cost control has been assigned to ARCH 700 and ARCH 618, which are now offered during the same semester; students learn about the costing of buildings from professional practitioners (along with other aspects of professional practice). An elective course in life cycle analysis is also offered by a faculty member in the MArch Program.

Causes of Concern and Team's Recommendations 1. Program Response:

The MArch Program's identity is one committed to the development of critical design thinking mediated by digital means with a focus on urbanization, sustainability, and innovation. Curriculum changes made in the Fall 2020 bolster this commitment with the introduction of a new Work-Integrated Learning/Critical Practice Studio, new electives, and studio selective courses that allow students to customize their programs. The study abroad option in the Spring/Summer term has a particular focus on the contemporary city. The launching of the new Bachelor of Design in City Innovation in the Fall 2023 further reinforces the School's commitment to urbanization, sustainability, and innovation. The previous commitment to the "ecologies" of design has been modified to correspond with the MArch Program's current mission statement and action plan. 2. Program Response:

Ecology as a framework is embedded in the curriculum through content rather than terminology. The previous Philosophical Statement that placed a special emphasis on "ecology" was modified after the last CACB visit in 2017, see the current Mission Statement and strategic plan for the Program in Section 1.0. The curriculum continues to develop courses and interlinked structures with an understanding of design as an endeavour with multi-scalar impact and consequence. 3. Program



#### Response:

The MArch Program is committed to continuing to develop a curriculum focused on the delivery of evidence-based approaches to sustainability, including building performance, life cycle analysis, circular economy, and contextual awareness.

This is supported by faculty members in the areas of building performance and life cycle analysis. Courses in life cycle analysis and solar envelopes are currently available as electives and studio selectives in the curriculum and provide proactive ways to expand this content. 4. Program Response:

The MArch Program continues to be committed to interdisciplinarity, however, the opportunities to collaborate with the Landscape Architecture/Planning Program are currently limited. Where possible collaborations are developed with other units on the University of Calgary campus and elsewhere. In 2020 the Program made curriculum changes that added a seventh semester (Spring/Summer), this has added more flexibility and opportunities to the program of study, including the Work-Integrated Learning studio (ARCH 700). The establishment of the City Building Design Lab (CBDLab), located in downtown Calgary, has created tremendous synergy with many existing and new partners. The new Bachelor of Design in City Innovation (BDCI) will also create meaningful opportunities for interdisciplinarity. 5. Program Response:

The focus on "digital literacy" remains a distinctive aspect of the Program and is explicitly communicated to incoming and current students. However, this is not to the exclusion of manual techniques; students often build physical models and sketch during their design project development. Integration of programmatic and space planning within this context is an important aspect of how the studio sequence has been developed. While the introduction of digital tools and ways of thinking are intense at the start of the program, students are given freedom to pursue projects in a variety of media throughout the length of the program. Elective courses are also intended to augment digital literacy. 6. Program Response:

This has been addressed in part through the name change of the unit to the School of Architecture, Planning and Landscape (SAPL) that occurred in May 2019 (from the former Faculty of Environmental Design (EVDS)). The new name has improved the visibility of the School, along with the establishment of the CBDLab as a downtown presence. Social media platforms have been adopted by the program.

The School's communications staff has been reinforced with an additional staff hire and a new website is now in place and is regularly updated. The School has also developed a series of podcasts, lectures, and workshops available online and dedicated to further expanding the reach of our curriculum and programs. The Work-Integrated Learning Studio opens further collaborations between the School, architectural practices and industry. The launching of the School's first undergraduate degree (BDCI) in the Fall 2023 has attracted tremendous interest from prospective students (over 600 applications for 75 positions in the first year). Report Link: <u>https://saplaccreditation2023.squarespace.com/20-progress-since-the-previous-site-visit</u>

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## 3. Compliance with the Conditions for Accreditation

## 3.1 Program Self-assessment

The APR must include:

- a description of the Program's self-assessment process and
- the faculty, student, and alumni assessments of the Program's overall curriculum and learning context. Feedback may be obtained through surveys and focus groups, but individual course evaluations are not deemed sufficient to provide insight into the Program's substantive focus and pedagogy.

The Master of Architecture (MArch) Program employs a range of self-assessment methods to monitor its mission, strategic planning objectives, and overall quality. These include aligning with the University of Calgary and School of Architecture, Planning and Landscape (SAPL) strategic plans. The SAPL 2022-2027 Strategic Plan is at: <a href="https://sapl.ucalgary.ca/sites/default/files/teams/1/SAPL%20Strategic%20Plan%202022-2027.pdf">https://sapl.ucalgary.ca/sites/default/files/teams/1/SAPL%20Strategic%20Plan%202022-2027.pdf</a>

The MArch Program adopted a new 5-year Action Plan and Mission Statement in 2023 (see Section 1.0). The assessment of goals, objectives, and performance occur through the ongoing administrative processes of the School and through periodic external reviews. The MArch Program faculty meet regularly to discuss Program issues and strategic goals. Changes since the last CACB accreditation visit in 2017 have been driven by various factors and often in collaboration with the Dean and the other Programs. School meetings and committees, MArch Program meetings and retreats, course evaluations, alumni surveys, faculty member assessments (see Section 3.5), and tenure/promotion procedures all contribute to the ongoing assessment of the Program.

SAPL has been involved in various bench-marking exercises, including those mandated by the University, such as the 2013 and 2018 Unit Reviews. The University and the School also consider the CACB accreditation process a vital assessment process. In addition to the School and Program self-assessment processes, the University assesses SAPL proposals with respect to curriculum, course, and academic regulations through the Faculty of Graduate Studies Council, and then the Academic Planning and Priorities Committee of the General Faculties Council (GFC), with feedback returned to the MArch Program at each stage. Close connections with the profession are facilitated by an ex-officio position on the Alberta Association of Architects (AAA) Council held by the Associate Dean or designate, as well as an ex-officio student position. The AAA also provides a representative to the SAPL Faculty Council. The Associate Dean, Academic (Architecture), in consultation with students, faculty, adjuncts, and alumni also has responsibility for ensuring high standards of teaching, research, and service, along with monitoring the quality of the overall curriculum. All of this is to ensure a diverse, equitable, questioning, and safe learning environment for students, maintaining productive relations with professional associations, and meeting broad societal expectations.

The MArch Program conducts a formal review of individual student progress, course delivery, and curriculum at the end of the fall and winter semesters; this is followed by the SAPL Faculty Forum review. The MArch Program, advisory to the Dean, discuss and make recommendations respecting policies, procedures, and standards that are forwarded to the Dean, to a course manager for implementation, or to the Faculty Council for formal approval. Periodically, events transpire that require special review or assessment. Students participate in the ongoing assessment of the MArch Program in various ways. The Associate Dean, Academic (Architecture) holds town hall



meeting 1-2 times a year as open for discussing any issues that might arise. The Associate Dean also meets with students who may have personal or general issues on an individual basis. Generally, students can be involved in planning and assessment activities in SAPL, and also have opportunities through the SAPL-SA to provide feedback on specific aspects of the MArch Program.

Each semester SAPL courses are evaluated by students through the University's anonymous USRI course evaluation process based on quantitative ratings and comments. Course evaluations are annually reviewed by the Associate Dean, and biennially by the SAPL Faculty Promotions Committee as a means of assessing teaching effectiveness across the Program. Where issues with teaching arise, the Associate Dean addresses these directly with individual faculty members.

A comprehensive survey of alumni was conducted in November-December 2022. Altogether 666 alumni were contacted who had graduated in the last decade, with 119 responses for an 18% response rate. In the Survey 21 questions were asked that addressed a range of questions related to the quality of the curriculum and the experience in the Program based on a scale of 1.0 (Strongly Disagree) to 5.0 (Strongly Agree). Respondents also had the opportunity to provide general comments. Overall the results of the survey are very positive with most questions answered in the 3.50-4.00 mean score range (the full survey results and questions are available on the accreditation website). Questions 6 (sustainable design), 10 (technical preparation), 13 (EDIA), and 14 (professional practice) scored lower. Information gathered in the Survey has been used to adjust the teaching of specific courses, particularly in the technical and professional practice areas. Report Link: <u>https://saplaccreditation2023.squarespace.com/31-program-selfassessment</u>

## 3.2 Public Information

The Program must provide clear, complete, and accurate information to the public and include the following text in its official Program information.

"In Canada, the Canadian Architectural Certification Board (CACB) is the sole agency authorized bythe Canadian Architectural Licensing Authorities (CALA) to accredit Canadian professional degree programs in architecture for the purposes of architectural licensure."

The APR must include:

- The program description as it appears in the university academic calendar or any other institutionally authorized official description of the Program; and
- evidence that the Program has communicated to all faculty and incoming students the informationregarding the CACB process for accreditation.

The School of Architecture, Planning, and Landscape (SAPL) strives to be accurate and consistent in its public representations and works to assure that ongoing handling of academic matters by faculty members and staff is consistent with the University of Calgary policies and regulations, and is in the best interest of all parties. The SAPL website is the most important point of contact for the profession and the public, for prospective and current students, and alumni. Managed by the leadership team and the Manager of Marketing, Communications and Community Engagement, the website is continuously reviewed and updated as required. The website contains a wide range of information for students, and has information on research, faculty, staff, events, facilities, EDIA, and the various degree programs; see <u>https://sapl.ucalgary.ca</u>. Information on accreditation can be found at: <u>https://sapl.ucalgary.ca/about/accreditation</u>.

The specific calendar descriptions in the both the University of Calgary calendar and the Faculty of Graduate Studies calendars can be found at: <u>https://www.ucalgary.ca/pubs/calendar/current/sapl-2.html</u>



The Master of Architecture (MArch) Program courses can be found in the University calendar at: https://www.ucalgary.ca/pubs/calendar/current/architecture.html The APR must include evidence that the Program has communicated to all faculty and incoming students the information regarding the CACB process for accreditation. All faculty members are aware of the CACB process of accreditation through various processes: 1) introduced to it through their initial appointment by the Associate Dean, Academic (Architecture); 2) made aware of the details during the preparation for accreditation process, which includes a review of all courses against CACB requirements; through meetings and other sessions where the CACB process for accreditation during the Orientation students are given an introduction to the CACB process for accreditation during the Orientation week in their first semester in the School. This is also addressed during town hall meetings, and in the process for preparing for an accreditation visit.

Report Link: <u>https://saplaccreditation2023.squarespace.com/32-public-information</u>

## 3.3 Equity, Diversity, and Inclusion

The APR must include procedures in place to achieve equity, diversity, and inclusion in school operations and activities.

The School of Architecture, Planning and Landscape (SAPL) was founded in 1971 (originally as the Faculty of Environmental Design) on the principle of promoting the diversity of views and values inherent in the interdisciplinary practice of design professionals. The University of Calgary has a comprehensive set of policies with respect to equity, diversity, inclusion, and accessibility (EDIA) these can be found through the Office for Equity, Diversity, and Inclusion at: <u>https://www.ucalgary.ca/equity-diversity-inclusion</u>. The University has been recognized as one of Canada's best diversity employers since 2017. It is incumbent on the Master of Architecture (MArch) Program and SAPL to follow EDIA principles in all dealings with students, faculty members, staff, or the public. University policies require that all committees dealing with key decisions are composed with diversity in mind.

The School has always sought a policy of open communication where all parties are given access to the formulation of policies, procedures, reviews, and program development through range of methods. It is the role of the Dean's Office and the Associate Dean – Academic (Architecture) to disseminate information and to ensure a supportive learning and working environment. SAPL encourages EDIA and does not differentiate on the basis of race, age, gender, sexual orientation, culture, creed, health, or physical ability. The School must ensure that no barriers to EDIA exist in the recruitment, admission, engagement, education, development, or promotion of students, faculty members, or staff. This requires that SAPL maintain a working environment free of coercion, intimidation, favouritism, or discrimination on any basis.

