Accreditation Report

Master of Architecture Program
Dalhousie University
March 6-9, 2022
The text in this document is presented in three different colours:

- **Black** for the Conditions for Accreditation requirements
- **Gold** for the Program’s responses to the Conditions for Accreditation
- **Blue** for the CACB Visiting Team’s Compliance Statements
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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 CACB and 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 https://cacb.ca/conditions-and-procedures/

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

II. Summary of Visiting Team Findings

1. Visiting Team’s General Comments

   This visit is the first to use the redesigned online format for producing the APR and the VTR. As expected, it was more efficient to use and more meaningful as an overall result. We would like to thank the School, Faculty, students and staff for their engagement and active collaboration with the Visiting Team in making the virtual visit a success. We offer special thanks to Director Diogo Burnay and Professor Steve Parcell for their diligent work throughout the process to facilitate the visit.

2. Conditions for Accreditation "met" and "not met": a summary

   1. Program Self-Assessment
   2. Public Information
   3. Equity, Diversity, and Inclusion
   4. Student Composition, Well-Being, and Enrichment
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   6. Space and Technology Resources
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   9. Administrative Structure
   10. Professional Degrees and Curriculum
11. Performance Criteria

11.1. Program Performance Criteria

| PPC1. Professional development | Met Not Met | ✓ |
| PPC2. Design education          |            | ✓ |
| PPC3. Global perspectives and environmental stewardship | Met Not Met | ✓ |
| PPC4. Collaboration, leadership, and community engagement | Met Not Met | ✓ |
| PPC5. Technical knowledge       |            | ✓ |
| PPC6. Breadth of education      |            | ✓ |

11.2. Student Performance Criteria

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3. Program Strengths

The Visiting Team found a strong School spirit with engaged and thoughtful students. Students are interested in the Global impact of architecture and environmental issues. Faculty members and support staff are engaged, they collaborate well and are attentive to the student experience.

The School enjoys a very supportive alumni and professional community. The School’s location in downtown Halifax remains an asset. Recent facility renewal efforts are much appreciated and have improved conditions. This is an ongoing effort that we expect will continue.

The Visiting Team found that there is a top-down commitment to the school’s importance within the university community and the strategic vision. This is a good indicator of stability. There is alignment at all levels for the need to broaden community engagement and Global reach.

The School fosters a cohesive ethos supported by an admirable culture of making and hand drawing, as well as technical strength.

Free Labs are noteworthy as live, socially impactful practicums. Quality of representation and expressing ideas is very good.

The integrated Coop Program fosters connection to the profession and reinforces the academic Professional Practice stream. The students are also exposed to the Associations and practicing architects.

4. Causes of Concern

There is a concern that survey courses in the B series of SPC’s (Culture, Communication, and Critical Thinking) as well as in the C series (Technical Knowledge) provide the students with a cursory exploration of those subjects at the possible expense of depth.

Students and staff expressed concerns with provision, renewal and access to advanced digital design equipment and applications as well as access to current digital fabrication opportunities. We also note that this was a cause for concern at the last visit in 2015. The students’ experience is hampered by the limited research culture and research diversity. We also note that this was a cause for concern at the last visit in 2015.

Although Students and Faculty express an awareness of Global, Social and Environment issues this awareness is not manifested in the curriculum.

The Program records a strain from their budgetary situation over the last 6 years and the VT is concerned that, if continued, this trend could impact accreditation. The Program must resume the strategic planning and self assessment processes. We also note that this was a cause for concern at the last visit in 2015.
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 School conceives architecture holistically, as both a discipline and a profession. Professional practice courses, including required co-op work terms, are coordinated with academic courses. The structure of the curriculum and the organization of its streams encourage an integrated understanding of architecture. Human habitation, building construction, and the social responsibility of the architect are present from the beginning. Students learn the craft of manual drawing and modeling before extending their abilities into the digital realm. Students complete at least two years of general studies in different disciplines before focusing on architecture. This provides a solid foundation for the BEDS and MArch programs. Certain topics are becoming more prominent within the program, including cultural diversity, global awareness, climatic ecology, and expanding technologies.*

Visiting Team Review

1.2 Program Action Plan and Objectives

The APR must include:

