



2017 Visiting Team Report
Master of Architecture Program
University of Calgary

The Canadian Architectural Certification Board

1 Nicholas Street, Suite 710
Ottawa (Ontario) Canada K1N 7B7

Voice: (613) 241-8399

Fax: (613) 241-7991

E-mail: info@cacb.ca

Web Site: www.cacb-ccca.ca

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I. Introduction • CACB Accreditation

The CACB is a national independent non-profit corporation, whose Directors represent the Canadian Architectural Licensing Authorities (CALA), the Canadian Council of University Schools of Architecture (CCUSA) and the Canadian Architectural Students Association (CASA). The CACB is both a decision-making and policy-generating body. It is the sole organization recognized by the architectural profession in Canada to assess the educational qualifications of architecture graduates (*Certification program*) and to accredit professional degree programs in architecture offered by Canadian Universities (*Accreditation program*).

By agreement of the Registration Authorities and Councils of nine Provincial Institutes and Associations, the CACB was established in 1976 to assess and certify the academic qualifications of individuals holding a professional degree or diploma in architecture who intend to apply for registration. The Ordre des Architectes du Québec joined the CACB in 1991. In 1991, the CACB mandate to certify degree credentials was reaffirmed and its membership was revised to reflect its additional responsibility for accrediting professional degree programs in Canadian University Schools of Architecture.

The CACB awards accreditation only to professional degree programs in architecture. These are normally:

- Master of Architecture degree with a related pre-professional bachelor's degree; requirement, typically amounting to five or six years of study;
- Master of Architecture degree without a pre-professional requirement, consisting of an undergraduate degree plus a minimum of three years of professional studies;
- Bachelor of Architecture degree requiring a minimum of five years of study, except in Quebec, where four years of professional studies follows two years of CEGEP studies.

The process of accreditation begins at the school with the preparation of the Architecture Program Report (APR). The APR identifies and defines the program and its various contexts, responding to the *CACB Conditions and Procedures for Accreditation*. The APR is expected to be useful to the planning process of the school, as well as documentation for the purposes of accreditation.

Upon acceptance of the APR by the CACB Board, an accreditation visit is scheduled. The CACB's decision on accreditation is based upon the capability of the program to satisfy the Conditions and Procedures for Accreditation, including the ability of its graduating students to meet the requirements for learning as defined in the Student Performance Criteria. During the visit, the team reviews student work and evaluates it against these requirements. The team also assesses the effectiveness and degree of support available to the architectural program through meetings with the institution's administrators at various levels, architecture and other faculty, students, alumni, and local practitioners.

At the conclusion of the visit, the Visiting Team makes observations and expresses compliments and concerns about the program and its components. It also offers suggestions for program enrichment and makes recommendations, which, in the judgment of the team, are necessary for the program's improvement and continuing re-accreditation. Following the visit, the team writes the following VTR, which is forwarded with a confidential recommendation to the CACB. The CACB then makes a final decision regarding the term of accreditation.

II. Summary of Team Findings

1. Team's General Comments

The CACB appointed the following visiting team consisting of seven (7) members – Martin Bressani (educator); Sylvain Lagacé (practitioner); Elizabeth MacKenzie (practitioner); Beth Macleod (Intern); John Cirka (Observer); Martin Jones (Observer); and Henri T. de Hahn. The team's responsibility was to review the Master of Architecture program, Faculty of Environmental Design (EDVS) at The University of Calgary Architecture Program accordingly to CACB's Conditions and Terms for Accreditation and Procedures for Accreditation as defined in the 2012 Edition. The visit took place Saturday March 18 – Wednesday, March 22, 2017.

The circumstances of the visit followed approved protocol, which included team members' review of all pertinent documents; an introductory session over the telephone which included general discussion and finalization of logistics prior to the visit; on site team distribution of responsibilities which were confirmed Saturday evening March 18; team's visit per Architecture Program final schedule and drafting of the report and recommendation by five (5) voting team members. The team chair (Henri T. de Hahn) and Associate Dean (Academic-Architecture) & Professor Dr. Graham Livesey exchanged email correspondence prior to the visit and discussed over the telephone questions pertaining to the logistics of the team visit –schedule, agenda, organization of team room, required digital presentation of student artifacts and course syllabi, and travel arrangements.

The team recognizes the generous welcome from the Students, Staff, Faculty, and Senior Administration of the Faculty and the University at large. The strong identity of EVDS was felt throughout the visit and much appreciated. Our thanks go to University of Calgary Provost Dr. Dru Marshall and Deputy Provost Dr. Kevin McQuillan, and in particular to Dean Dr. Nancy Pollock-Ellwand, whose leadership skills and dedication to the needs of the Architecture Program were felt throughout the visit. On behalf of the team, Chair de Hahn would like to particularly commend Dr. Livesey for his attentiveness to the chair's suggestions from the on-boarding process to the final exit interviews. His tireless efforts on behalf of the students and colleagues show passion and dedication to building a strong program. He was discreetly ever-present and responded to the team's needs and promptly provided additional materials that were requested during the visit.

The team was extremely appreciative of the presentations, availability, and openness during all scheduled meetings and informal discussions with Students, Staff, Faculty, EVDS and University senior leadership. The collective dedication to the program is to be applauded and enabled the team to feel welcome and accomplish their responsibilities within the scheduled visit timeframe. Finally the chair would like to recognize that the VTR could not have been crafted without each of the team member's contributions. Their unique expertise, commitment to process and transparency, and above all, a belief that an academic setting with the highest standards remains the *sine qua non* foundation for future generations of designers was imperative.

Minor adjustments to the final schedule were made on site and are reflected in the completed team's visit schedule at the end of the VTR. Overall, the team felt that the visit was a great success.

A request of nine (9) items of additional information was submitted by the Chair to the Associate Dean during the visit and they were provided promptly. This information including the following with response dates in bold:

1. Diagram showing 3 streams of students entering M1 (Foundation, Minor Program, Pre Professional, and international degree holders) – **Complete. Provided to team 3/19/2017**
2. Transcripts of a typical ARST Minor student – **Complete. 2 examples provided to team 3/20/2017**

3. Governance of the Faculty of Environmental Design – Complete. Terms of reference for Faculty Council provided to team 3/20/2017
4. EVDS Committee information – Complete. Committee information provided to team 3/21/2017
5. Compiling research grant information breakdown for M.Arch program faculty members – Complete. Grant information provided to team 3/21/2017
6. CACB statements on promotional material – Complete. Graham Livesey provided verbal response. 3/19/2017
7. Meeting requested with Steve MacLeod, Finance Partner – Complete. Steve was unavailable to meet in person but was present on the phone. Team meeting took place with Tracy Beauregard, Manager Faculty Operations at 10:30 am (3/20/2017).
8. Meeting requested with Leitha Cosentino, Director of Development – Complete. Leitha met with team at 3:30 pm 3/20/2017
9. Additional information regarding courses taught by Brian Sinclair, Graham Livesey, and Caroline Hachem-Vermette – Complete. Faculty provided verbal and print material to support courses on 3/21/2017

2. Conditions for Accreditation “met” and “not met”: a summary

	Met	Not Met
1. Program Response to the CACB Perspectives		
<i>A. Architecture Education and the Academic Context</i>	[x]	[]
<i>B. Architecture Education and the Students</i>	[x]	[]
<i>C. Architecture Education and Registration</i>	[x]	[]
<i>D. Architecture Education and the Profession</i>	[x]	[]
<i>E. Architecture Education and Society</i>	[x]	[]
2. Program Self-Assessment	[x]	[]
3. Public Information	[x]	[]
4. Social Equity	[x]	[]
5. Human Resources	[x]	[]
6. Human Resource Development	[x]	[]
7. Physical Resources	[x]	[]
8. Information Resources and Information Technology	[x]	[]
9. Financial Resources	[x]	[]
10. Administrative Structure	[x]	[]
11. Professional Degrees and Curriculum	[x]	[]
12. Student Performance Criteria (SPC)		
<i>A1. Critical Thinking Skills</i>	[x]	[]
<i>A2. Research Skills</i>	[x]	[]
<i>A3. Graphic Skills</i>	[x]	[]
<i>A4. Verbal and Writing Skills</i>	[x]	[]
<i>A5. Collaborative Skills</i>	[x]	[]
<i>A6. Human Behavior</i>	[x]	[]
<i>A7. Cultural Diversity</i>	[x]	[]
<i>A8. History and Theory</i>	[x]	[]
<i>A9. Precedents</i>	[x]	[]
<i>B1. Design Skills</i>	[x]	[]
<i>B2. Program Preparation</i>	[]	[x]
<i>B3. Site Design</i>	[x]	[]
<i>B4. Sustainable Design</i>	[x]	[]
<i>B5. Accessibility</i>	[x]	[]