In 2022 SAPL created a new administrative position entitled Equity, Diversity, and Inclusion Director, who is a member of the SAPL Leadership Team. The first holder of this position was Prof. Catherine Hamel, the current holder is Dr. Getachew Assefa, who is also a strong advocate for EDIA (see: <u>https://sapl.ucalgary.ca/about/people/getachew-assefa</u>). Resources provided for 2022/2023 include an EDIA Budget + training. In addition, Dean John Brown, is the first dean from a Canadian School welcomed to join the Dean's Equity and Inclusion Initiative a group working towards equity and justice in the built environment and building diversity in the academic community. The School has also created a host of programs in recent years. Recently a student initiative in SAPL during 2021-2022, called AEDE (Advocates for Equitable Design Education),



took on the question of EDIA in the School. SAPL recently launched its Just SAPL\_EDIA by Design web site to support the faculty's commitment to people and community engagement through Equity, Diversity, Inclusion and Accessibility (see: <u>https://sapl.ucalgary.ca/about/equity-diversity-inclusion-and-accessibility</u>)

In addition to targets and data, SAPL continues to embed transparency in its EDIA activities as a strategy showcasing proactive commitment. SAPL has undertaken a broad range of EDIA initiatives, including: the SAPL Awards, the Student Experience Committee – Recruitment, the Marketing and Communication strategy, new curriculum offerings, Indigenous engagement, special events, and hiring strategies. The University of Calgary Office for Equity, Diversity, and Inclusion, under the direction of Dr. Malinda Smith (Vice-Provost and Associate Vice-President Research (Equity, Diversity and Inclusion)), provides a range of programs on topics such as Anti-Black Racism, LGBTQ2S+ resources, supporting persons with disabilities, women in academia, and addressing racism against racialized/visible persons.

The Office manages various studies, awards programs, and research opportunities. Information, for example, on LGBTQ2S+ resources can be found at: <u>https://www.ucalgary.ca/equity-diversity-inclusion/literacy-and-education/lgbtq2s-guide</u>

The University adopted the Indigenous Strategic Plan in 2017. Policies and opportunities for Indigenous students can be found at: <u>https://www.ucalgary.ca/student-services/writing-symbols/home\_https://www.ucalgary.ca/student-services/writing-symbols/community/indigenous-relations\_https://www.ucalgary.ca/future-students/undergraduate/indigenous\_</u>

For students with disabilities, policies can be found at: <u>https://ucalgary.ca/student-services/access</u> Information on workplace diversity and employment equity can be found at: <u>https://www.ucalgary.ca/hr/campus-culture/workplace-diversity-and-employment-equity</u> The University has recently established the Inclusive Excellence Cluster Hiring Initiative, which means a group of under-represented faculty can be hired together and which will allow them to work together to overcome stereotypes and prejudice. SAPL has participated in the program with recent hires. Information on this can be found at: <u>https://www.ucalgary.ca/equity-diversityinclusion/data-and-reports/inclusive-excellence-cluster-hiring-initiative</u> Report Link: <u>https://saplaccreditation2023.squarespace.com/33-equity-diversity-and-inclusion</u>

## 3.4 Student Composition, Well-Being, and Enrichment

The APR must include:

- A description of the student cohort (background, gender, etc.); the Program's academic standards for students; a description of the students' educational backgrounds; and the selectivity, retention, and graduation rates of the Program since the last accreditation sequence;
- evidence that the school has policies and procedures in place for a safe, positive, and respectful learning and working environment;
- a description of the Program's approach to co-curricular, extracurricular, and enhanced learning opportunities available to students;
- 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;

- 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;
- a description of student support services, including health and wellness, academic and personal advising, career guidance, evaluation of progress, and internship placement(if applicable); and
- a description of teaching and research assistant opportunities for students.

The Master of Architecture (MArch) Program and the School of Architecture, Planning and Landscape (SAPL) support a talented and motivated group of students in pre-professional, professional, and post-professional degree programs. The MArch Program aims to populate 5 studio sections per term with 12-15 students each in each, for a total of 55-65 students per year. The M1 contingent is made up of students coming directly from the Foundation year, students applying from the ARST Minor program (and in future the Bachelor of Design in City Innovation program), and students applying from other institutions with pre-professional and professional degrees. Admissions requirements are described in the University calendar and on the SAPL website. The latest version of the MArch admission requirements is at: <u>https://sapl.ucalgary.ca/future-students/admissions/march</u>

Admissions is managed by the SAPL Admissions Officer, and the selection committee involves the MArch Program faculty. Applications for the MArch program are accepted once per year; from September 1 to January 15. All applicants admitted to the MArch program start in the fall term. Students in the MArch Program come from across Canada and abroad. As the professional degree is offered at the graduate level, students are required to have a Bachelor's degree for admittance. The application numbers since 2017, and admits (target numbers), average GPAs, and the gender breakdown are found in tables in the accreditation website, along with enrollments and graduation rates per year.

The University of Calgary has a comprehensive set of policies that address safety, respect, and the working environment for faculty and staff. These can be found at a range of website addresses listed in the accreditation website.

The March Program offers a comprehensive slate of enrichment opportunities to students, including the annual SAPL Design Matters lecture series, exhibitions, conferences, field trips, guest critics/lecturers, and block week courses (including the Somerville, Taylor, and Gillmor Visiting Lectureships). Recent visitor to the annual Design Matters lecture series can be found at: https://sapl.ucalgary.ca/whats-happening/designmatters

The CDDLab also hosts numerous other events including workshops, conferences, and special lectures. The School of Architecture, Planning and Landscape (SAPL) currently has two exhibition spaces: the Stantec Gallery on the main campus and the CBDLab Gallery at the downtown location. These are used primarily to showcase work by faculty and students (see: https://sapl.ucalgary.ca/whats-happening/exhibitions the block courses offered by SAPL, are a

unique aspect of the School and have been operating since the 1970s.

The courses are offered three times a year (October, January, and March) for a week, during which students break from regular classes and take either a required course or an elective.

The study abroad programs occur in the Spring/Summer term after MArch Year One (M1) and are offered in Barcelona and Tokyo (a Calgary studio option is offered for students not going abroad). In all three locations students take an urban design focused studio and a version of the Urban Systems (ARCH 675) course. Students in the MArch Program also have various opportunities to



participate in off-campus activities, including field trips such as the one-week field trip to Los Angeles offered in the winter term, or to be involved in the Zurich trip offered by the MPlan Program.

SAPL has an active student association (SAPL Students Association) that organizes the annual student orientation events in early September, as well as social and educational events throughout the year (see: https://sapl.ucalgary.ca/current-students/resources/sapl-student-association

These include the annual networking event with local professionals, lectures, ski trips, parties, and other activities. SAPL has an array of support services for students (see: https://sapl.ucalgary.ca/current-students/resources/student-support

All students entering the School attend Orientation Camp before they begin, this provides a comprehensive range of information on the School and its programs, the facilities, the SAPL support staff, the University of Calgary campus, and the city of Calgary, see: https://sapl.ucalgary.ca/current-students/orientation-2022

SAPL recognizes the role it plays in providing a healthy environment for students, faculty, and support staff. Students have access to a counselling and advice coming from either dedicated support staff, administrators (including the Associate Dean (Academic – Architecture), or from faculty members. The University of Calgary has a comprehensive set of student support services (including advising, learning development, career guidance, writing support, etc.), the various services can be found in the accreditation website. Students, for various reasons (health, personal, financial, parental leave, etc.), can take leaves of absence from the MArch Program. These are typically worked out between the student and the Associate Dean. Academic (Architecture), and can vary in length from a few weeks to several months. The evaluation of student progress in SAPL occurs twice a year at Mid-Year Review (January) and Year-End Review (May). All student records are reviewed. Students performing very well are sent letters of commendation and are eligible for awards. Students performing poorly are given counselling sessions to help them improve their academic records. Students accused of academic misconduct are required to go through a regulated process. If students are required to withdraw they may first appeal to the SAPL Student Appeals Committee, and then to the appeals committee in the Faculty of Graduate Studies.

The University provides a range of services for Indigenous students, on EDIA, etc. – a list of websites is available in the accreditation website. SAPL does not provide internship placements, nor does it operate a co-op program. However, the MArch Program has recently developed a Work-Integrated Learning studio requirement that places students in offices to undertake workrelated research projects. SAPL provides opportunities for MArch students to be hired as Graduate Assistant Teaching (GATs) in various non-studio courses. Various faculty members have research grants that allow them to hire students, so in any given year students have good opportunities for paid research work. To see the number of students hired as GATs or Graduate Assistant Research (GARs), see the accreditation website. The MArch Program is able to provide scholarships and awards from various sources, these are used for entrance scholarships for outstanding applicants, continuing scholarships for high-performing students in the Program, and dedicated endowed scholarships and awards programs. A complete list of dedicated scholarships and awards are available on the accreditation website. Report Link:

https://saplaccreditation2023.squarespace.com/34-student-composition-wellbeing-and-enrichment



## 3.5 Faculty and Staff Resources

The APR must include:

- a description and tabulation of the academic and professional qualifications of faculty, as well as a description of the distribution of effort between teaching and the other responsibilities of each faculty member;
- a description of the distribution of effort between administration and other responsibilities for each position;
- a description and tabulation of the administrative and technical roles and qualifications of Program support staff, as well as a description of the distribution of effort whereroles and responsibilities are split among multiple tasks or positions;
- the Program's policy regarding human resources development opportunities;
- a description of the policies, procedures, and criteria for faculty appointment, promotion, and tenure;
- a description of faculty and staff development opportunities;
- evidence of how faculty activities encourage currency in the knowledge of changing demands of practice and licensure; and
- a description of the Program's approach to research, research activities carried outwithin the Program, and how the research may or may not inform the professionalcurriculum.

The School of Architecture, Planning and Landscape (SAPL) is comprised of talented, energetic, and dedicated faculty, administrators, and staff. There are currently 20 individuals active in the MArch Program as full-time and half-time faculty members (not including emeritus professors). Based on dedicated administrative assignments, leaves, and cross-assignments this calculates as 15.50 FTEs (Full-Time Equivalent), of these 4 are women, or 2.5 FTEs. The Program is expecting to hire another group of faculty in 2024, adding another 5.0-6.0 FTEs. The full-time faculty cohort as of July 1, 2023 (faculty qualifications are found in the CVs in Section 4.4, see also <u>https://sapl.ucalgary.ca/about/people/faculty</u> and the accreditation website.

Sessional instructors are contracted to teach specific courses on an annual basis (sessional instructor qualifications are found in the CVs in Section 4.4). The position of Adjunct Professor is an official limited-term appointment to the University. A list of sessionals and adjunct professors can be found in the accreditation website. The operations of the School are managed by the executive leadership team, including the Dean, the Associate Deans, the Associate EDI Director, and the Manager of Faculty Operations, working in collaboration; this group meets regularly. In addition there is the recently created Associate EDI Director and the Graduate Program Director. The MArch Program is administered by the Associate Dean, Academic (Architecture) who has a 50% administrative appointment, and who is responsible for decisions directly impacting the day-to-day administration of the Program. See accreditation website for organization chart and detailed information. The job titles (and descriptions) and personnel among the support staff have been reorganized recently to address changes in the School.

All staff members perform tasks that support the MArch Program faculty and students, and no staff member is assigned exclusively to the Program (except an assistant who is assigned 40% to the Associate Dean. All support staff are hired or released by Human Resources with the approval of the Dean, they are managed by the Manager, Faculty Operations, Administration and Facilities, in consultation with the executive leadership group. The qualifications and job descriptions for support staff are precisely outlined in a 10-page document developed by the School's administration. Each of the support staff positions have specific assigned roles. For further information see: <a href="https://sapl.ucalgary.ca/about/people/staff">https://sapl.ucalgary.ca/about/people/staff</a> along with the accreditation website.



The full-time faculty in the MArch Program are hired by the School of Architecture, Planning and Landscape (SAPL) and are responsible to the Dean. The teaching assignments are handled by the Associate Dean, Academic (Architecture). The traditional Teaching/Research position has recently been augmented by the Teaching professor, both follow the same career trajectories. Information on Academic Employment Types can be found at: <a href="https://www.ucalgary.ca/hr/hiring-managing/academic-employment-types">https://www.ucalgary.ca/hr/hiring-managing/academic-employment-types</a>. SAPL recognizes that "research" encompasses a wide range of modes including: - Scholarship and publication of technical, pedagogical, theoretical, or historical research in peer-reviewed journals, books, conferences, etc.; - Peer-reviewed design and creative works; - Peer-reviewed critical practice, or professional activities that advance "best practices" within a professional area of specialization, or activities that advance the theoretical underpinnings of the profession; - Expert witness in construction litigation or other proceedings; - Technical reports; and, - Community engagement and professional advocacy.