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

*Dalhousie University and the Faculty of Architecture and Planning had clear strategic plans up to 2018. This is now a time of transition at all three levels, due to recent changes in leadership: president, vice presidents, provost, and dean. In 2020, responding to COVID-19 delayed the School of Architecture's development of an action plan. A process for developing a School of Architecture strategic plan was laid out in September 2020 and is now underway. [2021 update: In June 2021, the Faculty conducted an internal and external dean search, with participation of members from the School of Architecture. In July 2021, Graham Gagnon was appointed Dean of the Faculty for a two-year term. The primary goal of his decanal appointment is to help work out the futures of the Faculty and its two Schools. The current aim is to expand and redefine the Faculty.]*

Visiting Team Review
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 well as the “causes of concern.” It may also address the conditions identified as “met” or it may address “team comments.”

Section 2.1 summarizes the Annual Report correspondence between the School and the CACB from 2015 to 2019 on each item that was listed as a "cause of concern" or an "item not met" in the 2015 VTR. Some items were cleared; some continued to be discussed during the past few years.

Visiting Team Review

Reviewed ✓

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.

3.1.1 describes the self-assessment process. 3.1.2 presents a cross-section of results.

Visiting Team Compliance Assessment

Reviewed ✓

The Program notes that a self-assessment process was launched in early 2020 by sending a questionnaire with 6 questions based on the CACB 6 PPC's. The answers present a variety of views both positive and negative. There is no evidence that the responses were used to assess if it is achieving its strategic plan.

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 by the 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 information regarding the CACB process for accreditation.

3.2.1 includes links to the program descriptions in the calendars, along with four School of Architecture publications that quote the CACB's statement on accreditation. 3.2.2 shows that the School communicated the CACB’s process for accreditation to faculty and incoming students.

Visiting Team Compliance Assessment

Reviewed ✓
The information required by the CACB is provided in the APR and on the Website. The ACR-Stage A statement from Dal for this item is in compliance with the CACB conditions.

3.3 Equity, Diversity, and Inclusion

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

3.3 includes links to provincial and university EDI policies. EDI has been a priority of the university for many years, aligned with the core values of the university and emphasized by the current and previous presidents. Faculty of Architecture and Planning Council has a new EDI standing committee. The university’s EDI policies are mentioned in all School of Architecture course outlines and employment announcements. The School’s longstanding commitment to social responsibility has been providing a good platform to discuss diversity. Issues about systemic racism raise larger social and political questions that should resonate for years at all levels: global, national, institutional, and personal. Architectural education is just one part of a much larger architectural profession that should raise questions for clients, developers, communities, government, and professional associations.

Visiting Team Compliance Assessment

The Provincial Human Rights Act as well as numerous DAL University policies and initiatives are clearly noted in the APR. In 2018, the Faculty initiated an EDI committee which includes Faculty and Student representation. The APR also notes regular School announcements and initiatives on this matter.

The ACR-Stage A statement from DAL for this item is in compliance with the CACB conditions.

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 student body comes mostly from across Canada, especially western Canada. There is an equal gender balance. Students bring diverse academic backgrounds to the program. The School is student-centred; everyone - students, staff, and faculty - is on a first-name basis. Student representatives and teaching assistants are active participants in the workings of the program. Students do academic and professional courses throughout the whole program. In the MArch program, students have many opportunities to pursue individual academic interests. Despite financial reductions, the School is committed to invite renowned lecturers and critics to introduce students to a wide variety of architectural approaches.

Visiting Team Compliance Assessment

This item includes nine facets that ensure the school provides support and encouragement for students to achieve their potential during school years and later in the profession, as well as an appreciation for interpersonal milieu that embraces cultural differences. The Visiting Team has found that this type of environment is present from multiple perspectives and is in compliance with CACB conditions.

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 where roles 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 out within the Program, and how the research may or may not inform the professional curriculum.

Faculty teaching loads are distributed equitably according to a point system that has been in place for 15 years. With upcoming retirements, faculty renewal can aim for higher academic qualifications and more diversity and external funding in faculty research. Adjunct instructors continue to be needed in the MArch program for their diverse subjects and different perspectives on the architectural profession. Their involvement with the School is also beneficial to the local professional community. Relations between faculty and staff should return to our previous non-hierarchical relationship, so that everyone feels we are working together as a team. New collective agreements for faculty and staff are being negotiated in 2020. [2021 update: There is a new 2020–2022 collective agreement for faculty.]