<i>B6. Life Safety Systems, Building Codes and Standards</i>	[x]	[]
<i>B7. Structural Systems</i>	[x]	[]
<i>B8. Environmental Systems</i>	[x]	[]
<i>B9. Building Envelopes</i>	[x]	[]
<i>B10. Building Service Systems</i>	[x]	[]
<i>B11. Building Materials and Assemblies</i>	[x]	[]
<i>B12. Building Economics and Cost Control</i>	[]	[x]
<i>C1. Detailed Design Development</i>	[x]	[]
<i>C2. Building Systems Integration</i>	[x]	[]
<i>C3. Technical Documentation</i>	[x]	[]
<i>C4. Comprehensive Design</i>	[x]	[]
<i>D1. Leadership and Advocacy</i>	[x]	[]
<i>D2. Ethics and Professional Judgment</i>	[x]	[]
<i>D3. Legal Responsibilities</i>	[x]	[]
<i>D4. Project Delivery</i>	[x]	[]
<i>D5. Practice Organization</i>	[x]	[]
<i>D6. Professional Internship</i>	[x]	[]

3. Program's Progress since the previous site visit (from previous VTR)

The following Condition(s) which was not met in the 2011 VTR:

- 3.4 Social Equity

Comments of the 2017 team: While the Architecture program continues to make the necessary progress in this area, the team recognizes that this issue can only continue to be addressed within the particularities of each institution. The team considers this Condition to have been met.

The following SPC's which were not met in the 2011 VTR"

- A.6 Human Behavior
- A.7 Cultural Diversity
- B.2 Program Preparation
- B.3 Site Design
- B.4 Sustainable Design
- B.5 Accessibility, and
- C.4 Comprehensive Design

Comments of the 2017 team: To the exception of B.2 Program Preparation, all previous Not Met SPC's have been substantially adjusted and are met with the comments under each Criteria.

4. Program Strengths

Program strengths of the Faculty:

1. A key strength of the Architecture Program lies in its intellectual commitment to digital, urban design, and technical proficiencies while engaging the University's mission, EVDS' administrative leadership, faculty and students in a variety of ways. This carries through the Faculty's curriculum, pedagogy and didactics.
2. The Architecture Program has carved a central and unique role within the Canadian architectural educational landscape by providing high quality experiences for students, a constructive rapport and presence in the University of Calgary, and creating opportunities that attract high quality of students to its program.

3. The quality of the student body is key to the success of the program. Students arrive with previous university and life experiences, creating a highly qualified, dedicated, articulate and diverse student body with varied interests and high expectations. The team was impressed with the sense of a unified collectiveness by the student body.
4. The program's distinctiveness lies in its balance between architectural explorations with professional aspirations through its focus of urban issues and digital generative making.
5. The program is particularly notable for its *Minor in Architectural Studies* and the introduction of an *Architecture and Design Survey* course, distinguished visiting instructors, signature study-abroad programs, prominent guest lectures, and robust offerings of charrettes, seminars and workshops. Particularly noteworthy are the three concentrated block courses offered over the academic year which bring to the students a unique and concentrated learning experience.
6. While the Faculty have varied research interests and pedagogical methods -- both in breadth and depth -- as a whole it speaks with a collective voice, lending a unique identity to the Program. The visiting team discerns a strong sense of unity in terms of developing a robust curriculum. Furthermore, it recognizes the ability of the faculty to engage in constructive debates regarding their mission as educators. Finally, the Team wishes to commend the Faculty for their remarkable success in securing research grants, garnering over \$2M since the last accreditation.
7. The Associate Dean (Academic-Architecture) is an energetic and passionate leader who has the success of the students and faculty at heart. Faculty and students in turn recognize his numerous contributions to the program. His success as a seasoned leader stems in part from his continued commitment to teaching and his scholarship activities.
8. The Team compliments the faculty for their actions in addressing the concerns expressed in the 2011 VTR. We applaud the high quality and resolution of the comprehensive project and its integration with EVDS 615 and 611, and encourage the Faculty's continued commitment in achieving its next level of excellence.
9. The facilities include particularly strong state-of-the-art digital fabrication technology and workshop space. This space provides a strong complement of machinery for woodwork, metalwork and digital fabrication. Student access to these facilities and technicians is a significant strength of this program.

5. Causes of Concern and Team's recommendations

1. While the identity of the Program encompasses multiple aspects, the team struggled to identify a cohesive and overarching understanding of the concepts of ecology, sustainability, interdisciplinarity and digital literacy as they pertain to the exhibited student artifacts. This unease was strongly echoed by the student body at large, creating compelling arguments to clarify the program's intellectual commitment to the education of an architect.
2. In terms of ecology, the team finds strong linkages to the program's entire curriculum. This seems a prominent and compelling educational objective. However, this "framework for design thinking" seems to lack resonance within the students' work, thus substantially weakening the identity and structure of the program. When asked, students' comments range from a complete lack of awareness to mild recognition of the pedagogical intention found in the APR.
3. In terms of sustainability, the team commends the hiring of a new faculty member in that field and the accompanying development of a vision for the delivery of sustainability courses. The team acknowledges

the conscious efforts to link this subject area with those of ecology and environmental design. Given the Program's initial and long history in environmental design, however, the program ought to expand the current definitions and application of sustainability.

4. In terms of interdisciplinarity, the team recognizes the program's intention to create strong interdisciplinary study abroad programs – in particular the successful Portland experiment between Landscape and Planning – and invites the faculty to expand these opportunities to the core on-campus program by building innovative alliances within EVDS and other university units (notably the efforts to reach out to the Faculty of Engineering, Social Work, Kinesiology, Business and Medicine). This may require, within the very short period of the three-year-curriculum, curricular adjustments in order to position the program as a leader in interdisciplinary learning.
5. In terms of digital literacy, the team recognizes it as a major strength throughout the curriculum. However, the team senses that this strong emphasis on sophisticated graphics at times displaces other areas of crucial reinforcement in the curriculum such as program development and space planning. Furthermore, the team senses among students divergent opinions regarding the relative weight of analog and digital techniques. Nonetheless, the students acknowledge the instructor's support of the students' chosen methods for their design resolution.
6. The Program suffers from a lack of visibility as an "architecture" school within the University and the larger community. There is a need to strengthen, promote and ensure the visibility of the Architecture Program. Immediate solutions could include the EVDS website, publications and social media. Students and University Leadership both identified the visibility of the Architecture program within the community and the Faculty as an immediate priority. We strongly encourage the Faculty to invest in social media to promote the work of the architecture students and the life of the school.

7.

III. Compliance with the Conditions for Accreditation

1. Program Response to the CACB Perspectives

Programs must respond to the relevant interests of the constituencies that make up the CACB: educators (CCUSA) and regulators (CALA), as well as members of the practicing profession, students and interns, and the general public.

General Team comments:

A. Architecture Education and the Academic Context

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

Met	Not Met
[x]	[]

Team comments:

The architecture Program is well recognized by the University's upper administration as a unique hub of research and teaching, and profits from its position within a world-class research institution. Provost Dr. Dru Marshall has demonstrated a strong and precise understanding of the Program, articulating well the challenges and opportunities of a professional school within the wider university environment. It also profits from its position within the Faculty of Environmental Design, amidst germane disciplines such as the Landscape Architecture and Planning Programs. The Dean, Nancy Pollock-Ellwand, has shown strong commitment to the Program and its future growth. In short, it seems to enjoy support from all university levels.

In terms of research, faculty members have developed strong research relationships with Engineering, Medicine, Business, Social Work, and Kinesiology. Given the Program's strength in building sciences and digital fabrication, the Team strongly encourages the faculty to pursue stronger connections with the Faculty of Engineering. It also encourages closer collaboration with the CAA, one of Canada's richest architectural archives.

The Program, in turn, contributes successfully to the university with its Minor in Architectural Studies (ARST), providing a unique opportunity for University of Calgary undergraduates to explore and experience the skills and knowledge that make up the discipline of architecture. Yet, absorbed as it is within the EVDS Faculty, "architecture" as a distinct academic field appears to lack visibility. The Team feels that there is a need to promote architecture within the campus and the larger community.

B. Architecture Education and the Students

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

Met	Not Met
[x]	[]

Team comments:

The Team's interview with the student body revealed that most students are generally satisfied with the support they receive for the program and faculty. They view the teaching staff as highly dedicated to the personal development of each of their students and the general relationship between both parties as very collaborative. More specifically, the Team has heard examples where major and minor grievances were addressed swiftly and fairly to the satisfaction of all parties.