Policies pertaining to the career development of faculty members are addressed at the University and School levels in a series of documents, see the accreditation website for details. Tenured faculty members are evaluated biennially with respect to performance through a SAPL committee and then a Unviersity committee. The research activities in the School are overseen by the Associate Dean, Academic (Research and Innovation).

Consistent with SAPL's strategic mission to prepare future-ready design innovators, the MArch Program demonstrates a commitment to research-integrated learning. The development of research labs and groups has been a vital initiative in recent years and includes the Laboratory for Integrative Design, the Center for Civilization, and the Structural Design Lab, see: <u>https://sapl.ucalgary.ca/research/groups-and-labs</u> Report Link: <u>https://saplaccreditation2023.squarespace.com/35-faculty-and-staff-resources</u>

Space and Technology Resources

The APR must include:

- a general description with labeled plans indicating seminar rooms, lecture halls, studios, offices, project review and exhibition areas, libraries, computer facilities, workshops (including technology), and research areas;
- a description of any changes to the facility (including furniture, equipment, etc.), whether under construction, funded, or proposed;
- a description of workshop and fabrication resources including equipment, infrastructure, and other resources available to students, faculty, and staff; and
- a description of the information technology available to students, faculty, and staff, including hardware, software, networks, services, staff, and other computer resources.

The School of Architecture, Planning and Landscape (SAPL) is well-endowed with space, furniture, and equipment to support the activities of the Master of Architecture (MArch) Program. The School currently has two facilities: the primary main campus location in the Professional Faculties Building which the School has occupied since 1994; and the City Building Design Lab (CBDLab) in the former main library in downtown Calgary that the School as used since 2019 as a facility for teaching, community-oriented programs, and events.

As result of the establishment of the new 4-year Bachelor of Design in City Innovation (BDCI) undergraduate degree program, which is taking in 75-100 students a year starting in the Fall 2023,

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the Master of Architecture Program has mainly relocated to the downtown location until a new consolidated facility is developed in the downtown core, this will likely be a renovated existing building. The location of postsecondary academic units in downtown Calgary is being actively promoted by the City of Calgary. Since 2019 the downtown campus location (CBDLab) has occupied two floors (main and lower level) when the space adjacent to City Hall. In the fall 2023 a third floor was added to the CBDLab to accommodate moving the MArch Program downtown.

A list of specific spaces and floor plans are in the accreditation website. Each MArch student has a dedicated workstation of about 5-6 m2, equipped with an adjustable table and a chair. Shared lockers are also available in the studio spaces. Foundation and M1 students occupy the studio space on the 2nd floor of the CBDLab and M2 students occupy the main level the CBDLab studio, space provided by Work-Integrated Learning partners, and space provided in Barcelona and Tokyo for the study abroad program.

The growth of the program to its current size, of 170 students in three years (including ARST Minor students), has been accommodated in the current facilities. The studios are organized as open and flexible work environments that encourage collaboration between students. Students can also work in classrooms (when not in use) and other work areas scattered throughout the School. The students also have a dedicated lounge on the main floor of the CBDLab. Each faculty full-time member has a private office (with a window) of about 13 m2. Sessional instructors have shared offices to use. Dedicated research space is located throughout the SAPL main campus.

The administrative staff ae well-accommodated in the SAPL reception area, along with the Dean's office and staff lounge. The facility on campus and the downtown CBDLab are overseen by the Manager, Faculty Operations, Administration and Facilities. This person coordinates any management issues with the leadership team, and the various groups in the School (students, faculty, and staff) should anything arise. Ensuring an overall safe and healthy working and learning environment is always a key priority.

A large workshop (555 m2) is located on the 1st floor of the main campus facility, and a smaller workshop space in the downtown CBDLab (95 m2). The main workshop is well-equipped for working in wood, metals, and plastics. A list of equipment is available in the accreditation website. All students newly entering the MArch Program must take extensive safety training before they can use the workshop facilities. Lectures and demonstrations by University experts and SAPL workshop technicians detail safety procedures and the correct use of machines and materials. Workshop training is handled during the Orientation Week in early September, and through a number of assignments (including a demonstration project) in the first weeks of a student's first term in the School.

The University supports wireless internet connectivity across its various campuses. MArch students are required to have a laptop for their studies, but still take advantage of student software licenses and the School's Computer Lab. The MArch Program tends not to use the Lab heavily, and delivers Graphics instruction in other classroom spaces. MArch Program students tend to get software from various sources and use programs like Rhino, Revit, Grasshopper, Maya, and InDesign (a partial full list is in the accreditation website).

The SAPL Computer Lab has 30 desktop workstations set up for tutorials and classwork. The Lab supports advanced work in CADD, geographic information systems (GIS), multimedia design, and



the simulation of building and environmental systems. SAPL does not have a dedicated IT technician, instead the University's Information Technologies department provides IT support for learning, teaching, research, and administration. The Information Technologies group provides prompt support for basic IT issues. Students, faculty, and staff use computers in many ways, these are well supported by SAPL and the University. Report Link: <a href="https://saplaccreditation2023.squarespace.com/space-and-technology-resources">https://saplaccreditation2023.squarespace.com/space-and-technology-resources</a>

## 3.6 Information Resources

APR must include:

- a description of the library, including library collections, visual resources, digital resources, services, staff, facilities, equipment, and budget/administration/operations;
- a library statistics report; and
- a current action plan outlining recurring levels of staff support; renewal of hardware, software, equipment, and infrastructure; anticipated modifications to the currentinstallation; and a demonstration of sufficient funding to execute the action plan.

#### \*Please see report link for formatted tables\* Report Link:

https://saplaccreditation2023.squarespace.com/37-information-resources Architecture information resources are managed by the administrative unit Libraries and Cultural Resources (LCR) at the University of Calgary. LCR is comprised of the University Libraries, Archives and Special Collections, Galleries, the University Archives, and University of Calgary Press – all of which support the Master of Architecture (MArch) Program in the School of Architecture, Planning and Landscape (SAPL). LCR has built a sizeable collection of learning materials, including books, journals, data, and other information sources, relevant to the MArch Program and SAPL broadly. Faculty, instructors, and students can contact the Librarian for Architecture, Landscape and Planning to purchase learning materials as required. For any items not available in LCR, these can be borrowed from other libraries through the library's Interlibrary Loan service and provided free-ofcharge to students, staff, and faculty. The budget for architecture collections and the Library Statistics Report are as follows. Tables 1 and 2 present recent additions in NA (Architecture) classification. Table 3 includes titles from other disciplines relevant to architecture (e.g. construction, engineering, ecology).

Table 1: Architecture Print and eBook Acquisitions - 2021-2023 Expenditures by Year 2021 2022 2023 Total Books classed as NA (print and eBook) \$34,112 \$35,051 \$40,000\* \$109,133 TOTAL: \$34,112 \$35,051 \$40,000\* \$109,133

Table 2: Architecture Print and eBook Acquisitions – Title Counts Titles Acquired2021 2022 2023 Total Books classed as NA (print and eBook) \$231 246 275\* 752TOTAL: \$231z246 275\* 752 \*Data estimated as year is in progress. Based on currently activesubscriptions and those in negotiation.

Table 3: Cumulative Architecture (and related topics) Titles in Collection Title Counts As of 2023 Total Books classed as NA – print 16,405 16,405 Books classed as NA – electronic 3,304 3,304 Journals classed as NA – current subscriptions 310 310 Journals classed as NA – total current and past (i.e. library has past volumes available in collection) 918 918 Other Books classed as TH, SB, TA, TK, TJ 96,212 96,212 Microfilm reels 1587 1587 Microfiche 487 487 Videos 351 351 Digital Image Files 68214 68214 LCR operates eight libraries across the University of Calgary, seven of which are available to students, staff, and faculty. The off-site High Density Library (HDL) provides additional space to store collections and materials for access by the University and external



communities upon request, with a one-business-day turnaround.

The six-floor Taylor Family Digital Library (TFDL) contains materials most relevant to SAPL and is easily accessible for students on the main campus. Since its opening in 2011 the TFDL has been recognized as one of the most technologically advanced academic libraries in North America. The TFDL has various facilities used by the MArch Program including a Visualization Studio with a highresolution display wall and surround sound. For more information on spaces and facilities see: https://library.ucalgary.ca/about.

The Canadian Architectural Archives (CAA) collects the work of prominent Canadian architects of regional, national, and international significance. As the first institution in Canada to concentrate solely on the collection of architectural records, the CAA's mandate was visionary in that the collections were intended to be as comprehensive as possible (including drawings, project files, photographs, models, etc.). The collection is rich in detail and historical precedents and provides an overview of 20th century Canadian and Albertan architectural history.

The CAA is a unique teaching and learning resource, as the holdings lend themselves to numerous interdisciplinary research opportunities. Students also have access to two university galleries, including the Nickle Galleries in TFDL and The Founders' Gallery at the Military Museums in Calgary (see <u>https://nickle.ucalgary.ca/about/</u>) The University of Calgary Press has a team of publishing experts who have worked with SAPL over the years. For further information see <u>https://press.ucalgary.ca</u>.

The Librarian for the School of Architecture Planning and Landscape provides tailored instruction for MArch courses, ensuring students are creating successful research topics, finding quality sources to support their work, working with academic integrity, citing and referencing correctly, and many other topics to suit the learning outcomes of the course. Many MArch students contact the Librarian for support with their assignments and research projects. LCR also offers a variety of general workshops on topics relevant to the work of students, staff, and faculty. Images are vital to the study of architecture, for presentations and as learning resources. The LCR image collections consist of +80,000 digital images acquired from external vendors with educational use rights, subscription databases, and image collections digitized in-house

## 3.7 Financial Resources

The APR must include:

• an itemized Program budget that includes operating and salary expenses and adescription of research funding, endowments, scholarships, and development activities.

The primary source of funding for the School of Architecture, Planning, and Landscape (SAPL) operations is the University operating grant from the Government of Alberta. The Master of Architecture (MArch) Program budget is developed and managed by the Associate Dean – Academic (Architecture), in consultation with the Dean and the Finance Partner. The following set of figures shows the MArch Program allocation and expenditures separately from those of the School. In comparing the MArch Program budget to the total SAPL budget, numbers have been pro-rated to 50 percent, which is the approximate ratio of architecture students and architecture faculty to the total numbers of students and faculty members in the School. School of Architecture, Planning and Landscape Income 2023-2024:

Operating Allocation: \$8,158,983 Credit Tuition: \$92,628 Other Fees: \$24,000 Endowment Income: \$1,564,583 Accreditation Report



Carryover: \$212,740 Total: \$10,052,914

MArch Program Operating Costs 2023-2024 MArch Program specific expenditures (operating costs) currently budgeted for 2023-2024, and listed under "Other Operating Costs" in the table above, are broken down as follows: CCUSA Dues: \$10,500 ACSA Dues: \$7,000 ARCC Dues: \$700 Faculty/Student Travel Support: \$5,000 Hospitality: \$2,000 IT Costs: \$1,000 Other Course Expenses: \$6,000 Total: \$32,200

The MArch Program offers a comprehensive range of scholarships, awards, and student assistantships. Notable scholarships include the Murray W. Waterman Architectural Awards for continuing students, the Cohos Evamy Partners Travel Scholarship, and the GEC Award of Excellence in Comprehensive Design. The School also administers a number of endowment funds that provide both scholarship and special projects money for students and faculty members. In addition, a portion of the SAPL operating funds is devoted to entrance and continuing scholarships (as in the School Budget table above). Scholarships for MArch students and actual numbers paid out in 2023-2024 can be found on the accreditation website.

A wide range research/teaching grants, donations, and contracts have been secured by MArch Program faculty members during 2017-2023. See the accreditation website for the full list. Development activities in SAPL are led by the Dean and Associate Dean (Research and Innovation), working with the Director of Development (SAPL). Since 2017, SAPL has secured \$5.3M in donations. This included an in -kind donation of \$2.5M to cover the rent and operating cost of the five-year lease of the space, and a further \$1.5M for five years of program support from Calgary Municipal Land Corporation to support the creation of the City Building Design Lab (CBDLab) in the former downtown Castell Main Library Building.