Visiting Team Compliance Assessment

The program appears to provide adequate human resources, however, faculty are concerned about heavy teaching loads and uncertainty around how non-traditional research is recognized. Support staff express concerns about work overload due to limited resources which also prevents Prof. Development. This issue is on the verge of negatively impacting the student experience.
3.6 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 building has received substantial improvements since 2014. The Faculty's new Wood Shop is better equipped, but now in a different building. In 2019 the School gained space on the main floor but lost it in 2020 when the university reassigned it. The building would benefit from a classroom to accommodate a BEDS class of 65, as most lectures are held elsewhere on the campus. More offices for faculty and adjuncts are needed. The former wood shop was converted to faculty research space. The new auditorium is a substantial improvement. To improve its acoustics, an assessment will be performed after COVID restrictions are lifted. Rising costs for software subscriptions are challenging. The Fabrication Lab in the building provides access to basic equipment. For the School's growing academic and research needs, a clearer access policy to fabrication facilities in the IDEA Building would be useful.

Visiting Team Compliance Assessment

The APR notes that many improvements have been carried out. Outside of fabrication and digital related resources, sufficient physical space is dedicated to the professional program. VT noted lack of state-of-the-art digital teaching and learning resources and convenient access to specialized spaces, fabrication facilities, and tools associated with computational design, simulation. Handling of digital assets and school networking are outdated, and IT services are limited.

3.7 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;
- a current action plan outlining recurring levels of staff support; renewal of hardware, software, equipment, and infrastructure; anticipated modifications to the current installation; and
- a demonstration of sufficient funding to execute the action plan.

The School of Architecture has a strong relationship with the Sexton Library. Printed books are used heavily by students, along with e-books and online resources. The library consults with the School on new acquisitions, as well as cuts to periodical subscriptions due to rising costs.

Visiting Team Compliance Assessment
Materials are well-managed. Recent digitizing efforts retain original editions and images to benefit teaching, research. Inter-library/Novanet extends access to material. Efforts to support program, research, digital teaching, welcome professional & general community. More study spaces in the library now due to digitization. The library regularly weeds and adds to the collection, but a deep review of holdings to reflect contemporary concerns about diversity is yet to be done.

3.8 Financial Resources

The APR must include:

- an itemized Program budget that includes operating and salary expenses and a description of research funding, endowments, scholarships, and development activities.

Funding cuts by the provincial government and the university over the past six years have been straining the School's operations. Despite these cuts, the School has been able to balance the budget. Until 2019, the School Director was informed of the larger Faculty finances through monthly reports and had autonomy and flexibility to manage the approved School budget in a measured way, without individual items needing to be approved. It would be helpful for the current Faculty and School financial operations to be revisited. Funding for student scholarships has increased. Funding for faculty research has increased.

Visiting Team Compliance Assessment

Met ☑ Not Met ☐

The financial resources are challenging yet seem adequate for the delivery of full program operations. Planning is underway at all levels of the University to meet the obligations of programs in an uncertain financial future.

3.9 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 School has an integrated set of committees that monitors all parts of the professional program. Student reps participate on all academic committees, as well as appointment committees for new faculty members. The Faculty of Architecture and Planning is the smallest Faculty in the university, so its administrative structure and operation need to remain thin, light, and agile, unlike the heavier and more stratified structures found in larger Faculties.

Visiting Team Compliance Assessment

Met ☑ Not Met ☐

The APR describes the University, Faculty and School organisational structure as well as providing comparisons with other programs at the university.
3.10 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 6 year (2+2+2) program and curriculum and are fully explained. This program model is found in the approved models outlined in the CACB Conditions 2017. The admission process is detailed in the documents provided and is published on the School's web page. Opportunities for extramural courses, Studies abroad and exchanges are noted.

3.11 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.

Visiting Team Review

Reviewed ✓
3.11.1 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.

*Throughout the program, from the first BEDS term to the final MArch term, there is a complementary balance between academic and professional activities. Co-op work terms are a major component of the BEDS/MArch program.*

Visiting Team Compliance Assessment

The program includes orientation from the Atlantic Region Associations, encouragement to become student members and introductions to the IAP process. There is engagement with and exposure to the profession during the Professional Practice weeks and the 2 co-op work terms.