C. Architecture Education and Registration

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

Met	Not Met
[x]	[]

Team comments:

From our assessment of the course material and the work produced, we conclude that the program as a whole properly prepares the students to enter the workforce and start the internship program to attain licensure. While some students expressed that they didn't feel ready to begin their professional careers, we feel that this apprehension is mainly due to the current state of the local economy and not specifically a reflexion on their particular skill set.

D. Architecture Education and the Profession

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

Met	Not Met
[x]	[]

Team comments:

EVDA 661 'Architectural Professional Practice I' prepares students for practice in the field of architecture by providing a series of lectures (in house and and visiting guests) and assignments addressing various requirements within the Profession. These include practice management, project procurement, working with clients, consultants and other stakeholders as well as construction methods, regulatory requirements, permitting process, and construction contracts. The qualification process is briefly explained.

A new course, Leadership and Architecture, EVDA 697.86, links with practicing architects and others to provide insights into Architectural Practice.

E. Architecture Education and Society

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

Met Not Met
 [x] []

Team comments:

The Master of Architecture Program is comprised of a diverse group of students, the majority of whom spend one term in a Studies Abroad program. In recent years, they have visited communities in Barcelona, Tokyo, Melbourne and Portland and been exposed to a variety of social and environmental conditions in these cities as well as in Calgary.

The project for the major Comprehensive Studio this term, for example, is an Aboriginal Gathering House at Fort Calgary. Within this project, the students have explored indigenous concerns - past, present and future - and they have been in contact with Elders and Residential School survivors as part of their information gathering.

One of the studios has been focussed on aging in place with a 'to scale' laneway house built within the EVDS building. This ongoing research and cross fertilization within U of Calgary provides students with real life experience in social concerns along with low cost and multi-family housing. Environmental concerns are also addressed in urban design (e.g., cycling), building science courses and design studios.

2. Program Self-assessment

The program must provide an assessment of the degree to which it is fulfilling its mission and achieving its action plan.

Met Not Met
 [x] []

Team comments:

The strategies for self-assessment identified in the APR and utilized within the program have created a very collegial atmosphere, and thus allow for a great deal of constructive open discussion, review and input from all faculty and students. This collective approach to self-assessment and review resonates through monthly faculty forums, which include all faculty members, and allow opportunities for curricular and student review as a comprehensive group. The faculty forums present a more informal setting for discussion, debate and decision, in order to present strong unified direction for review at more formal quarterly Faculty Council meetings. The program also shows great strength in its ability to respond to student assessment and be receptive and responsive towards student input. The availability of the faculty to the students and a high level of contact between these groups is strengthened by the low faculty to student ratios and create a strong relationship between these groups. The students expressed a strong comfort level in expressing grievances and opportunities for improvement. They have opportunities for this through an 'open door' system with faculty, a student Leadership position on the Faculty Council and a 'town hall' open forum discussion with the Dean. They felt that their suggestions have been consistently met with immediate response and active revisions to the program in order to address their concerns.

The Vision Statement identifies an experimental approach to teaching through a critical pedagogical model. Constant scrutiny of the program by the faculty and students, followed by strategic changes and tweaks in the pursuit of a continually strengthened program, reflect a commitment to this vision. Discussions with faculty, sessional instructors and students reinforce this constant evolution of the program through examples of ways in which they have improved the courses and outcomes in the current semesters compared to recent years.

There is across the entire curriculum a definitive effort, both at the individual and collective faculty level, to assess student course work with specific intentions to assess student legibility and unity between sections, to secure that the semester's delivery of courses are properly tracked to insure didactic continuity, and to manage and adjust standards consistent with ever evolving pedagogical intentions.

The Mission Statement identifies a commitment to community engagement which is strongly evident through programs including Design Matters and make Calgary. While the reputation and size of the program is rising, there is room for growth in this area. Students and University Leadership both identified the visibility of the Architecture program within the community as an immediate priority.

While the vision and mission expressed for the program in the APR are in strong alignment with the goals for the program, the Statement of Philosophy is in conflict with the work reviewed and the students' understanding and representation of the program. The alignment of this Philosophy should be reconsidered for strengthened alignment with the direction, focus and current strengths of the program.

3. Public Information

The program must provide clear, complete, and accurate information to the public by including in its academic calendar and promotional literature the exact language found in the CACB 2010 Conditions (Appendix A-1), which explains the parameters of an accredited professional degree program.

Met	Not Met
[x]	[]

Team comments:

Digital and printed recruitment materials are consistent with CACB requirements under public information. Pertinent information may be found on the University's and EDVS Faculty's website.

4. Social Equity

The accredited degree program must provide a summary of provincial and institutional policies that augment and clarify the provisions of the Charter of Rights and Freedoms as they apply to social equity.

Met	Not Met
[x]	[]

Team comments:

The Team greatly appreciates faculty diversity at the University, notably at the level of the upper administration from the Dean of the Faculty to the President. It encourages the ongoing efforts to continue to pursue increased faculty diversity. The students explicitly stated recognition and appreciation of the diversity currently represented within the Faculty and expressed their satisfaction. The Program has the opportunity to be active in this area by providing open discussions with students on the disparity between gender representations across the industry. This would foster a strong awareness in its students, thus increasing the likelihood that its female students achieve licensure.

5. Human Resources

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

Met	Not Met
[x]	[]

Team comments:

All faculty members enjoy the necessary academic freedom that a University setting guarantees for teaching, scholarship and service to unfold naturally. Each of these areas has been well documented in the APR and the team's visit echoes and confirms the high caliber of those activities. Faculty member's descriptions – included in the APR Section 4 Supplemental Information, are concise and clearly demonstrate the linkages between teaching responsibilities, skills and research agendas. Publications are extensive and the faculty are

to be commended for promoting a balance between academic pursuit and professional accountability (creative practice). Contrary to the comments offered in the 2011 VTR, the team is confident that those areas needing clarification have been fully addressed. The team invites the reader to review areas of Program Strength and Causes of Concerns under rubric II. 4. and 5.

Students

The multitude of opportunities within the Architecture Program and EDVS at large continues to attract a talented cohort of students. While students expressed diverse opinions about their tenure at EDVS, they all are appreciative of the faculty's commitment to creating a knowledge-based education in the discipline of architecture.

The team invites the reader to review areas of Program Strength and Causes of Concerns under rubric II. 4. and 5. In particular the team remains concerned with Rubric II. 5.1. and had this comment: "...echoed by the student body at large, creating compelling arguments to clarify the program's intellectual commitment to the education of an architect."

The team echoes the 2011 VTR comments regarding the strengths of the study abroad programs and understands that they are more robust then ever. Adjustments and realignments have been made to enhance the fundamental strengths of these programs. The new dynamics offered by the Tokyo program –lead by Dr. Brian Sinclair, seems to be a strategic move that will complement the rich signature study abroad programs offered for over a decade.

Support Staff

The team met with all support and technical staff and found that their commitment to the overall mission of the Architecture program is remarkable. Conversation enables the team to contextualize the student work and add value to our overall comments expressed in this report. In addition to the four (4) new positions highlighted in the 2011 VTR, the following additional two (2) positions have been added, enabling EDVS to further their strategic thinking at the service of its students:

1. Administrative Assistant to the Dean
2. Associate Deans & Chairs Administrator, Faculty of Environmental Design Certificate Administrator, Sustainability Studies

The latter position has been key for the Architecture Program, yet the team has some reservations given that this position is not a full-time position dedicated to the Associate Dean (Academic-Architecture).

6. Human Resource Development

Programs must have a clear policy outlining both individual and collective opportunities for faculty and student growth within and outside the program.

Met	Not Met
[x]	[]

Team comments:

The team's assessment based on the APR and on-site observations and discussions, acknowledges that appropriate policies are set in place for faculty and students to create and take advantage of all available opportunities regarding their intellectual growth.

7. Physical Resources

The program must provide physical resources that are appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each full-time student; lecture and seminar spaces that accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space.

Met	Not Met
[x]	[]

Team comments:

The facilities include particularly strong state-of-the-art digital fabrication technology and workshop space. This space provides a strong complement of machinery for both woodwork, metalwork and digital fabrication. Student access to these facilities and technicians is a significant strength of this program.

The current facilities lack an exhibition space large enough to host a full class of design studio projects. The desire for an exhibition space that would allow the students in multiple years of the program to review the work of their peers collectively, was explicitly expressed as a lacking facility. This gap causes the students to miss out on a very strong learning opportunity, embedded in the ability to review a set of 50 design responses to the same original project brief. An exhibition space that would allow full classes to pin up their work for sustained periods of time would also allow for interdisciplinary exposure within the faculty, allowing the programs housed within EVDS to gain stronger insights and a deeper interest in their colleagues work, potentially resulting in new opportunities for overlap, interfacing, review and teaching.