This gift leveraged the School's long-term commitment to community action into a new level of engagement resulting in, over the past five years, 67 externally funded research projects across 4 Grand Challenge themes, 211 funded Graduate Research Assistantship positions, collaborations with 30 AEC companies, 2176 attendees of professional learning opportunities and over 180 public and industry events and exhibitions.

The success of the CBDLab to SAPL's teaching, research, and community service agendas, as well as its demonstrated contribution to helping reinvigorate Downtown Calgary, has led to an institutional goal of relocating the entirety of SAPL's operations to a downtown location. In 2023, as part of its Office Conversion Program, the City of Calgary has designated funds to support this relocation which would see the school expand its footprint to 26,000 m2.

The University is currently seeking financial support from other levels of government to offset the costs for a 20-year lease in a vacant downtown office tower. The relocation to downtown and the expansion of the school's physical infrastructure is part of the newly approved SAPL Strategic Plan which identifies Optimizing Our Location as one of four strategic priorities.

The Strategic plan also identifies six more specific development priorities that will guide fundraising activities of the next five years.

1. Fund Design Matters lectures and exhibition programming

2. Fund Indigenous Pathways Program

3. Fund BDCI Strategic Roll-Out Initiative



4. Fund Community-based Research Innovation Incubation Initiative

5. Fund sustained operation of the City Building Design Lab

6. Diversify Global Studies Program and fund travel scholarships a list of major funds (donations, grants, and contracts) that have been secured by the School since 2017 can be found on the accreditation website. Link to Report: <u>https://saplaccreditation2023.squarespace.com/38-financial-resources</u>

## 3.8 Administrative Structure

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 if the Program is part of a multi-discipline unit.

The University of Calgary is authorized by the Province of Alberta as a degree granting institution. Like other Canadian universities it is not accredited as a whole by anybody or authority. The University of Calgary is a member of the Association of Canadian Universities and Colleges and is recognized globally as a major Canadian university with respect to its size, facilities, and the breadth and quality of its programs. As a large research-intensive university it is part of the U15 Group of Canadian Research Universities. The University belongs to multiple organizations and is a leader in campus sustainability.

The University has two governing bodies: the Board of Governors is the corporate body charged with the management and control of the University, its property, revenue, business, and affairs; and, the General Faculties Council (GFC) is primarily responsible for the academic affairs of the University, subject to the authority of the Board of Governors. The School of Architecture, Planning and Landscape (SAPL) is one of fourteen Faculties and Schools, which constitute the University's academic organization. Each Faculty or School has a Faculty Council empowered to determine the School's programs of study, provide for the admission of students, set conditions of withdrawal, and authorize the granting of degrees subject to conditions determined by GFC.

The Faculty Councils, as the official legislative body of each Faculty or School, strike committees, both standing and ad-hoc, which report to Council and administer affairs within its jurisdiction. As a graduate school, SAPL also operates under the regulations of the Faculty of Graduate Studies. Within SAPL, the administrative structure reflects an academic democracy.

The management of the School (or executive leadership team) consists of the Dean, four Associate Deans, two directors, and the Manager of Operations. SAPL is a non-departmentalized unit, though each program maintains autonomy in areas of budget, curriculum, teaching assignments, admissions, and so on. Program decisions are further discussed at leadership team meetings, Faculty Forum, and ratified by the Faculty Council. As legislative decisions are ultimately a School responsibility, the Master of Architecture (MArch) program is required to be properly reflective, articulate, and persuasive about its goals and values. Within this framework the MArch Program has the autonomy to establish its own strategic objectives, curriculum and standards, subject to approval by SAPL and the Faculty of Graduate Studies. The Associate Dean, Academic (Architecture) is appointed by the Dean based on a recommendation of the MArch Program. Historically the appointments are for a three-year term and have been on an internal rotating basis. The Associate Dean, Academic (Architecture) has the overall responsibility and accountability for



curriculum, professional accreditation, student advising, admissions, professional liaison, teaching assignments, faculty performance assessment, and financial and administrative planning within the *Program*.

The final authority for academic programs and budget rest with the Dean, therefore, the recognized academic unit, for the purposes of accreditation is the School of Architecture, Planning and Landscape (SAPL). The professional accredited degree offered by SAPL is the Master of Architecture. The degree is of three years duration (seven semesters), including the one-year Foundation program, if needed by the student.

SAPL offers a range of degree programs. The Master of Architecture degree program is complemented by the professional degree programs in landscape architecture (MLA) and planning (MPlan). The School also offers two undergraduate pre-professional programs (ARST Minor and BDCI), and three post-professional graduate degrees (MEDes, PhD, DDes). The new the Bachelor of Design in City Innovation (BDCI) was approved as a degree program in 2022 and launched with its first cohort of 75 undergraduate students in September 2023. Administered by an Associate Dean it is the first complete undergraduate degree offered by SAPL. See the SAPL website for further information: <u>https://sapl.ucalgary.ca/future-students/undergraduate/bachelor-design-city-innovation</u>

The Minor in Architectural Studies (ARST) was approved in 1999, and has been housed in SAPL since 2013. The ARST Minor is administered by the Associate Dean, Academic (Architecture), with the support of undergraduate student advisors. A student in the ARST Minor must have a major in another Faculty, typically in the Faculty of Arts, the Faculty of Science, or the Haskayne School of Business. The Minor is equivalent to the Foundation year (in cross-listed courses) of the professional accredited MArch program and is intended for students intending to apply to the M1 year, see: <a href="https://sapl.ucalgary.ca/future-students/undergraduate/minor-architectural-studies-arst">https://sapl.ucalgary.ca/future-students/undergraduate/minor-architectural-studies-arst</a> Report Link: <a href="https://saplaccreditation2023.squarespace.com/39-administrative-structure">https://saplaccreditation2023.squarespace.com/39-administrative-structure</a>

#### 3.9 Professional Degrees and Curriculum

The APR must include:

- specification of the degree(s) offered;
- an outline of the curriculum of the Program describing how each performance criterion included in Section 3.11 is met and how the Program achieves its pedagogical goals;
- a description of any Program components that are outside of the administrative purview of the unit or institution that is accredited;
- a summary description of processes and requirements related to degree Program admissions that make up the Program, including those governing student applications for advanced placement; and
- student admission assessments concerning advanced placement within the Program.

#### CACB link to Requirements for Acceptable Degrees

The School of Architecture, Planning and Landscape (SAPL) offers a seven-semester professional program leading to the degree Master of Architecture (MArch). The MArch degree is reserved for students completing a program of study in architecture that meets the CACB criteria for



accreditation. Together with a related or unrelated Bachelor's degree this meets the CACB criteria of "a minimum of six years of post-secondary study culminating in a Master of Architecture degree." The Faculty of Graduate Studies calendar entry lists the required courses for the MArch degree, see: <u>https://www.ucalgary.ca/pubs/calendar/grad/current/architecture-arch.html</u>

This required curriculum is augmented and enriched by elective courses. The MArch Program curriculum has been developed and refined over many years and went through a readjustment (beginning in the fall 2020) to secure the future of the study abroad program, introduce a Work-Integrated Learning studio, and to modify the elective requirements. The curriculum is divided into courses devoted to design, communications, history, theory, professional practice, and electives to meet the PPC and SPC requirements.

The MArch Program has developed a structured approach to design education culminating in the Comprehensive Studio, and followed by senior option studios; this is augmented by the first two Graphics courses.

The Program has a comprehensive range of technical courses. History, theory, and professional practice are also crucial topics in the curriculum. Finally, electives round out the curriculum. The full degree is 106.5 course units, with 84.0 units devoted to required courses and 22.5 units to electives (see description of units below).

The curriculum for the professional MArch Program can be found in the accreditation website. The academic year consists of three semesters: Fall, winter, and Spring/Summer (excluding block weeks). According to the University a half course consists of 3 class hours per week for a semester, or 3 units. A full course consists of 6 hours per week for a semester; studio courses in SAPL are scheduled for 16 hours per week, or 6 units. A quarter course consists of 18 contact hours, and can be delivered in various modes, or 1.5 units. Three times a year (October, January, and March) the School suspends regular classes for a week so that special topic and intensive required courses, or Block Courses, can be taught.

The Foundation year of ten cross-listed courses is shared with the Minor in Architectural Studies (ARST), students who complete this program can apply directly to the M1 year. Augmenting the required curriculum are elective courses from which each student can customize their architectural education according to their diverse interests. Elective requirements can be met through a combination of MArch Program elective courses, courses offered by other SAPL Programs, or University-wide course offerings.

Students are required to take at least once one of the following block courses: Gillmor Theory Seminar, Somerville Design Charrette, or the Taylor Workshop. Elective course offerings vary for year to year, the list of 2022-2023 electives is found in the accreditation website.

Students applying to the Master of Architecture Program come from three streams:

- 1) Holders of a Bachelor's degree in any subject area (including the new Bachelor of Design in City Innovation), if admitted, enter the Foundation year;
- 2) Students completing various undergraduate degree program with a Minor in Architectural Studies (ARST Program managed by SAPL) apply to year the MArch Year One (M1) cohort;
- 3) Students with pre-professional or professional degrees in architecture apply to the MArch Year One (M1) cohort. See: https://sapl.ucalgary.ca/future-students/admissions/march.

The Minor in Architectural Studies provides an undergraduate stream into the professional MArch Program and has a number of benefits. On the completion of their degrees (with the ARST Minor), high-performing students can apply to the MArch Year One (M1) and to professional architecture degree programs elsewhere. The launching of the Bachelor of Design in City Innovation (BDCI)



program by SAPL in the fall 2023, is intended to be an innovative design-oriented degree that focuses on the concept of the "global citizen."

Incoming students may apply for advanced standing (or course waiver) or advanced credit for courses in which they can demonstrate full equivalency; this does not apply to electives or studios. Students holding an undergraduate degree from an accredited North American architecture program and are applying to the two-year MArch, you must complete and submit the course waiver form with their application, along with relevant course outlines. University of Calgary applicants with the Minor in Architectural Studies (ARST) are not required to do this. ARST Minor and Foundation Year/three-year program applicants can request a course waiver using the course waiver form. Report Link: <a href="https://saplaccreditation2023.squarespace.com/310-professional-degrees-and-curriculum">https://saplaccreditation2023.squarespace.com/310-professional-degrees-and-curriculum</a>

## 3.10 Performance Criteria

The APR must include:

- an overview of the curricular goals and content of the Program;
- a thematic summary of how the six program performance criteria (PPC) and twenty-four student performance criteria (SPC) are acknowledged in the structure and deployment of the curriculum described below; and
- a graphic matrix that cross-references each course with the student performance criterion (SPC) it addresses.

Report Link: <u>https://saplaccreditation2023.squarespace.com/3111-program-performance-criteria</u> The courses that comprise the curriculum are grouped into design, communications, technology, history, theory, professional practice, and electives. The curriculum is designed to both meet CACB accreditation criteria and the areas of concentration outlined in section 1.0: digital design and fabrication, contemporary urbanism, critical practice, sustainable design, and history and theory. The curriculum strikes a balance between theory and practice, with an effort to consider the requisite skills of architects today and into the future.

The first year (Foundation) presents a set of courses that provide foundational design skills along with drawing and history. Key courses also include an introductory course on sustainability and the first building science course. These courses ensure that students are prepared for the next stage of the curriculum along with introducing students to key concepts, such as the contemporary city and housing (the subject of the second semester studio), that shape the program.

The second year (M1) introduces students to larger and more complex building types, typically institutional buildings. The core design theory course is offered in the first term, and by building on the history courses, allows students to understand the ideas that have impacted architecture during the last century. This is complimented by the first structures course, and the innovative Leadership and Architecture (ARCH 604) block course which introduces modes of architectural practice. The integration of technology and professional practice courses at this point in the curriculum, sets students up for the fourth semester which concentrates on a comprehensive studio project, affirming the Program's commitment to technical training

The Spring/Summer term is where students have an opportunity to undertake an urban design studio in Barcelona, Tokyo, or Calgary; contemporary urbanism is a key theme throughout the curriculum with Calgary being regularly used as a laboratory for examining existing and emerging building technologies.