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.

*Architectural design is the central part of all eight academic terms. BEDS technology, representation, and humanities courses have autonomous learning objectives and assignments, but are also partially integrated with design by providing complementary knowledge and abilities for its projects. Beginning students think with their hands while making physical drawings and models at various scales. This provides a foundation on which students can develop manual-digital fluency. From the start of the BEDS program, design courses encourage students to do their own research through case studies of notable buildings from around the world. This dual research-design emphasis culminates in the MArch thesis. The design curriculum is organized sequentially: from small to large, from simple to complex, and from program-directed to faculty-directed to student-directed.*

Visiting Team Compliance Assessment

The eight design studios in the program are sequenced for increasing complexity and are demonstrated to be integrated with the academic courses including theory, history and technical streams. The program describes a culture of hand drawing and fabrication with encouragement to research design precedents.
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.

Starting with B1 Design, the BEdS courses "think globally and act locally." Students study building designs from around the world as they develop designs for local situations. Global attention is also evident in the four BEdS history/theory courses, as well as the broad, worldwide topics that MArch students pursue in their thesis projects. Environmental attention is the focus of B5 Building Systems (ARCH 4212). It is also a major topic in some M1 and M2 courses.

Visiting Team Compliance Assessment

The school lacks a culture that connects curricular content to its everyday practices in conservation and sustainability. Individual buildings from around the world are introduced, but visibly missing are: 1 historic and contemporary perspectives about broader processes in which architectural and urban design participates, and 2 Indigenous and minority perspectives and contributions.

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.

Most BEdS courses include seminars or projects for small groups that encourage collaboration among students. MArch courses have a maximum of 14 students; this scale fosters individual participation, leadership, and team collaboration. In some courses, students work closely with a community group as part of their research and design. The studios in the Medjuck Building each term are shared by students at three levels; this offers guidance for junior students and a mentorship role for senior students. Dalhousie Architecture Students Association appoints student reps to participate on all academic committees. In Professional Practice courses, students learn how different types of offices are organized and what motivates the work of an office; this encourages them to visualize their own leadership roles and career path.

Visiting Team Compliance Assessment

Collaborative work in case study research frequently initiates project development. Collaborative designs are created in the Free Lab and most M1 studios. VT noted library extends access to information resource networks to local community and more fulsome community outreach in Free Lab. Rarity of community engagement is disappointing. Collegial student mentorship and leadership are encouraged. Students can participate in formal committees.
PPC 5. Technical Knowledge

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

Four fundamental technology subjects in the BEDS academic terms (materials, envelope, structure, and environment) correspond to the emphasis of the design project in the same term. This encourages design-technology integration in student assignments. MArch technology core courses (ARCH 52xx) in M1 and M2 offer different options that enable students to pursue a particular research topic in more depth. The School’s longstanding emphasis on design-build work is most evident in Free Lab (ARCH 4004/6002). Wood has been a major material in both the professional program and faculty research. During the past few years, some faculty members have been pursuing alternate materials and construction methods in their research work and graduate courses.

Visiting Team Compliance Assessment

The APR notes that the BEDS approaches technical integration from four themes of materials, envelope, structure, and environment. Technology at the MArch level is stated to provide options adapted to areas of research topics.

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.

Two years of general studies provide a strong academic foundation for students. In BEDS courses, that knowledge contributes to multifaceted architectural discussions. MArch Year 5 core courses (ARCH 5xxx) are situated somewhere between required and elective. In each of the three subject streams (design, humanities, and technology), students choose from among several options. To augment faculty specializations, the School sometimes employs local practitioners with expertise in another field. The MArch program includes four electives: one in each academic term.

Visiting Team Compliance Assessment

The two years of general studies before entering the BEDS is a unique feature of the program. Diversity in the educational background of students entering BEDS promotes broader thinking. Collaboration enriches the student experience within the cohort. Certain electives at the MArch level can be taken in other university departments. Local practitioners are invited by the school which promotes exposure to a variety of perspectives.
3.11.2 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.

Students follow the School's process portfolio method during the four terms of the BEDS program. This conscious attention to process is also evident in M1 and M2 courses, as well as the first thesis term, ARCH 9012.