8. Information Resources and information technology

The architecture librarian and, if appropriate, the staff member in charge of visual resource or other non-book collections must prepare a self-assessment demonstrating the adequacy of the architecture library. For Information Technology Resources, the program must also provide the information technology infrastructure and corresponding staff support in order to effectively contribute to the delivery of the curriculum, as well as supporting activities of staff and faculty.

Met	Not Met
[x]	[]

Team comments:

The University of Calgary completed the construction of a new central library on campus in 2011. The Taylor Family Digital Library (TFDL) is a fully modernized library facility housing the architectural book and periodical collection. The 'digital' designation signals the library's contemporary approach of knowledge curation and multi-modal information distribution, in addition to making print documents available to users. The library provides state-of-the-art facilities for study, collaborative work and resource use. The TFDL includes a Digital Media Commons, Learning Commons, Spatial and Numeric Data Services, Student Success Centre and Visualization Studio as part of the broad forms of support it offers the University community.

The book holdings of the library include both print and ebook formats, adding just over 450 titles per year on average in the 'NA' Library of Congress classification range and just over one hundred titles in other relevant LC classification ranges. The library report also notes 203 periodical subscriptions, presumably in architecture and related areas but this is not specified. Books continue to be added to the collection at a rate of almost 600 titles per year (in both print and ebook formats). The 2011 VTR noted an anticipated budget increase to \$50,000 per year but this level of acquisition has not materialized. It remains at \$35,000 on average.

The new library is less a holding area for books with large expanses of stacks. It opted for the trend to provide student learning support and technology resources (see above). Consequently, stack space is limited. To support the 'Digital' Library on campus, a 'High Density' Library (HDL) stores books in an off-site facility. It is estimated that half of the holdings are in each location at the moment. Library users requesting books which are in the HDL receive them typically in a day.

The TFDL on campus includes two other significant resources, the Nickle Galleries and the Canadian Architectural Archives (CAA). The Nickle Galleries has shown exhibitions curated by EVDS faculty. The CAA is particularly noteworthy. It is a significant national architectural resource, holding artefacts related to Canadian architecture. It 'collects the work of prominent Canadian architects', in most cases its collection includes the 'entire output of an architectural firm.' The space devoted to its on-campus holdings is part of the TFDL building and it also shares space in the HDL for a large off-site collection.

The Canadian Architectural Archives attracts scholars and students from across the country who request their resources and information. They field an average of 100 requests per month. A few of the recent exhibitions supported by CAA resources include: Architecture and National Identity, Shaping Canadian Modernity, and Layered Landscapes. The CAA is an incredible resource easily accessible to EVDS, and architecture students and faculty, yet it supports requests across the country but few from EVDS itself. It is suggested that more of a connection be established between the Architecture Program and the CAA. A modest assignment in one of the graduate courses would at least introduce students to this very important University of Calgary resource and might spark further interest and engagement with the Archives in some cases.

IT resources appear to be adequately supported for student laptop use and for printed output of project files. IT support staff in the EVDS Faculty work with the University to develop and implement upgrades.

9. Financial Resources

Programs must have access to sufficient institutional support and financial resources.

Met	Not Met
[x]	[]

Team comments:

Program Associate Dean, Dr. Graham Livesey (Academic-Architecture), provides excellent stewardship of the Architecture Program's resources, despite a 2% required budget cut for the academic year 2016-17. Dr. Livesey comments that strategic thinking from the EVDS' leadership team continues to offer the necessary financial stability to maintain the Program's mission, both for faculty and students.

Based on the APR (pp.101-103), the team was concerned about a deficit of \$181,350 (between chart 1 and chart 2). Further clarification brought in line that the 2016-17 budget for the Faculty was 6.25M (Chart 1, p.101: Faculty of Environmental Design income 2016-2017 -Operating Allocation; Credit Tuition and Other Fees). The reason this was not explicitly reflected in the two charts presented was due to the fact that the Faculty Income chart provided the funding available to the Faculty, both operational as well as other sources (eg. Carryover Funds; Endowment Income).

The second chart (Chart 2, p. 101: Approved 2016-2017 Faculty Budget) provides a breakdown of the total Operating Expenses for the Faculty (6.8M).

2% Budget Cut for 2016-2017

Over the past couple years, each Faculty has received a cut to their Operating Budget of ~2%. In order to submit a balanced budget, the Faculty completed a thorough review of all programs and operations to see where this funding shortfall could be absorbed. The Faculty took into careful consideration that implementing a portion of this cut to a particular program should not hinder the quality of the program being offered. It had been determined in 2016-17 that the Architecture Budget could absorb a 2% budget cut without compromising the quality of the program.

In addition, the Faculty had begun offering new Certificate Programs which will provide additional Revenue streams to help offset any eventual future budget cuts. As well, the Faculty of Environmental Design has a number of retirements coming up over the course of the next 3 to 5 years. As these faculty members retire, their positions will be backfilled at lower rates, which will free up budget dollars to invest back into the Programs.

While the Associate Dean's appointment does not carry any fundraising responsibilities, Dr. Livesey has participated in a number of preliminary meetings with potential donors. He is expected to participate in community and external relations as required.

10. Administrative Structure (Academic Unit & Institution)

The program must be part of, or be, an institution accredited by a recognized accrediting agency for higher education. The program must have a degree of autonomy that is both comparable to that afforded to the other relevant professional programs in the institution and sufficient to assure conformance with all the conditions for accreditation.

Met	Not Met
[x]	[]

Team comments:

The condition is met

11. Professional Degrees and Curriculum

The CACB awards accreditation only to first-professional degree programs in architecture. These include:

- *Master of Architecture degree with a related pre-professional bachelor's degree; requirement, typically amounting to five or six years of study;*
- *Master of Architecture degree without a pre-professional requirement, consisting of an undergraduate degree plus a minimum of three years of professional studies.*
- *Bachelor of Architecture degree requiring a minimum of five years of study, except in Quebec, where four years of professional studies follows two years of CEGEP studies;*

The curricular requirements for awarding these degrees must include three components: general studies, professional studies, and electives that respond to the needs of the institution, the architecture profession, and the students respectively.

Met	Not Met
[x]	[]

Team comments:

There are three points of admission to the Architecture Program: undergraduate students studying at the University of Calgary who elect to enter the Architectural Studies Minor; Master of Architecture Foundation Year admission for students who have an undergraduate degree in any discipline; and students with either a professional or pre-professional degree in architecture entering the MArch Year One. The Visiting Team acknowledges the synergies that form among students in Architecture who enter the Program at various points and bring a diverse range of disciplinary backgrounds, maturity, and levels of architectural experience.

Although the above variations are described in the APR, the confusion noted in the 2011 VTR remains since the equivalency of courses which are taken either as a Minor by students completing an undergraduate degree or as a Foundation Year by students enrolled in the Master of Architecture Program is not addressed in the APR. The shared courses could either be seen as graduate level and very challenging for undergraduates or as undergraduate level and not advanced sufficiently for graduate students. Given the request for clarity of this ambiguous overlap noted in the 2011 VTR, it is an unfortunate omission in the 2017 APR. The Visiting Team suggests that the Architecture Program clearly presents the three modes of entry for students into the Program and consequent paths toward a single graduate degree in architecture.

The current discussion of the benefits of the Minor in Architectural Studies is rendered in terms of a reduction in time to degree for some students, noting that from high school this path yields a graduate degree in architecture after six years of university study — 4 years in any undergraduate degree and 2 years of graduate architecture study. Other graduate students of the Master of Architecture Program who enter directly into the M1 year of the graduate program (for students with a professional or pre-professional degree in architecture) will have had a total of at least six years of architectural education. There was no discussion in the APR of this difference in education for students receiving the same M.Arch degree.

The Program has organized its curriculum around the theme of ecology which reflects the original emphasis on the environmental focus in the founding of the Faculty of Environmental Design. Currently each semester in the three-year Program has been designated as Ecology 1 through 6. Ecology in this context has departed from the original biological definition of the interaction between an organism and its environment to embrace a metaphorical application of 'ecology' as a study of the relationship between individuals and their context understood in physical, socio-cultural and other ways. Reflecting this extension of 'ecology' into these other conceptual territories would benefit the Program in aligning its curricular themes with actual practice in course delivery.