The first semester of the final year (M2) is taken up with the Work-Integrated Learning studio which allows students to learn in a professional setting. This course is paired with the semester-long Professional Practice course (ARCH 618). The remaining courses, including the final studio, are elective or option courses that allow students to highly customize their course selections. A broad range of electives are offered that address design, history/theory, and technology topics including the use of advanced technology, Indigenous approaches to design, equity issues, and visiting lectureships. Within the framework of the curriculum the core requirements of CACB accreditation are balanced with a wide range of elective course offerings.

Ultimately, the curriculum is designed to allow for graduates to pursue a wide range of career options in professional practice, academia, and related disciplines (real estate development, administration, construction, other design disciplines). Graduates from the last 20 years are working as partners and associates in firms and holding academic positions across North America and Europe. A thematic summary of how the six program performance criteria (PPC) and the twenty-four student performance criteria (SPC) are acknowledged in the structure and deployment of the curriculum described below.

The six Program Performance Criteria (PPC) provide a useful road map for evaluating the overall structure of the curriculum. As noted above preparing students for professional practice is taken seriously by the Master of Architecture (MArch) Program, in terms of technical training and the suite of professional practice courses. This is augmented by the sequence of design studios which are carefully managed to ensure that students develop design skills effectively, design is the core skill that an architectural education provides, allowing for the integration of knowledge, creativity, communications, and technical skills. Exposing students to a diverse range of approaches and realities is a core value of the School of Architecture, Planning and Landscape, reflected in the curriculum, the study abroad offerings, and the new Bachelor of Design in City Innovation (BDCI) with its concentration on the "global citizen." Collaboration is stressed through the curriculum, especially in the Comprehensive Studio (ARCH 616) where students work in a team of two.

Students have many opportunities to work with various communities and to learn leadership skills (including the Leadership in Architecture (ARCH 604) course). Students take technical courses throughout the curriculum and are generally eager to learn about structures, envelope systems, and newer fabrication technologies. Breadth of education is contained in the curriculum, especially through elective course offerings, and also in the undergraduate experiences that students possess; employment and diversity of backgrounds also adds to the breadth of the learning environment. The MArch Program strives for a balanced approach to the integration of Student Performance Criteria (SPC) in the curriculum.

The majority of the SPCs are addressed in the first two years of the Program (Foundation and Master Year One (M1)), with the remaining year (Master Year Two (M2)) devoted to senior studios, electives, and the professional practice course (in harmony with the Work Integrated Learning studio). The Foundation Year emphasizes basic design skills (at the residential scale) and graphic communication, and introduces students to architectural history, sustainability, and building science. MArch Year One (M1) develops design skills with an emphasis on medium to large sized public buildings, comprehensive design, building science (including structures, envelopes, lighting, and building systems), leadership, and architectural theory. The required courses presented in the three years (seven semesters) of the MArch degree address the CACB's SPCs according to the graphic matrix and qualitative descriptions of each course below. Report Link: https://saplaccreditation2023.squarespace.com/3111-program-performance-criteria



## 3.10.1 Program Performance Criteria

The Program must provide its students with a well-thought-out curriculum with educational opportunities that include general studies, professional studies, and elective studies. Each of the PPCs must be addressed in a clear narrative statement and with reference to any relevant supporting documentation.

## **PPC 1. Professional Development**

The Program must demonstrate its approach to engaging with the profession and exposing students to a breadth of professional opportunities and career paths, including the transition to internship and licensure

The Master of Architecture (MArch) Program seeks to establish in each graduate a moral and ethical foundation that is consistent with both professional architectural legislation (the provincial Architect's Acts) and social responsibility. An important role of the School of Architecture, Planning and Landscape (SAPL) is to inform the student about the nature of the design professions, the world in which they operate and the opportunities that therefore arise.

The School (formerly the Faculty of Environmental Design) was founded on the desire to critically transform the nature of the professional in society. In coursework and other venues, the ethical and moral responsibilities of the design professional are presented within a broad range of disciplinary contexts. The MArch Program seeks to balance an understanding of registration criteria and procedures with a creative and realistic long view of practice opportunities.

Graduates from the Program are well prepared for internship and professional registration. While most students aspire to registration, studies have shown that a large number also will seek — and excel at— alternative careers in academia and industry. A high percentage of recent graduates are employed in professional practices. Since the last accreditation site visit in 2017 (Spring 2018 Convocation to spring 2023 Convocation inclusive), the MArch Program has graduated 317 students. Many are interns with the AAA or other registration bodies across Canada and abroad.

The Professional Practice course (ARCH 618) offered in the fall of the final year (M2) provides one vehicle for introducing students to internship and registration, as does the Leadership course (ARCH 604) offered in the M1 Year; the Leadership course also presents students with alternative career path options. The recently created Work-Integrated Learning studio (ARCH 700) offered in the fall of the M2 Year, is a vital opportunity for students to experience an architectural firm; students work on projects supervised by practicing architects that are mutually beneficial.

The three Professional Practice courses are designed to work together to deliver a broad range of related content in different learning formats. Further, the SAPL Student's Association holds an annual networking event with local design firms. Most students also seek summer employment in architectural offices, and graduates have had little difficulty finding work and integrating effectively into the profession. Therefore, students upon graduation have a well-developed sense of the profession and the requirements of internship, registration, and professional conduct. The MArch Program enjoys a positive and cooperative relationship with the Alberta



Association of Architects (AAA). Through SAPL representation on the AAA Council, formal contact and continuity is maintained. The AAA also sponsors several annual awards and prizes for students in the Program.

Many SAPL alumni have served on the AAA council, including several recent AAA Presidents. The MArch Program strives for a seamless relationship between the university setting and professional practice. Professional practice is encouraged and recognized by SAPL for tenure and promotion. There are many active practitioners among our sessional instructors, adjuncts, and studio reviewers, as well as professional Planners and Landscape Architects in the other Programs in the School. Therefore, students are exposed to both theoretical and practical aspects of design, and to an educational milieu that promotes excellence in professional design practice. <u>https://saplaccreditation2023.squarespace.com/3111-program-performance-criteria</u>

## **PPC 2. Design Education**

The Program must demonstrate how it situates and values education and training in design at the core of the curriculum, including the ways in which the design curriculum weaves together the social, technical, and professional streams of the curriculum.

The MArch Program consider the design studio courses as the core of the curriculum. This occurs across seven semesters during which students learn the fundamentals of design, develop graphic and digital drawing skills, learn about the contemporary city, design a comprehensive studio project, experience a professional work situation, and experiment in design. The first four semesters are a structured sequence of studio that give students a strong introduction to design and a robust set of skills. This is followed by a study abroad option, a Work-Integrated Learning option, and a research studio option. Design is a unique mode of creative and technical practice that gives MArch Program graduates a synthesized set of skills that allows them to address a broad range of societal challenges

The first Foundation studio (ARCH 506) introduces basic function, form, space, and site concepts, along with the concept of "critical thinking" as a design attitude. The studio is structured to address precedent analysis, architectural typologies, program/site mapping, and design as a synthesis of factors. The parallel training in drawing occurs in Graphics Workshop I (ARCH 504).

The second Foundation studio (ARCH 514) addresses residential design in the urban context. Addressing a range of scales, the studio examines the making of an object, the design of a single residential unit, the urban analysis of a context, and the design of a multi-unit residential project. The second Graphics Workshop (ARCH (ARCH 512) is the related course. In the M1 year students address a larger more complex program in an urban context in the third core studio (ARCH 606). Here they continue to develop their understanding of urban environments and begin to consider structure (along with ARCH 600), egress, and enclosure systems. The fourth term culminates the foundational training in design when students take the Comprehensive Architectural Design Studio (ARCH 616). Working in pairs the students address the full complexity of a building including examining structure, understanding HVAC, addressing building codes, and designing envelope systems; this course works closely with four technical courses offered during the same semester.

During the Spring Summer term of M1 students can opt for a study abroad experience in Barcelona or Tokyo, where urban design is the emphasis of the studio; if they don't go abroad they take a comparable studio in Calgary. The M1 year offers various Work-Integrated Learning options (ARCH 700) which places students in professional offices to work on projects of mutual benefit to the students and the firm. This gives students an introduction to how various kinds of firms operate.

The final studio (ARCH 702) is a research-oriented studio offered by a faculty member or a sessional instructor and can examine a wide range of themes. Within the overall studio sequence students gain a broad set of skills, from design to technical knowledge, and from learning about the city to learning about professional practice. Courses in history and theory also provide important perspectives as students develop their design skills.

## PPC 3. Global Perspectives and Environmental Stewardship

The Program must demonstrate how it embraces the diverse contexts that define contemporary architecture, including local, global, and environmental interests.

One of the most vital tasks of the architect is to create spaces that sustainably support and enhance human activity across a diverse range of settings and cultures. This means dealing with complex factors of culture and environment. It is the view of the MArch Program and SAPL that satisfactory solutions to complex social problems will be found not through the creativity and competence of the individual architect alone, but through collaborative work that engages both an appropriately broad range of expert knowledge and the support of those who have a stake in the outcome.

While the rapid globalization of culture offers, on the one hand, the opportunity for greater richness and diversity of expression and meaning, it presents, on the other hand, the real risk of homogenization and the loss of the distinctive and valuable qualities of many regional cultures. The School is committed to interdisciplinary design, broadly defined, and design across scales from products to the study of ecosystems; architecture students primarily address buildings and urban ecologies.

The MArch Program has a strong commitment to sustainable design, reflected in various aspects of the curriculum. In preparing graduates to address, through architecture, the dilemmas of contemporary society, the MArch Program must balance the need for strongly held values with the need for the recognition of, and tolerance for, the pluralistic values and goals of an increasingly diverse society. Propelled by its strategic plan, SAPL has taken a leadership role in Calgary, promoting the value of design and planning to the growing city. SAPL has expanded its presence within the cultural life of the city through the establishment of the City Building Design Lab (CBDL) facility in the downtown core adjacent to City Hall, and through its involvement with activities such as festivals, lecture series, publications, and gallery exhibitions. The School also offers study abroad semesters in Barcelona and Toyko, which a majority of MArch students participate in.

These courses expose students to complex global societies. The understanding of diverse cultures, genders, ethnicities, and the like is also provided in the architectural history and theory



courses in the required curriculum. The broad range of visitors to the MArch Program also exposes students to national and international outlooks.

The launch of the new undergraduate program, in the Fall 2023, leading to a Bachelor of Design in City Innovation (BDCI) degree has a strong emphasis on the concept of "global citizenship," or training students in a broad set of skills that will prepare them to tackle complex contemporary challenges [link to website]. This is the School's first undergraduate program, and will involve a number of new faculty hires, and is expected to accommodate 400 students across four years. The degree is also a pre-professional option for entry into the MArch Program and other professional programs in the School.

## PPC 4. Collaboration, Leadership, and Community Engagement

The Program must demonstrate how it supports and fosters effective individual and team dynamics, a spirit of collaboration and inclusion, community engagement, and diverse approaches to leadership.

In the School, all students are immersed in an interdisciplinary and collaborative design environment where they are exposed to a broad range of professional, environmental, and design related topics and challenges. This is reflected in the open studio working and teaching environment where students work in studio areas in team arrangements, but also actively take advantage of many other spaces in the building to work on shared assignments, etc. The social and cultural aspects of professional design practice are addressed in, among others, the history and theory, sustainability, and the professional practice courses.

In the Professional Practice course (ARCH 618), students are exposed to the issues involved in balancing client, public, creative, and leadership responsibilities. They engage with allied professionals, such as landscape architects, engineers, project managers, building developers, who participate in making the built environment. In this and other courses, students are presented with opportunities to work in groups and interdisciplinary teams to learn about collaboration and team organization. The leadership roles of future design professionals represent a further important aspect of the curriculum in the MArch Program, and in SAPL more broadly. Leadership training has been a key part of an innovate professional practice course established in 2016 entitled "Leadership and Architecture" (ARCH 604). Architecture students are also active in a variety of associations, including the SAPL Student's Association, and the Alberta Association Architects (AAA).