In spite of the declaration of ecology as the thematic structure of the curriculum, it was addressed by faculty summarizing the first three semesters of the Program but not mentioned in the latter three semester summaries. The Visiting Team also noted that students were either unaware of ecology as the major curricular theme in the Program or had vaguely heard a reference to it.

The Program has responded to a number of issues noted in the 2011 VTR through the hiring of a new faculty member whose area of expertise is in building science and sustainability. The third semester of the Program has been organized specifically to respond to sustainability issues in the context of a comprehensive design studio and related courses. Given the long history of a focus in the EVDS Faculty on the environment and its current ecology theme, the distinction made between the terms 'ecology' and 'green' or 'sustainable' in the APR could be further strengthened to address these important issues from an architectural perspective and not simply in the prevailing language of building science and other sciences.

The tight coordination of courses and studios each semester to advance the pedagogical goals of the Program has yielded a well organized three-year Architecture Program. The Study Abroad Programs, both the Barcelona Studio running for two decades and more recent offerings in the Pacific Rim, offer important and intensely rich opportunities for student learning beyond the classroom. A question remains about the position of a semester away in a two-year Masters Program, especially after students have completed a comprehensive Studio in the prior semester, but this is understood as a scheduling challenge in a short graduate program. The Visiting Team was also impressed with the opportunities for intense engagement in particular thematic areas offered by visiting professionals through the Block Week course offerings. The results of a week of work are impressive and the Program is encouraged to keep supporting this unique learning form.

12. Student Performance Criteria (SPC)

Each architecture program must ensure that all its graduates possess the skills and knowledge defined by the performance criteria set out below, which constitute the minimum requirements for meeting the demands of an internship leading to registration for practice. (See CACB 2010 Conditions for further detail regarding the SPC categories and criteria).

Met	Not Met
[x]	[]

General Team comments: (See Below)

A1. Critical Thinking Skills

Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well reasoned conclusions, and test them against relevant criteria and standards.

Met	Not Met
[x]	[]

Team comments:

The visiting team had extensive discussion and debate related to this criterion. While the work reviewed from courses EVDA 621, presents an understanding of critical thinking, we do not see this understanding consistently translated into an ability through the design execution in studios. The strongest evidence and exploration of the students' ability to raise questions and test their conclusions is presented in EVDA

621. While the work in this course does allow for this criterion to be met, we believe that the ability for critical thinking executed through a design response to a set of conditions in studios is fundamental in the education of future architects. Some design studio projects provide a written reflection or criticism identifying an ability to critically review their designs in relation to the given criteria, problem and requirements, however, the presence of this critical review and reflection as a deliverable is inconsistent. While there are examples of this criteria being met through student projects in the studios, a more consistent deliverable of a written reflection and criticism of their design studio project would significantly strengthen the program's ability to respond to this criteria.

A2. Research Skills

Ability to employ basic methods of data collection and analysis to inform all aspects of the programming and design process.

Met	Not Met
[x]	[]

Team comments:

Specific examples of research activity were found in EVDA 523.01, EVDA 523.02 and EVDA 621. Research skills were also deployed in many of the graduate studios, most notably in EVDA 682.04 and some of the M.Arch Year 2 studios.

A3. Graphic Skills

Ability to employ appropriate representational media to convey essential formal elements at each stage of the programming and design process.

Met	Not Met
[x]	[]

Team comments:

The concentrated coordination of graphics courses and studio projects in the two semesters of the Minor/Foundation Year curriculum develops a high degree of awareness and skill in a broad range of representational modes to convey architectural concepts. This is in evidence in both the two Graphics courses' material in the Foundation Year and the studio work throughout the program. The Graphics courses introduce a wide variety of graphic techniques (traditional and digital) and provide a conceptual framework for deploying these methods in synchronous studios and in subsequent studios. It is especially commendable that the Graphics courses have an effective software skill-building component in a broad suite of applications provided parallel to the course delivery of representational modes in a discursive context

A4. Verbal and Writing Skills

Ability to speak and write effectively on subject matter contained in the professional curriculum.

Met	Not Met
[x]	[]

Team comments:

Despite the lack of direct evidence, the Team was convinced through interviews with students and professors that a substantial and sustained effort is made to teach students oral skills in the context of studio teaching. For example, the students are provided with systematic and iterative feedback to incorporate into their public presentation of their design project. Substantial evidence demonstrate that students are required to write in many of the core courses: the history and theory courses, the technical and professional courses and also, though to a lesser extent, in studio courses.

A5. Collaborative Skills

Ability to identify and assume divergent roles that maximize individual talents, and to cooperate with others when working as members of a design team and in other settings.

Met	Not Met
[x]	[]

Team comments:

The program utilizes a student team structure in some studio projects (primarily the Comprehensive Studio) and course assignments. In interdisciplinary project groups, the benefit of divergent talents among students is not consistently managed effectively to encourage and maximize the contribution of varied skills in the production of studio projects. On occasion, there seemed to be an expectation among architecture students that skills of other disciplinary team members would match their drawing skills, for example. More attention on an effective application of collaborative practices in studio would benefit the academic principle of interdisciplinarity in an interdisciplinary Faculty.

A6. Human Behavior

Understanding of the relationship between human behavior, the natural environment and the design of the built environment.

Met	Not Met
[x]	[]

Team comments:

The re-focus of the EVDS 523 curriculum on the complexities of human behavior and the environment seems to have the intended effect of providing students with knowledge of the criteria. In the course work surveyed, the students demonstrate a proper understanding of the relationships between human behaviour and the environment. While the true definition and adherence to this criteria was thoroughly discussed by the visiting team, the group felt that the program's ability to respond to this criteria would be strengthened through clearer evidence that the students consider the user's perspective in their design studio projects.

A7. Cultural Diversity

Understanding of the diverse needs, values, behavioral norms, and social/spatial patterns that characterize different cultures and individuals, as well as the implications of this diversity on the societal roles and responsibilities of architects.

Met	Not Met
[x]	[]

Team comments:

EVDA 523.01 and 523.02 provide some basic understanding of cultural diversity; even if largely with a Western focus and from a Western perspective. The studios taken abroad by a substantial portion of the student population provide further exposure to cultural diversity but the team feels that this criteria is very minimally met.

A8. History and Theory

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

Met	Not Met
[x]	[]

Team comments:

Understanding of diverse global and local traditions in architecture, landscape, and urban design is only minimally met with the two history of architecture courses EVDA 523.01 & 523.02. Though these courses are well structured and comprehensive, the Team found them casted at the level of undergraduate survey courses. Exposure to contemporary theories is met with EVDA 621.

A9. Precedents

Ability to make a comprehensive analysis and evaluation of a building, building complex, or urban space.

Met	Not Met
[x]	[]

Team comments:

Precedent analysis is carried in the history courses sequence, in EVDA 621 and in EVDS 671 & 675. Studio courses utilize precedent analysis as a tool.

B1. Design Skills

Ability to apply organizational, spatial, structural, and constructional principles to the conception and development of spaces, building elements, and tectonic components.

Met	Not Met
[x]	[]

Team comments:

Studio projects demonstrate the ability to configure themselves based on organizational, spatial, structural, and constructional principles. The final resolution of formal and spatial propositions in projects consider building elements effectively in most cases although there is little evidence of an interest in examining the role of tectonic expression in final design outcomes.

B2. Program Preparation

Ability to prepare a comprehensive program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws and standards, and site selection and design assessment criteria.

Met	Not Met
[]	[x]

Team comments:

Studios I and II introduce program as part of residential-scale precedent analysis. Ensuing projects demonstrate modest inclusion of programmatic requirements. The Comprehensive Studio includes a program matrix and asks students to design a larger, more complex project with more demanding programmatic requirements. However, it does not appear that students prepare a program (in the form of a brief, for example). Projects display a rudimentary accommodation of programmatic requirements within formally ambitious projects but account less so with space planning and user needs. The Barcelona Studio is noted as an exception, demonstrating an elegant resolution at a residential scale of programmatic requirements within the design proposition. We are concerned that this SPC remains not met.

B3. Site Design

Ability to analyze and respond to context and site conditions in the development of a program and in the design of a project.

Met	Not Met
[x]	[]

Team comments:

Studios in the first half of the three-year program situate projects in varying sites to expose students to the impact of different conditions and corresponding responses in their design process. Some projects exhibit unique and striking responses. A pragmatic site analysis within a sustainability framework is completed by students in the first assignment of EVDS 523 Sustainability in the Built Environment.

B4. Sustainable Design

Ability to apply the principles of sustainable design to produce projects that conserve natural and built resources, provide healthy environments for occupants/users, and reduce the impacts of building construction and operations on future generations.