SAPL, established as the Faculty of Environmental Design in 1971, has a long tradition of community involvement and activism. Over the years, interdisciplinary teams of students and faculty have worked with numerous groups and communities on projects ranging from transient housing to community advocacy planning. The MArch Program remains committed to this tradition of activism. This is reflected in recent studios and design-build projects, and through the research projects of various faculty members. Further, faculty members, adjuncts, students, and alumni are involved in local and regional design issues in a wide range of capacities, through professional practice, research, and serving on volunteer committees for the profession, the city, and other community organizations.



## PPC 5. Technical Knowledge

The Program must describe how it engages fundamental and emerging technical aspects of building construction.

The March Program has had for many years a strong commitment to teaching technical knowledge and to integrating this into the studio stream of courses. This is evident in where courses are placed in the curriculum and how they cross-integrate with studio courses, particularly during the Comprehensive Architectural Design Studio (ARCH 616) semester. The commitment is also evident in the three dedicated faculty [confirm] who teach and research in this area.

The Program understands that there is a significant technical component to the practice of architecture, and the construction of buildings. In the second semester of the Foundation year the students take the first Building Science and Technology (ARCH 508), this course provides a broad range of theoretical knowledge about the performance requirements of buildings, including subjects like heating/insulation, water management, basic structures, codes, and systems [confirm]. In the first semester of M1 students take the first Structures for Architects (ARCH 600) course, which also provides a theoretical foundation in the subject; this course has some parallels with the Intermediate Architectural Design Studio (ARCH 606).

The second semester in M1 is where the Comprehensive Architectural Design Studio (ARCH 616) occurs. Here four technical courses are closely integrated with the studio course, something the teaching team works carefully on in the review of studio assignments. The technical courses are Architectural Lighting Design (ARCH 608), Structures for Architects II (ARCH 610), Building Science and Technology II (ARCH 612), and Environmental Control Systems (ARCH 614). In the Comprehensive studio students are exposed to the full scope of an architectural project form concept deign through to technical drawings, and experience that helps them transition to practice.

## PPC 6. Breadth of Education

The Program must demonstrate how it provides an opportunity for students to participate in general studies and elective studies in the pursuit of a broad understanding of human knowledge and a deeper study of topics within the discipline of architecture.

Architectural education is itself a broad education in design/drawing, history/theory, technical subjects, professional practice and the like. The history and theory stream, which operates in a Humanities mode, ensures that students can critically select material and write competently. They are exposed to a broad set of writings and concepts in these courses. The technical stream provides another mode of learning, more closely aligned with Engineering as a discipline. A broad range of elective courses allows students to "customize" their educations by selecting from a range of course offerings, these include block courses, studio selective courses, and an evolving set of elective course offerings.

While the School's programs are founded on collective goals and values that we see to be important to society, the environment, and the profession, the content and methodology of the MArch Program is also directed to the individual student. The CACB's emphasis on lifelong personal and professional growth and development is well-founded, particularly in today's



changing professional environment.

Students enter the program with a variety of backgrounds, and with a range of understandings about the nature of the profession. Some are drawn to architecture by their interest in formmaking, others as a means for social or environmental change. Some students see the study of architecture as one more academic adventure, and some come with heads full of technical knowledge. All have some idea of the way they intend to practice, although some, through experience or observation, are looking for alternative ways of practicing design. The MArch Program shares with the CACB the notion that students should have a well-rounded education. Students in the Program normally possess a Bachelor's degree from a recognized university of postsecondary institution. The students come from a wide range of academic backgrounds, which contributes significantly to the culture of the Program; there are no prerequisites regarding undergraduate courses or programs. The requirement of an undergraduate degree provides an important breadth dimension to a student's education and demonstrates that students are mature and can perform well in a graduate professional program. Based on their undergraduate studies, students entering the School have been successful in disciplines that see the world in various ways. The ability to shift into new ways of thinking and to apply fundamental values and skills to new situations is essential to success in the School and during a career; it is also a foundation for lifelong learning and development. The undergraduate experiences that student have contributes importantly to the breadth of education

## 3.10.2 Student Performance Criteria

## A. Design

#### A1. Design Theories, Precedents, and Methods

The student must demonstrate an ability to articulate a design process grounded in theory and practice, an understanding of design principles and methods, and the critical analysis of architectural precedents.

The ability to articulate design theories and methods are primarily addressed in the first two studios, or the "foundation" sequence.

The first studio (ARCH 506), in conjunction with Graphics Workshop I (ARCH 504), is carefully structured to address the fundamentals of form, space, program, site, and process; it also addresses concepts of precedent and typology, context analysis and mapping, design, and synthesis. The second studio presents approaches to design through explorations in housing and urbanism (ARCH 514), alongside Graphics Workshop II (ARCH 512). In these courses precedents and theory as used in a variety of ways. Subsequent studios examine institutional projects and comprehensive design, and offer study abroad opportunities, a Work-Integrated Learning experience, and experimental options.

The addition of the Work-Integrated Learning studio (ARCH 688) introduces students learning in various kinds of practice situations. Students are exposed to a broad set of approaches, scales, and building types throughout the studio sequence, developing design processes grounded in theory, practice, methods, and precedents. The two Graphics courses (ARCH 504 and 512) are designed to give students the drawing tools to support their learning about design processes. Students are introduced to topics like orthographic drawing, 3D modelling, materiality and making, as they gain proficiency in visual communication. Both courses address the use and



#### analysis of precedents.

The primary theory course (ARCH 602) introduces a set of key ideas that have impacted 20th and early 21st century architecture, including: Modernity, Phenomenology, Post-Structuralism, Feminism, Indigeneity, Environmentalism, etc. The instructors introduce concepts, while students present on the architectural manifestations. Key works of architecture are also presented in the two history courses (Arch 502 and ARCH 510). Report Link: <a href="https://saplaccreditation2023.squarespace.com/3112-student-performance-criteria">https://saplaccreditation2023.squarespace.com/3112-student-performance-criteria</a>

## A2. Design Skills

The student must demonstrate an ability to apply design theories, methods, and precedents to the conception, configuration, and design of buildings, spaces, building elements, and tectonic components.

The ability to apply design theories, methods, and skills to the design of buildings, including spaces, elements, and components, is primarily addressed in the first five studios. The first studio (ARCH 506), in conjunction with Graphics Workshop I (ARCH 504), is carefully structured to address the fundamentals of form and space, along with the general conception of a design. In the second studio (ARCH 514) students develop their design skills through exercises that teach urban analysis, residential unit design, making, and a multi-unit housing project. The third studio (ARCH 606) addresses a larger urban building and introduces building elements/components at a conceptual level. The Comprehensive Studio (ARCH 616) adds tectonic components in a technical sense.

In these courses precedents and theory as used in a variety of ways. The Special Studio Topics in Architecture (ARCH 688) studio addresses urban design in either Barcelona, Tokyo, or Calgary; in conjunction with the Urban Systems (ARCH 675) course students learn about architecture and urbanism. The two senior option studios offer a variety of project scales from urban design to furniture; Senior Research Studio in Architecture I (ARCH 700) is dedicated to Work-Integrated Learning. The two Graphics courses (ARCH 504 and 512) are designed to give students the requisite drawing skills to develop their design abilities. Overall the studio sequence is calibrated to ensure theories and methods give students an evolving set of design skills that synthesize many factors (contextual, programmatic, technical, and cultural).

## A3. Design Tools

The student must demonstrate an ability to use the broad range of design tools available to the architectural discipline, including a range of techniques for two-dimensional and threedimensional representation, computational design, modeling, simulation, and fabrication *The ability to apply to use a wide range of design tools, including drawing, computational design, modeling, and fabrication occurs primarily in the two Graphics Workshop courses and in the studio sequence.* 

The two Graphics courses (ARCH 504 and 512) are designed to give students the drawing tools to support their design development.

The first Graphics course introduces orthographic, along with 3D modelling both manually and digitally; it also introduces materiality and making, along with procedural workflows, as students gain proficiency in visual communication.



The second Graphics course undertakes precedent analysis along with an introduction to parametric design. In these courses students gain familiarity with a range of software including AutoCad, Rhino, and Grasshopper. Emphasis is placed on exercises that develop skills, craft, and professionalism. In particular, the first three studios place an emphasis on learning and developing manual and digital design tools. Students continue to develop their design tools throughout the seven studio set of courses, as expectations increase.

The Comprehensive Architectural Design Studio (ARCH 616) is carefully placed within the overall curriculum, as it consolidates previous learning, and sets students up for elective studios. Senior studios and electives courses allow students to further develop skills in computational design, parametric modeling, and fabrication. The MArch Program does teach and encourage the use of manual skills, but also places emphasis on learning digital skills that are transferable to practice. SAPL has a well-outfitted workshop, with a wide range of wood and metal tools, laser cutters, CNC milling machines, and robotic arms. All students must undertake a workshop safety course before they can use the facility. It is an important resource for model building and fabrication exercises, making assignments are found throughout the studio sequence.

#### A4. Program Analysis

The student must demonstrate an ability to analyze and respond to a complex program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws, and site selection and design assessment criteria.

The ability to analyze and respond to program analysis is most completely developed in the Comprehensive Studio (ARCH 616); this studio is where students are expected to demonstrate a thorough approach to design based on skills developed in previous studios. In ARCH 616 demonstrate an ability to management space requirements, relevant laws, site analysis, and design assessment. Program analysis is addressed in the two previous studios, beginning with the second studio (ARCH 514) where students develop their programming skills in the design of a multi-unit housing urban project. The third studio (ARCH 606) addresses a larger urban building, often with a complex program; in some cases students prepare their own programs for the term. The three senior studios address urban design, Work Integrated Learning, and advanced projects. In the Work Integrated Learning semester (ARCH 700) students are introduced to working in architectural practices and often addressing the needs of live clients. The final senior studio (ARCH 702) often requires students to prepare programs. Precedent study is addressed in a set of courses, as discussed in SPC A1 above.

#### A5. Site Context and Design

The student must demonstrate an ability to analyze and respond to local site characteristics, including urban, non-urban, and regulatory contexts; topography; ecological systems; climate; and building orientation in the development of an architectural design project.

The ability to analyze and respond to range of sites is introduced in the first semester in Sustainability and the Built Environment (ARCH 500), which also addresses a range of related topics including energy, climate change, topography, and neighborhood design. Site analysis, site mapping, and programming are introduced in the second studio (ARCH 514) students, where students are introduced to context interpretation through the analysis of spatial patterns



(land use, figure/ground, boundaries, etc.) and flows (vehicles, pedestrians, environmental, etc.). The third studio (ARCH 606) addresses a larger urban building and includes detailed context analysis. The Comprehensive Studio (ARCH 616) involves an essential site (and code) analysis as part of the initial phase of the studio. The study abroad term (ARCH 688: Barcelona, Tokyo, or Calgary) addresses design in an urban context; this is supported by the Urban Systems course (ARCH 675). Overall, the MArch Program places significant emphasis on architecture and the city, therefore, students are expected to undertake site and contact analysis in an urban context several times during their studies. The two history courses (ARCH 502 and ARCH 510) place an emphasis on the cultural context of historic buildings and environments.

## A6. Urban Design

The student must demonstrate an ability to analyze and respond to the larger urban context where architecture is situated; its developmental patterning and spatial morphologies; the infrastructural, environmental, and ecological systems; to understand the regulatory instruments that govern this context; the broader implications of architectural design decisions on the evolution of cities; and the impact of urbanism on design.

The ability to analyze and design urban environments (and buildings) is a cornerstone of the MArch Program which understands that designing good urban buildings is a factor in sustainable design. The complexities of urban design, including the analysis of urban contexts, is addressed in several studios (particularly ARCH 514 and ARCH 606); students in these studios learn how buildings interact with urban environments. The primary urban design experience occurs during the study abroad term (ARCH 688: Special Studio Topics in Architecture) where students address the history and structure of a particular city (Barcelona, Tokyo, or Calgary) and respond to it with a scheme at the scale of a city district. The study abroad term is supported by the Urban Systems course (ARCH 675) which is tailored to each of the three cities the students investigate, and engages both history and theory, including urban morphology, infrastructure, and regulatory structures. Sustainability and the Built Environment (ARCH 500) addresses a range of related topics at the urban scale in the context of sustainable neighborhood design.

## A7. Detail Design

The student must demonstrate an ability to assess, as an integral part of design, the appropriate combinations of materials, components, and assemblies in the development of detailed architectural elements through drawing, modeling, and/or full-scale prototypes.

The ability to develop detail design is found primarily in the Comprehensive Studio (ARCH 616), along with Building Science and Technology II (ARCH 612) and Structures for Architects II (ARCH 610). In ARCH 616 students design a medium-sized cultural facility, and in the second phase select materials and the design of assemblies. In ARCH 612 students learn to detail wall and roof assemblies, and the final deliverables include wall sections and the like. In the second Structures course (ARCH 610) students learn about the performance characteristics of different structural materials, including steel, reinforced concrete, and wood. Making exercises are often incorporated into several studios, giving students an opportunity to learn about the capabilities of materials at full scale and to present work with a high level of craft. The final senior studio (ARCH 702) often addresses fabrication.



# A8. Design Documentation

The student must demonstrate an ability to document and present the outcome of a design project using the broad range of architectural media, including documentation for the purposes of construction, drawings, and specifications.

The ability to document and present using a wide range of architectural media (including drawings, models, constructions, simulations, etc.) is introduced in the two Graphics Workshop courses (ARCH 504 and 512).

These courses are designed to give students the basic skills tools needed to support the acquisition of more advanced skills. The first Graphics course introduces orthographic, along with 3D modelling both manually and digitally. The second Graphics course undertakes precedent analysis along with an introduction to parametric design.

Students continue to develop their design documentation skills throughout the seven-studio set of courses; fundamental skills are addressed in the first three studios. The Comprehensive Studio (ARCH 616) requires students to learn construction documentation, including working drawings. Senior studios and electives allow students to develop skills in computational design, parametric modeling, and fabrication.

During their studies students gain proficiency in a broad range of architectural (including AutoCad, Rhino, and Grasshopper), presentation, graphic design, and desktop publishing software.

# B. Culture, Communications, and Critical Thinking

# **B1. Critical Thinking and Communication**

The student must demonstrate an ability to raise clear and precise questions; record, assess, and comparatively evaluate information; synthesize research findings and test potential alternative outcomes against relevant criteria and standards; reach well-supported conclusions related to a specific project or assignment; and write, speak, and use visual media effectively to appropriately communicate on subject matter related to the architectural discipline within the profession and with the general public.

The ability to critically think and communicate are skills developed throughout the curriculum, as found in writing assignments, presentations in studio, and in the requirement to synthesize complex information in studio assignments. However, the primary emphasis on critical thinking and communication is found in the history and theory courses. The two required history courses (ARCH 502 and ARCH 510) examine buildings as cultural artifacts, teaching students to understand that there are many factors that influence the design and construction of a building and its use over time; the courses go beyond a formal description of architecture.

The primary theory course (ARCH 602) introduces a set of key ideas that have impacted 20th and early 21st century architecture, including: Modernity, Phenomenology, Post-Structuralism, Feminism, Indigeneity, Environmentalism, etc. These courses emphasize precise thinking, critical analysis, research methods, careful argumentation, and effective communication. The first studio (ARCH 506) and the third studio (ARCH 606) place a particular emphasis on critical



thinking in a design context. The two Graphic Workshop courses (ARCH 504 and ARCH 512) also place an emphasis on critical thinking and developing drawing skills. As part of a graduate Program students are expected to write and speak well, and to be able to critically select pertinent information in research exercises (term papers, reports, exams, etc.); to understand legitimate versus illegitimate sources, especially in a world where so much information is available. Critical thinking is also cultivated throughout the studio courses as an essential skill, given that research is increasingly an aspect of design.

Presentations in various classes is standard, students gain tremendous experience presenting verbally and with a range of visual communication techniques; by the time they graduate students are very familiar with communicating in front of peers, instructors, and guests.

#### **B2.** Architectural History

The student must have an understanding of the history of architecture and urban design in regard to cultural, political, ecological, and technological factors that have influenced their development.

The understanding of architectural history is delivered in the two required history courses (Arch 502 and ARCH 510) which examine buildings as artifacts, shaped by cultural, political, environmental, and technological factors. The first course addresses pre-20th century topics including approaches to dwelling, transforming landscapes, questions of style, technology, institutions, diversity, and the profession. The second course looks at early modernism, regulatory systems, modern housing and urbanism, alternative modernisms, the aftermath of World War II, suburbia, postmodernism, non-Western modernism, and Canadian modern architecture. Beyond the two history courses the primary theory course (ARCH 602) introduces a set of important ideas and intellectual movements since 1900 that are examined through theory readings and architectural texts. During the study abroad studio (ARCH 688) held in Barcelona, Tokyo, or Calgary, students learn about the history of the city they are studying in. Architectural history is also presented in various elective courses available to students, including the Gillmor Theory Block Week course.

#### **B3. Architectural Theory**

The student must have an understanding of conceptual and theoretical frameworks and how they have shaped architecture and urban design.

The understanding of architectural theory is delivered in the two required theory courses (Arch 602 and ARCH 675). The primary theory course (ARCH 602) introduces a set of important ideas and intellectual movements that have shaped architecture and urbanism since 1900, these are examined through theory readings and architectural texts; topics include: Modernism, Phenomenology, Post-Structuralism, Race and Multiculturalism, Gender, Feminism, Post-Colonialism, Indigeneity, and Environmentalism.

These topics, which include a range of contemporary subjects that address EDIA, are examined in lectures, student presentations, term papers, and tests. The ARCH 602 course works in parallel with the Intermediate studio (ARCH 606). The Urban Systems (ARCH 675) course introduces students to a set of urban design theory concepts by key urban theorists in parallel



with the study abroad studio (ARCH 688) in Barcelona, Tokyo, or Calgary. Architectural theory is touched upon in the second history course (ARCH 510), and is also presented in various elective courses available to students (including the Gillmor Theory Block Week course).

## **B4. Cultural Diversity and Global Perspectives**

The student must have an understanding of the diverse needs, values, behavioral norms, and social/spatial patterns that characterize different global cultures and individuals and the implications of diversity on the societal roles and responsibilities of architects.

The understanding of cultural diversity and global perspectives is delivered primarily in the two required history courses (Arch 502 and ARCH 510) which examine buildings as complex cultural artifacts, and in the theory course (ARCH 602). The first history course addresses pre-20th century topics including indigenous forms of dwelling, cultural landscapes effected by colonization and slavery, traditional architecture in Japan and China, housing for the working classes, institutional reform, architecture and diversity, and immigration. The second course looks at the 20th century and addresses a broad range of topics, including sessions devoted to non-Western modernisms. The primary theory course (ARCH 602) introduces a set of important ideas and intellectual movements since 1900 that are examined through theory readings and architectural texts that include topics such as Race and Multiculturalism, Gender, Feminism, Post-colonialism and Indigeneity; diverse concepts about modern and contemporary architecture are examined during the course. During the study abroad studio (ARCH 688) held in Barcelona. Tokyo, or Calgary, students are introduced to working in different cultural contexts, especially in the Barcelona and Tokyo offerings where student learn about other kinds of cultural patterns and behaviours; this is emphasized in the associated Urban Systems (ARCH 675) courses. Diverse values and needs are also addressed in the professional practice courses, particularly in the Leadership in Architecture (ARCH 604) course where students learn about different forms of architectural practice and leadership.

The School of Architecture, Planning and Landscape (SAPL) is committed to equity, diversity, and inclusion throughout all of its operations and obligations, this is reflected in the fact that a new administrative position, the EDI Director, has been created. The School's policies can be found at: <u>https://sapl.ucalgary.ca/about/equity-diversity-inclusion-and-accessibility</u>

#### **B5. Ecological Systems**

The student must have an understanding of the broader ecologies that inform the design of buildings and their systems and of the interactions among these ecologies and design decisions.

The understanding of the broad ecologies that impact architecture is introduced in the first semester in Sustainability and the Built Environment (ARCH 500) which addresses a range of related topics including ecology, resources and flows, environmental quality, climate change, site design, and sustainability. Several of the technology courses introduce ecological thinking, specifically Building Science and Technology I (ARCH 508) and Environmental Control Systems (ARCH 614). In ARCH 508 students learn about the resource impact of buildings, and how they interact with environments, and in ARCH 614 students learn about building systems, including



passive design strategies, and how these can ameliorate the impact of a building. The semester dealing with cities that includes the study abroad term includes ARCH 688 and ARCH 675 that address ecological systems in the context of studio and an urban systems course. The theory course (ARCH 602) also introduce concepts of ecology and environment. In the third (ARCH 606) and fourth (ARCH 616) studios students are introduced to context interpretation and through urban analysis learn about the ecological performance of cities including spatial patterns and flows. Overall, the MArch Program places strong emphasis on architecture and ecology (and sustainability) throughout the curriculum.

# C. Technical Knowledge

#### C1. Regulatory Systems

The student must have an understanding of the applicable building codes, regulations, and standards for a given building and site, including universal design standards and the principles that inform the design and selection of life-safety systems.

The understanding of regulatory codes is taught in Building Science and Technology II (ARCH 612), along with the Comprehensive Studio (ARCH 616) and Architectural Professional Practice (ARCH 618) courses. In ARCH 612 students learn about the construction and performance of building envelopes in relation to the National and Alberta building codes, and National Energy Code of Canada for Buildings. The Comprehensive Studio is aligned with courses in structures, building science, control systems, and lighting design; in the course students are required to develop building schemes that account for building codes, regulations, and standards through research, analysis, and design. The Professional Practice course teaches students about the professional regulations that govern the practice of architecture. Standards impacting green buildings are introduced in Sustainability and the Built Environment (ARCH 500), and students learn about life-safety systems in Environmental Control Systems (ARCH 614).

#### C2. Materials

The student must have an understanding of the basic principles used in the appropriate selection and application of architectural materials as it relates to fundamental performance, aesthetics, durability, energy, resources, and environmental impact.

The understanding of architectural materials is taught in the two Building Science and Technology courses (ARCH 508 and ARCH 612), along with the Comprehensive Studio (ARCH 616) and Structures for Architects II (ARCH 610). In ARCH 508 students learn about the basic components of buildings, and the suitable materials specific to these; students learn about fundamental building materials and how these work in assemblies, they also learn about material properties, manufacturing processes, and the technical cycles of various materials (including resource extraction, impact, and recycling). In ARCH 612 students learn about the construction and performance of building envelopes in terms of material assemblies. In ARCH 610 students learn about the structural properties of various materials, including steel, concrete, and wood. The Comprehensive Studio is aligned with courses in building science and teaches students to develop detailed design proposals that take into account the performance aspects of various building materials. Students also are given an introduction to basic materials in terms of energy in Sustainability in the Built Environment (ARCH 500) and aesthetics in the Intermediate Architectural Design studio (ARCH 606)



#### C3. Structural Systems

The student must have an understanding of the principles of structural behavior in withstanding gravitational, seismic, and lateral forces, including the selection and application of appropriate structural systems.

The understanding of structural systems is taught in the two Structures for Architects courses (ARCH 600 and ARCH 610), along with the Comprehensive Studio (ARCH 616). In ARCH 600 students learn about the fundamental principles that influence the behaviour of building structures, including different forces and loads, basic analytical methods, and how structural systems are selected. In ARCH 610 students learn about different structural systems and their applications; this course is offered in parallel with the Comprehensive Studio. In ARCH 616 students develop a structural system as part of the studio project. Students are also introduced to basic structures in the two Building Science and Technology courses (ARCH 508 and ARCH 612), and basic structural concepts are introduced in the Intermediate Architectural Design studio (ARCH 606).

#### C4. Envelope Systems

The student must have an understanding of the basic principles used in the design of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, durability, energy, material resources, and environmental impact.

The understanding of envelope systems is taught primarily in the two Building Science and Technology courses (ARCH 508 and ARCH 612), along with the Comprehensive Studio (ARCH 616). In ARCH 508 students learn about the basic performance components of buildings, including envelope/enclosure systems, and the fundamentals of various assemblies. In ARCH 612 students comprehensively learn about the construction and performance of building envelopes (roof, wall, and window) in terms of materials, codes, energy, performance, detailing, etc. The Comprehensive Studio is aligned with courses in building science and teaches students to develop detailed designs that include envelope systems. Basic envelope concepts are also introduced in Sustainability in the Built Environment (ARCH 500), Environmental Control Systems (ARCH 614), and the Intermediate Architectural Design studio (ARCH 606).