Met	Not Met
[x]	[]

Team comments:

Courses EVDS 523, EVDS 511, EVDA 611 and 615 address principles of sustainable design. It is applied minimally in the Comprehensive Design studio EVDA 684.04. However given the long tradition of environmental design in EVDS and the thematic focus in the curriculum on ecology, the program is encouraged to explore sustainable principles in a deeper and/or more holistic way into the design studios more generally.

B5. Accessibility

Ability to design both site and building to accommodate individuals with varying physical and cognitive abilities.

Met	Not Met
[x]	[]

Team comments:

Accessibility is introduced in EVDA 611 Building Science and Technology II in the context of building codes and develops a specific analytic exercise on accessibility requirements exhibiting an understanding of relevant principles. Projects in the Comprehensive Studio indicate the use of barrier-free elements and exhibit this through a thorough analysis.

B6. Life Safety Systems, Building Codes and Standards

Understanding the principles that inform the design and selection of life-safety systems in buildings and their subsystems; the codes, regulations, and standards applicable to a given site and building design project, including occupancy classifications, allowable building heights and areas, allowable construction types, separation requirements, occupancy requirements, means of egress, fire protection, and structure.

Met	Not Met
[x]	[]

Team comments:

The projects prepared for EVDA 611, 661 and 682.04 demonstrated a general understanding of codes, regulations, occupancy classifications, allowable heights, areas and construction types, some separation and occupancy requirements and means of egress. Fire protection was shown in wall and ceiling details.

B7. Structural Systems

Understanding of the principles of structural behavior in withstanding gravity and lateral forces, and the evolution, range and appropriate applications of structural systems.

Met	Not Met
[x]	[]

Team comments:

Weekly quizzes and exams cemented the concepts for the students as well as practical model exercises and examples of structural systems of existing buildings. An understanding was carried through into the Comprehensive Design Studio

B8. Environmental Systems

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

Met	Not Met
[x]	[]

Team comments:

Relevant projects are given to students demonstrating an interest in and understanding of environmental systems through the work in various courses. These principles are shown to a greater or lesser extent in the Comprehensive Studio.

B9. Building Envelopes

Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

Met	Not Met
[x]	[]

Team comments:

Building envelope concepts are introduced early in the Foundation Year and well reinforced in second year.

B10. Building Service Systems

Understanding of the basic principles that inform the design of building service systems, including plumbing, electrical, vertical transportation, communication, security, and fire protection systems.

Met	Not Met
[x]	[]

Team comments:

Most building service systems are addressed in EVDA 615 and the rest are provided through required readings from the class textbook, 'The Architect's Studio Companion.'

B11. Building Materials and Assemblies

Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance.

Met	Not Met
[x]	[]

Team comments:

Building materials and assemblies are taught throughout the program, notably in the comprehensive Design Studio

B12. Building Economics and Cost Control

Understanding of the fundamentals of development financing, building economics, construction cost control, and life-cycle cost accounting.

Met	Not Met
[]	[x]

Team comments:

Architectural Professional Practice EVDA 661 provides students with a brief introduction to building economics but could improve information pertaining to life-cycle costing especially as it relates to sustainability. The visiting team discussed the critical nature of an understanding of costing in order to succeed in professional practice.

C1. Detailed Design Development

Ability to assess and detail as an integral part of the design, appropriate combinations of building materials, components, and assemblies.

Met	Not Met
[x]	[]

Team comments:

This condition is primarily met and demonstrated in the work of the Comprehensive Studio. It is supported by the project work of EVDA 611 through the application of studio projects, allowing students to develop basic Design Development documents that could plausibly lead to the production of Contract Documents. EVDA 511 also supports the ability to assess and detail solutions through the Building Failures project work

C2. Building Systems Integration

Ability to assess, select, and integrate structural systems, environmental systems, life safety systems, building envelopes, and building service systems into building design.

Met	Not Met
[x]	[]

Team comments:

This condition is primarily met and demonstrated in the work of the Comprehensive Studio. As noted under C4, this is often despite many projects demonstrating complex and/or challenging formal and/or spatial ambitions. In addition to the work of Comprehensive Studio, the condition is also met in the project work of EVDA 615 and EVDA 611, each of which used student's own Comprehensive Studio projects to assess, select and integrate environmental control systems, envelope systems and to apply Building Code requirements. This appears to have allowed students to apply principles more fully than if applying the systems within the context of the Studio alone (e.g. completing environmental performance calculations to determine requirements and then determining systems requirements accordingly). In the future, the team suggests that this method could be formally applied in courses that address structural systems to increase the depth of applied structural understanding in this area.

C3. Technical Documentation

Ability to make technically precise descriptions and documentation of a proposed design for purposes of review and construction.

Met	Not Met
[x]	[]

Team comments:

The work reviewed demonstrates an understanding of the key components of technical documentation, and organization of information according to industry conventions and standards. This includes written documentation on drawing sheet sets to cover Code classification and life safety requirements, through standard plan, section and elevation representations to building details. Generally these demonstrate application of sound envelope and technical systems resolution that are consistent with design intent.

C4. Comprehensive Design

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

Met	Not Met
[x]	[]

Team comments:

In our view the work in Comprehensive Studio demonstrates a resolution of an architectural idea into a plausible building design incorporating all the major systems (structural, mechanical, electrical, envelope), while satisfying basic life safety requirements. This is often the case despite many project examples demonstrating complex and/or challenging formal and/or spatial ambitions. That said, while the incorporation of sustainable strategies that demonstrate environmental stewardship are apparent in the designs, several examples show that these systems are often incorporated into a design whose basic formal and spatial concepts are inherently at odds with sustainable principles and the ecological approach that is the central philosophy of the Architecture Program. We suggest that outcomes in this area could be improved if principles of environmental stewardship were introduced as primary design imperatives that inform initial concept development. The team commends the program on their solution to address both the workload associated with the comprehensive studio as well as the requirement for each individual

member of the design team to meet this criteria independently through the use of individual technical reviews with the panel of individual technical course instructors.

D1. Leadership and Advocacy

Understanding of the techniques and skills for architects to work collaboratively with allied disciplines, clients, consultants, builders, and the public in the building design and construction process, and to advocate on environmental, social, and aesthetic issues in their communities.

Met

[x]

Not Met

[]

Team comments:

Our assessment of the course material and work produced reveals that the students have a good knowledge of the various stakeholders involved in the design and construction process and they understand the importance of being the advocate for environmental, social, and aesthetic issues as part of a design team. The value of these skills is echoed and exemplified through the practice pursuits and leadership roles of faculty members. The influence and exposure of the students to strong leaders in this aspect is a great strength of this program.

D2. Ethics and Professional Judgment

Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

Met

[x]

Not Met

[]

Team comments:

In our view, the lectures included in EVDA 661 offers a broad view of the ethical requirements of our profession. Our review of the students' journal entries confirms that the material is well understood. We particularly appreciate the use of external lecturers (i.e. clients, insurers, planning officials etc.) to convey this information.

D3. Legal Responsibilities

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

Met

[x]

Not Met

[]

Team comments:

The content and assignments of EVDA 661 covers this requirement well. We were also impressed to see that general building code knowledge is reflected in the Comprehensive Studio work. General awareness of the opportunities and limitations of the regulatory framework is vital to student development.

D4. Project Delivery

Understanding of the different methods of project delivery, the corresponding forms of service contracts, and the types of documentation required to render competent and responsible professional service.

Met

[x]

Not Met

[]

Team comments:

The work that we surveyed demonstrates a good understanding of the various requirements of proper construction documentation. We did see evidence of construction procurement methods and construction administration being covered in the student work but if we can offer one path to improvement, we would suggest to further explore these subjects.

D5. Practice Organization

Understanding of the basic principles of practice organization, including financial management, business planning, marketing, negotiation, project management, risk mitigation and as well as an understanding of trends that affect practice.

Met

[x]

Not Met

[]

Team comments:

The student assignments reflects a broad understanding of the basic principles surrounding the management of a practice. While most of the principles are clearly covered by the assignments, the Team believes that the understanding of project management could be further developed.

D6. Professional Internship

Understanding of the role of internship in professional development, and the reciprocal rights and responsibilities of interns and employers.

Met	Not Met
[x]	[]

Team comments:

We view this SPC as met with a reservation. While the course material and assignments (from winter 2016) clearly show some exposure to the professional internship process, our interviews with the student body seems to indicate that the process is not fully understood by all students. Some felt that they did not have the skills to enter the workforce and did not seem to understand the role of the internship in developing these skills.