#### **C5. Environmental Systems**

The student must have an understanding of the basic principles that inform the design of passive and active environmental modification and building service systems, the issues involved in the coordination of these systems in a building, energy use and appropriate tools for performance assessment, and the codes and regulations that govern their application in buildings.

The understanding of environmental systems is taught primarily in Environmental Control Systems (ARCH 614), Architectural Lighting Design (ARCH 608), the two Building Science and Technology courses (ARCH 508 and ARCH 612), and the Comprehensive Studio (ARCH 616). In ARCH 614 students are taught about designing sustainable building systems for the Canadian climate, including topics in human comfort, passive systems design, thermal transfer, HVAC and



control systems, appropriate codes, and integrating environmental systems with other building components. In ARCH 608 students learn about sustainable lighting design principles. In ARCH 508 students are introduced to the fundamentals of building service systems. In ARCH 612 students learn about the environmental systems as they perform with building envelopes. The Comprehensive Studio is aligned with courses in building science and teaches students to develop conceptual HVAC designs for their studio projects, which involves selection, design, and integration of solutions. Students are also introduced to passive and active energy systems in Sustainability in the Built Environment (ARCH 500).

# D: Comprehensive Design

#### D1. Comprehensive Design

The student must demonstrate an ability to produce an architectural design based on a concept, a building program, and a site which broadly integrates contextual factors, structural and environmental systems, building envelopes and assemblies, regulatory requirements, and environmental stewardship.

The ability to comprehensively design a building is developed primarily in the Comprehensive Architectural Design Studio (ARCH 616). This crucial course is supported by four technical courses that occur during the same semester: Architectural Lighting Design (ARCH 608). Structures for Architects II (ARCH 610), Building Science and Technology II (ARCH 612), and Environmental Control Systems (ARCH 614). The teaching team for the studio and related courses meets regularly to prepare and monitor the semester's work plan. Students also gain vital knowledge in technical courses taken prior to the Comprehensive studio semester. In the Comprehensive Studio (ARCH 616) students design a medium-sized cultural facility, and are involved in site/program analysis, conceptualization, material/assembly selection, environmental systems, detail design, and construction documents. In ARCH 608 students learn the basic principles of sustainable lighting design. In ARCH 610 students learn about the performance characteristics of different structural materials, including steel, reinforced concrete, and wood. In ARCH 612 students also learn about approaches to envelope design, and to detail wall and roof assemblies. And in ARCH 614 students learn sustainable building systems for northern climates. The suite of five courses results in students designing a building to a degree that they have addressed context, program, structure, environmental systems, envelope, regulations, and sustainability.

#### **E: Professional Practice**

#### E1. The Architectural Profession

The student must have an understanding of the organization of the profession, the Architects Act(s) and its regulations, the role of regulatory bodies, the paths to licensure including internship, and the reciprocal rights and responsibilities of interns and employers.

The understanding of the architecture profession is taught primarily in Architectural Professional Practice (ARCH 618) which addresses the organization of the profession, the provincial Act, provincial and national regulations, and the structure of internship including relations between interns and employers.

The course examines the various roles of the architect in society, the nature of internship as part of the training experience, and career options in the discipline.



# E2. Ethical and Legal Responsibilities

The student must have an understanding of the ethical issues involved in the formation of professional judgment; the architect's legal responsibility under the laws, codes, regulations, and contracts common to the practice of architecture; intellectual property rights; and the role of advocacy in relation to environmental, social, and cultural issues.

The understanding of ethical and legal responsibilities is taught primarily in Architectural Professional Practice (ARCH 618) which addresses the laws, codes, regulations, and contracts. The course also addresses intellectual property and advocacy. The Leadership in Architecture course (ARCH 604) addresses advocacy and activism for architects in changing professional contexts. The responsibilities of architects, including advocacy, are also discussed in other courses throughout the curriculum; for example, the Introduction to Design Theories Course (ARCH 602) gives lectures on ethics, environment, and EDIA.

#### E3. Modes of Practice

The student must have an understanding of the basic principles and types of practice organization, including financial management, business planning, entrepreneurship, marketing, negotiation, project management, and risk mitigation, as well as an understanding of trends that affect the practice.

The understanding of modes of practice is taught primarily in Leadership in Architecture (ARCH 604) and the Work Integrated Learning studio (ARCH 700). ARCH 604 addresses modes of practice and emerging trends. ARCH 700 has been aligned in the same term with ARCH 618 to establish synergies between the two courses (studio and lecture courses). ARCH 700 introduces various aspects of architectural practice (including business planning, entrepreneurship, and project management) and explores the business of architecture, in the context of an office.

# **E4. Professional Contracts**

The student must have an understanding of the various contracts common to the practice of architecture.

The understanding of professional contracts is taught primarily in Architectural Professional Practice (ARCH 618) which addresses the different forms of contracts used in the architecture profession. The course addresses standard and custom client-architect agreements, consultantarchitect agreements, and contractor agreements with owners.

# E5. Project Management

The student must have an understanding of the relationships among key stakeholders in the design process; the methods for selecting consultants and assembling teams; building economics and cost control strategies; the development of work plans and project schedules; and project delivery methods.

The understanding of project management is taught primarily in the Work Integrated Learning studio (ARCH 700) and in Architectural Professional Practice (ARCH 618). ARCH 700 has been aligned in the same term with ARCH 618 to establish synergies between the two courses (studio and lecture courses). The various firms involved in delivering ARCH 700 deliver a session on project management approaches and the role of the various stakeholders in the process; they also cover building economics, cost control, schedules, delivery methods, and general business practices.



# 4. Supplemental Information

# 4.1 Introduction to the Institution and 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 may be provided as a web link.

# 4.1.1 History, Description, and Mission of the Institution

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 may be provided as a web link.

Report Link: <u>https://saplaccreditation2023.squarespace.com/41-introduction-to-the-institution-and-program-history</u>

# 4.1.2 Program History

The appendix of the APR must provide a brief Program history. *Report Link: <u>https://saplaccreditation2023.squarespace.com/412-program-history</u>* 

# 4.2 Student Progress Evaluation

The appendix of the APR must include:

- The procedures for evaluating student transfer credit and advanced placement; and
- The procedures for evaluating student progress, including the institutional and Program policies and standards for evaluation, advancement, graduation, appeal, and remedial measures.

*Report Link:* <u>https://saplaccreditation2023.squarespace.com/41-introduction-to-the-institution-and-program-history</u>

# 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.

Report Link: https://saplaccreditation2023.squarespace.com/43-current-course-description

# 4.4 Current Faculty Resumes

The appendix of the APR must include a condensed resume (no more than two pages) for each faculty member currently teaching in the Program. The resume must list: current course roster; 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 previous accreditation visit.

Report Link: https://saplaccreditation2023.squarespace.com/44-current-faculty-resumes

# 4.5 Visiting Team Report from the Previous Visit

The appendix of the APR must include a copy of the report from the previous site visit in its entirety. Report Link: <u>https://saplaccreditation2023.squarespace.com/45-visiting</u>



## 4.6 Annual Reports

The appendix of the APR must include copies of all ARs (including the Annual StatisticsReport) that have been submitted to the CACB since the previous site visit. Only the mostrecent school academic calendar should be submitted.

Report Link: https://saplaccreditation2023.squarespace.com/46-annual-reports



# Appendix B: Report Signatures

# Stage A: Program Signatures

University Name <u>University of Calgary</u>

Program Name School of Architecture, Planning and Landscape, Master of Architecture

Name: Jason Johnson Title: Date: September 15, 2023 Accreditation Report



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# University of Calgary : School of Architecture, Planning and Landscape, Master of Architecture

The Matrix does not require inputting the full curriculum structure. Please enter only Mandatory Courses contributing to SPC compliance. In cases where the student cohort is divided into concurrent parallel sections or streams during a single term (for example: a class divided into parallel 3 studios) please enter a generic description, generic course number and the common SPC compliance on a single line.

Reminder:	all	students	must	achieve	full	SPC	compliance	as
shown in th	ne M	latrix.						

A1	Design Theories, Precedents, and Metho	
A2	Design Skills	
A3	Design Tools	
A4	Program Analysis	
A5	Site Context and Design	A. Design
A6	Urban Design	
A7	Detail Design	
<b>A</b> 8	Design Documentation	
В1	Critical Thinking and Communication	
B2	Architectural History	B Culture
В3	Architectural Theory	Communications,
В4	Cultural Diversity and Global Perspective	and Critical Thinking
B5	Ecological Systems	
C1	Regulatory Systems	
C2	Materials	
СЗ	Structural Systems	C. Technical Knowledge
C4	Envelope Systems	
С5	Environmental Systems	
D1	Comprehensive Design	D. Comprehensive Design
E1	The Architectural Profession	
E2	Ethical and Legal Responsibilities	
E3	Modes of Practice	E. Professional Practice
E4	<b>Professional Contracts</b>	
E5	Project Management	

	ARCH 506	Studio I in Architecture – F												
	ARCH 502	History of Architecture and Human Settlements I												
YEAR: FALL	ARCH 500	Sustainability in the Built Environment												
SESSION	ARCH 504	Graphics Workshop I												
	ARCH 672	Experiential Learning in Arch. (October Block Course)												

	ARCH 514	Studio II in Architecture – F	
		Building Science and Technology I	
FOUNDATION YEAR: WINTER SESSION	ARCH 510 *	History of Architecture and Human Settlements II*	
3E35ION	ARCH 512*	Graphics Workshop II*	
	ARCH 674		

	ARCH 606	Intermediate Architectural Design Studio	
MArch YEAR	ARCH 600	Structures for Architects I	
SESSION	ARCH 602	Introduction to Design Theories	Ì
	ARCH 604	Leadership and Architecture Block Course	

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							A. Design					B. Culture.	Communications,	and Critical Lninking				C. Technical Knowledge			D. Comprehensive Design			E. Professional Practice		
			Design Theories, Precedents, and Metho				Site Context and Design		Detail Design	Design Documentation	Critical Thinking and Communication	Architectural History	Architectural Theory	Cultural Diversity and Gobal Perspective	Ecological Systems	Regulatory Systems	Materials	Structural Systems	Envelope Systems	Environmental Systems	Comprehensive Design	The Architectural Profession	Ethical and Legal Responsibilities	Modes of Practice		G Project Management
	ARCH	Comprehensive Architectural Design Studio	A1	L A2	2 A3	3 A4	A5	6 A6	A7	A8	в1	B2	B3	B4	в5	С1	C2	C3	C4	C5	D1	E1	E2	E3	E4	E5
MArch YEAR	010		+		-										_											
ONE (M1): WINTER	лрсн	Structures for Architects II	T																							
SESSION	ARCH 612	Building Science and Technology II (3 units)																								
	ARCH 614	Environmental Control Systems																								
		1				Т						Ē												Т	Т	
MArch YEAR ONE (M1):	ARCH 688	Special Studio Topics in Arch. (City Studio or S	tudy	Abi	roac	1)																				

	ARCH					Г						
MArch YEAR	700	Senior Research Studio in Arch. (Work Integrated Learning)										
TWO (M2): FALI SESSION	ARCH 618	Architectural Professional Practice										

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					A. Design					B Culture	Communications,	and Critical Thinking				C. Technical Knowledge			D. Comprehensive Design			E. Professional Practice		
	Design Theories, Precedents, and Metho	Design Skills	Design Tools	Program Analysis	Site Context and Design	Urban Design	Detail Design	Design Documentation	Critical Thinking and Communication	Architectural History	Architectural Theory	Cultural Diversity and Global Perspective	Ecological Systems	Regulatory Systems	Materials	Structural Systems	Envelope Systems	Environmental Systems	Comprehensive Design	The Architectural Profession	Ethical and Legal Responsibilities	Modes of Practice	Professional Contracts	Project Management
ĺ	<b>A1</b>	A2	A3	<b>A</b> 4	A5	A6	<b>A</b> 7	<b>A</b> 8	в1	B2	В3	B4	В5	с1	С2	СЗ	C4	С5	D1	E1	E2		E4	E5
ARCH 702 Senior Research Studio in Architecture																								

MArch YEAR TWO (M2): WINTER SESSION

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