While the new professor assigned to EVDA 661 hinted to a greater emphasis on the IAP, in the current session of this class, because of the timing of our visit, it is impossible for us to confirm this to be the case. Furthermore, the AAA sessions which are specifically tasked with introducing students to the IAP are unfortunately not mandatory to all.

Based on the evidence, our view is that the Program could use the existing sessions by the AAA to strengthen the student's knowledge of the IAP. Finally, based on our discussions with the students, we believe that a better understanding of the roles and responsibilities of the intern, the mentor and the employer during the IAP could strengthen the confidence of students as they prepare to enter the workforce.

IV. Appendices

Appendix A: Program Information

The following is condensed from the Program's Architecture Program Report

1. Brief History of the University of Calgary

The institution, that became the University of Calgary, was initially established in 1945 as an extension of the University of Alberta in Edmonton, based on the Calgary Normal School (est. 1906). In 1966 the city, and the southern Alberta region, finally achieved its long sought-after goal as the University of Calgary was given its new name and its autonomous status. This developed coincidentally with Calgary's emergence as an international business centre for energy, agriculture, communications, transportation and tourism. Calgary is rich in cultural and artistic activity, and an exceptionally high level of education leads its people to take a lively interest in their University. This history leads the University to combine the best of long-established university traditions with the freshness, originality and independence of Calgary's entrepreneurial environment. Although it has occupied its present 213-hectare north-west Calgary campus since 1960, the years from 1965 to 1976 defined the major period of growth for the University, seeing the establishment of programs in Engineering (1965), Social Welfare (1966), Business and Fine Arts (1967), Nursing (1969), Medicine (1970), Environmental Design (1971), Law (1975), Science (1976), Social Science (1976), Humanities (1976), General Studies (1981), and Veterinary Medicine (2008). Today it is a comprehensive large research (ranked top seven in Canada) and teaching University with a broad range of Faculties, academic departments and major program areas, and research institutes and centres. In September 2008, the inaugural class of the Faculty of Veterinary Medicine began their studies in the Clinical Skills Building at Spy Hill. With the Faculty's focus on transmission of diseases from animals to humans, population health, its ties to the medical school, its innovative curriculum and its use of community teaching resources, this new Vet School has already received a reputation for innovation. In August 2007, the U of C opened a campus in Doha, Qatar, offering internationally accredited nursing degrees to students in the Middle East. During the 2008/2009 academic year, there were 65 students registered at University of Calgary—Qatar (UCQ). An additional 75 students are expected to arrive in fall 2009, and another 50 the following winter (2010).

2. Institutional Mission

The Master of Architecture Program at the University of Calgary offers a three-year graduate curriculum leading to a professional degree in architecture. It prepares individuals to be productive and thoughtful contributors in the evolving world of architectural practice. In 2009 the Program adopted a new vision that focuses on design as engaging a complex range of ecological factors. Beyond delivering an accredited professional program, as a community of educators, practitioners and students, the Master of Architecture Program is committed to the following areas of concentration as reflected in teaching, research and practice: sustainable design, architecture and the contemporary city, critical practice, digital design and fabrication, and architectural history and theory.

3. Program History

The Faculty of Environmental Design was established in 1971 in response to a campaign by the Alberta Association of Architects for a school of architecture in the province. Its non-departmental structure housed academic programs in Architecture, Environmental Science and Urbanism. The intention of both the University and the Association, in establishing such an academic unit, was to meet the increasing demands being placed

on the profession and on the environment through the education and training of professionals for a greater variety of design roles in an academic environment that not only encouraged but required interdisciplinary group approaches to teaching and research.

Prof. William T. Perks, from Ottawa's National Capital Commission, was founding Dean of the Faculty (1971-1981) and Professor R. Douglas Gillmor, FRAIC, from the University of Manitoba, the founding Director of the Architecture Program. The early challenges facing the Program were the professional liaison and curriculum development necessary to implement the professional programs of study while at the same time developing the interdisciplinary links within the Faculty. Among the accomplishments of this period was the development of the theoretical and pedagogical foundations of the program and the recruitment of students and faculty committed to the idea of interdisciplinary studies. In addition to Doug Gillmor, the Directorship was held in this period by James McKellar, FRAIC and Dr. Michael McMordie.

Dr. Don Detomasi moved from the Planning Program in EVDS to serve as Dean from 1981 to 1989. During his tenure, the Directorship of the Architecture Program was held successively by Dale Taylor FRAIC, Doug Gillmor, and Robert Kirby. In response to the evolving needs of the profession, the Architecture Program began to shift towards incorporating national standards and procedures expressed through certification into a curriculum to be followed by a student body who were increasingly focused and less inclined to explore the periphery. This was also a period of declining resources and expanding national and international initiatives. A range of revenue generating research projects in Bangkok and Peru enabled the Faculty to manage the gradual decline in government support over this period. Dean Detomasi initiated a proposal for a new building to house this Faculty and three other professional faculties before his departure in 1989 to become Associate Vice President (Planning) for the University. Prof. Doug Gillmor, of the Architecture Program, served as Acting Dean from 1989 to 1990 as the Faculty began to develop a strategic plan for the coming decade.

Dr. Robert Page from Trent University served as Dean from 1990-1996, and directed the Faculty through the difficult task of managing significant budget cuts while maintaining the integrity of the professional programs. John Brown, MRAIC, and Dale Taylor, FRAIC, served as Directors of the Architecture Program during this period and prepared the Program for the process of accreditation by the CACB. Despite significant budgetary constraints and the loss of one faculty position, the Program instituted a number of enrichment opportunities including exchange programs in India and the study abroad program in Barcelona, Spain. The current building became the Faculty's new home in January 1994.

Following the retirement of Dale Taylor, the Directorship of the Program was shared by John Brown, MRAIC, and James Love, MRAIC. This was done to recognize the significant administrative duties of the Director while still allowing these key faculty members to continue their teaching and research activities. In 1997, under Acting Dean Dr. Ron Wardell, the Faculty underwent a reorganization of its administrative structure.

The appointment of Dr. Mary Ellen Tyler as Dean in September 1998 heralded a new period in the Faculty. Issues of administrative restructuring were addressed and the Architecture Program enjoyed a renewed commitment from the Faculty. Key initiatives included the establishment of a Minor in Architectural Studies (ARST) within the Faculty of Communication and Culture (formerly the Faculty of General Studies) in 1999, the consolidation of the study abroad term in Barcelona (Spain), and the inauguration of an annual architecture student publication *In Situ*.

Dr. Graham Livesey, AAA, MRAIC assumed the Program Directorship on July 1, 2000 and continued in the role until June 30, 2006. He focused on promotion, redefining the vision, curriculum changes, and growing the program. In September 2003 an Access proposal was developed for the Alberta government that outlined the Architecture Program's growth objectives. This proposal was accepted in 2005, and funds came to the program that allowed for the hiring of new faculty and augmenting the facilities to accommodate the growth of the overall program.

On September 1, 2003 Prof. Brian R. Sinclair assumed the Dean's position in the Faculty. An alumnus of the Architecture Program he has focused on strengthening the Faculty, fundraising, promotion, and significant outreach initiatives including the University of Calgary's urban campus project. He continued in the role until June 30, 2007. Under Dean Sinclair, Prof. Loraine Fowlow served as Associate Dean Academic, overseeing the academic administration of both the Architecture and Environmental Design programs.

Prof. Loraine Fowlow was Interim Dean from July 1, 2007 until December 31, 2009. During her tenure the faculty underwent a significant re-structuring that led to the faculty being comprised of two programs, each coordinated by an Associate Dean: the professional Master of Architecture Program and the non-professional Master of Environmental Design Program. These two programs are augmented by a Doctoral program. Prof. Marc Boutin directed the Architecture Program from 2006-2009, and became the first Associate Dean (Academic – Architecture). During this period the Faculty of Environmental Design came under the administration of the Faculty of Graduate Studies, which led to a number of changes. Among these, was the decision to reduce the professional Master of Architecture Program to three years. During this recent period the Program also secured its first two research chairs: Dr. Branko Kolarevic (Chair in Integrated Design) and Dr. James Love (Chair in Sustainable Building Technologies).

As of July 1, 2009 Graham Livesey assumed the position of Associate Dean (Academic - Architecture) for a one-year term. During 2009-10 the Program revised its vision statement, consolidated the three-year curriculum, developed a Strategic Plan (2010-2015), and concentrated on promotion. On January 1, 2010 Dr. Nancy Pollock-Ellwand was appointed to the position of Dean of the Faculty of Environmental Design for a five-year term. On July 1, 2010 Dr. Branko Kolarevic assumed duties as the new Associate Dean (Academic – Architecture).

Driven by an energetic and dedicated group of faculty members and supplemented by a very generous enrichment programs for its students, the Master of Architecture Program is currently in an exciting period of transformation and is well poised to assume an ever more significant role in the coming decade. During the last several years faculty, students, and alumni have received widespread recognition for their achievements in local, regional and national media and awards programs.

4. Program Mission

Vision Statement

The Master of Architecture Program at the University of Calgary will achieve wide recognition for being within the top tier of accredited schools in North America by 2015.

Mission Statement

To realize our vision of top-tier ranking, we will continue to innovate and grow in the areas of learning and research/practice/scholarship by enhancing our reputation, broadening the student experience, and developing resources.

Statement of Philosophy

There is a pressing need for human designed environments to be comprehensively integrated and to have significantly less impact on the resources of the planet and its ecologies. Ecologies are defined by the complex inter-relationships between organisms and environments. Designed ecologies are constellations of organisms, territorialities, energies, technologies, languages, and the like, that can be productive and effective, and achieve a dynamic balance. An ecological approach to architecture seeks a full integration of all the forces that impact on the design, construction, and inhabitation of buildings and related environments.

5. Program Action Plan

As a non-departmentalized faculty, the strategic planning for the Master of Architecture Program is harmonized with the Faculty of Environmental Design's business and strategic plans. The Master of Architecture Program's strategic initiatives are discussed at Program meetings, and, as required, specific tasks are assigned to faculty members in the Program. The Associate Dean (Academic – Architecture) has the overall responsibility to implement strategies and monitor measures of success and timelines associated with the development of the Program. Through various strategic planning initiatives the Master of Architecture Program has affirmed its commitment to delivering a high quality accredited professional graduate program leading to the Master of Architecture degree. It also confirmed the importance of pursuing this goal within the interdisciplinary context of Environmental Design. The Faculty of Environmental Design is developing a strategic plan that will reinforce the Master of Architecture Program's direction, among a range of initiatives, and will be adopted in the Fall 2010. The Master of Architecture Program developed and adopted a strategic plan, in April 2010, for the period 2010-2015.

Appendix B: The Visiting Team

CHAIR	Henri T. de Hahn	Educator Professor School of Architecture + Design (A+D) 201 Cowgill Hall (0205) Blacksburg, VA 24061, USA Tel.: (540) 231-680 Email: hdehahn@vt.edu
TEAM MEMBERS	Martin Bressani	Educator Director School of Architecture McGill University 815 Sherbrooke Street West Montreal, Quebec H3A 0C2 Tel.: (514) 398-3492 Email: maring.bressani@mcgill.ca
	Sylvain Lagace	Practitioner Caron Lagace Architecture and Design Inc. 82, Timberland Drive South Tetagouche, NB E2A 4Z2 Tel.: (506) 545-6334
	Elizabeth MacKenzie	Practitioner Elizabeth MacKenzie Architect 4669, Drummond Drive Vancouver, B.C. V6R 1 E8 Tel.: (604) 731-9157 Email: emack@shaw.ca
	Beth Macleod	Intern 3680 Lynch Street Halifax, NS B3K 3L2 Tel.: (902) 802-7607 Email: bethemacleod@gmail.com

OBSERVERS

John Cirka

Educator
Associate Chair, Graduate Studies
Department of Architectural Science
Ryerson University
340 Victoria Street
Toronto, Ontario, M5B 2K3
Tel.: (416) 979-7000 x6491
Email: jcirka@ryerson.ca

Martin Jones

Practitioner
Martin P. Jones Architect Ltd
2813 - 28 Street SW
Calgary, AB T3E 2 J2
Tel.: (403) 815-4707
Email: mjonesarchitect@shaw.ca

Appendix C: The Visit Agenda

University of Calgary
 Faculty of Environmental Design
 (EVDS) Final Accreditation Visit
 Agenda March 18 - 22, 2017

Saturday, March 18, 2017

PM	Team Arrival	Hotel Alma (403).220.3203 169 University Gate NW Calgary, Alberta, Canada T2N aN4
6:00 pm	Team Introductions + Gathering	Hotel Alma - Lobby
6:30 pm	Team-only dinner	Blink, 111 8 Avenue, SW
8:30 pm	Team Meeting / Review of Schedule	Hotel Alma Varsity Boardroom

Sunday, March 19, 2017

7:30 am	Team Breakfast with Dr. Graham Livesey EVDS Associate Dean (Academic-Architecture) & Professor	Hotel Alma - Bistro Alma
9:00 am	Tour Facilities	EVDS - Graham Livesey
10:30 am	Team Orientation, Review of APR & Issues	Team Room (PF 3177)
11:00 am	Preliminary Review of Exhibits	Team Room (PF 3177)
12:00 pm	Lunch	Team Room (PF 3177)
1:00 pm	Presentation of Program by Academic Staff	EVDS (PF 2160)
3:00 pm	Review of Exhibits	Team Room (PF 3177)
4:00 pm	Tour of Library and Canadian Architecture Archives by Linda Fraser	TFDL
7:00 pm	Team-only Dinner	Notable, 4611 Bowness Rd NW

Monday, March 20, 2017

7:00 am	Team Breakfast with Dr. Graham Livesey EVDS Associate Dean (Academic-Architecture) & Professor	Hotel Alma - Bistro Alma
8:15 am	Entry Meeting with UCalgary Provost Dr. Dru Marshall & Deputy Provost Dr. Kevin McQuillan (30 minutes)	Administration Building
9:00 am	Entry Meeting with EVDS Dean (PF 2189) Dr. Nancy Pollock-Ellwand (minutes)	EVDS (45)
9:45 am	Review of Exhibits	Team Room (PF 3177)
10:30 am	Chair Requested Meeting (PF 2184) Faculty Operations, Tracy Beauregard	EVDS
11:30 am	Lunch with MArch Student Representatives	EVDS (PF 2140)
1:00 pm	Program Wide Meeting with Students	EVDS (PF 2160)
2:30 pm	Meeting with Faculty Members	EVDS (PF 2160)
3:30 pm	Review of Exhibits	Team Room (PF 3177)
3:30 pm	Chair Requested Meeting Director of Development, Leitha Cosentino	EVDS (PF 3184)
5:00 pm	Reception for Faculty , Alumni, and Practitioners	EVDS Gallery
6:30 pm	Team-Only Dinner 1147 Kensington Crescent NW	Pulcinella
8:00 pm	Draft Report	Team Room (PF 3177)

Tuesday, March 21, 2017

7:30 am	Team-Only Breakfast	Hotel Alma - Bistro Alma
	8:30 am Review of Exhibits and Records (PF 3177) Draft Report	Continue Team Room
11:00 am	Meeting with Support Staff	EVDS (PF 2140)

11:30 am	Meeting with Technical Staff	EVDS (PF 2140)
12:00 pm	Lunch with MArch Faculty Representatives	EVDS(PF 2140)
1:30 pm	Continue Review of Exhibits and Records (PF 3177) Draft Report	Team Room
6:30 pm	Team-Only Dinner	Team Room (PF 3177)
8:00 pm	Draft Report / List Concerns and Comments (PF 3177) Strategy Session / Recommendation	Team Room

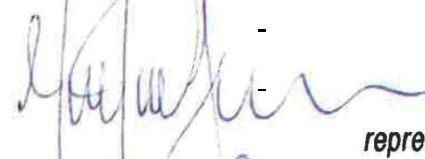
Wednesday, March 22, 2017

7:30 am	Team Breakfast with Dr. Graham Livesey EVDS Associate Dean (Academic - Architecture) & Professor	Hotel Alma -Bistro Alma
8:30 am	Exit Meeting with UCalgary Provost Dr. Dru Marshall (over the phone) & Deputy Provost Dr. Kevin McQuillan	Administration Building (30minutes)
9:00 am	Exit Meeting with EVDS Dean Dr. Nancy Pollock-Ellwand	EVDS (PF 2189) (45 minutes)
10:00 am	Program Wide Meeting with Students, Faculty & Staff	EVDS (PF 2160)
11:00 am	Team Departs	

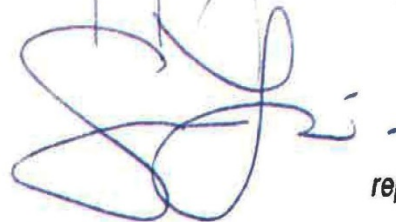
V. Report Signatures



Henri T. de Hahn • Team Chair
representing the educators



Martin Bressani
representing the educators



Sylvain Lagacé
representing the practitioners




Elizabeth MacKenzie
representing the practitioners



Beth Macleod
representing the students or interns



John Cirka
CACB Observer



Martin Jones
School/ Program Observer