Visiting Team Compliance Assessment Met ✓ Not Met  

A variety of design theories and methods is presented in ARCH 3106, 3107, 5102 and several design studios, though evidence of diverse theories articulated in the student work is limited. Similarly, while precedents are studied, notably in ARCH 3001 and 3002, the team felt that their critical analysis was inconsistent.

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.

Design skills from the first three BEDS terms are consolidated in the comprehensive design project in ARCH 4005, then developed further in M1 and M2 Design courses and the final thesis term, ARCH 9013.

Visiting Team Compliance Assessment Met ✓ Not Met  

As evidenced in ARCH 4003, ARCH 4005, M1 and M2 Studios, the conception, configuration and design of buildings, spaces, building elements, and tectonic components are well-supported through a documented and incremental application of design methods and precedents analysis. Some concerns about the rooting of the design process in theories, methods and precedents as identified in SPC A1 remain.

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 three-dimensional representation, computational design, modeling, simulation, and fabrication.

Following an emphasis on manual working methods in the first half of the BEDS program, students work mostly digitally in ARCH 4005. Broader representation skills are developed in M1 and M2 Design courses as students work on different types of projects.

Visiting Team Compliance Assessment Met Not Met ✓

Students appear to have good capabilities with a range of established design tools. Other than in certain electives (ARCH 5217), the team did not find consistent abilities with more recently developed tools associated with computational design, simulation or digital fabrication.
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.

All ARCH 4003 studios work with a real or hypothetical community group. ARCH 4005 is most comprehensive in addressing all of these points. In M2 Design courses, students develop their own program, usually for a site they have selected.

Visiting Team Compliance Assessment
VT found little evidence that students can analyze and respond to complex programs. While students use graphic tools to present spatial organization, critical questioning of programs given by instructors to account for user needs, appropriate precedents or relevant laws is largely absent. M1 and M2 studios and design thesis offer opportunities to engage in complex programs, but outcomes of deep analysis are inconsistent.

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.

All ARCH 4003 studios work with a real site for a public building. ARCH 4005 is most comprehensive in addressing all of these points. The sites in M2 Design courses - especially in locations abroad - are demanding, as are many sites for thesis projects in ARCH 9013.

Students demonstrate an ability to analyze and respond to local site characteristics in most of the studios, especially ARCH 4003 and ARCH50xx.

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.

B2 Design (ARCH 3002) is sited in the town of Lunenberg, a UNESCO world heritage site, to experience strong urban structure. Urban design is a factor in B3 and B5 Design, but most evident in M2 Design courses, during the "urban term" of the MArch program.

Visiting Team Compliance Assessment
The visiting team was unable to find evidence of a sustained discussion of the contemporary urban condition. Although some of the M2 studios engage with current urban theories, as well as infrastructural, environmental, and ecological systems, this engagement is not consistent in all sections. Furthermore, the team noticed a jump in scale from the regional to the site, bypassing the urban scale as such.
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.

*B2 and B3 technology courses prepare students for the comprehensive design expectations of ARCH 4005 and 4212. All MArch technology courses incorporate building details, in different ways.*

Visiting Team Compliance Assessment

*This criterion is addressed in ARCH 4005 with explorations at a human scale, and with increasing refinement in ARCH 4212 and the ARCH 52XX series. ARCH 5211 'The Construction Detail' does not seem to be about details at all.*

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.

*Documentation is most thorough in ARCH 4005 and 4212, during the comprehensive B5 term. M1 and M2 Design courses address the first part of this SPC.*

Visiting Team Compliance Assessment

*Conceptual design projects are effectively presented though varied media in design courses ARCH 3002 through ARCH 50xx. Construction documentation is demonstrated in ARCH 4212 and elsewhere. Work with three part specifications was not apparent.*

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.

*Research and design are combined throughout the BEDS program. In MArch courses, students raise questions, proceed with research, develop a critical framework, and present their findings. This is most evident in the two thesis terms, ARCH 9012 and ARCH 9013.*

Visiting Team Compliance Assessment

*ARCH 4112 and most of the 51xx courses develop critical thinking skills. An acceptable level of critical thought is well communicated in the thesis documents.*
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.

Following the global history survey courses in B1 and B2, students in ARCH 4112 focus on particular topics in history. History is pursued in different ways in MArch humanities courses. It is also a major factor in M2 Design courses, where the history of the urban infrastructure informs site selection and design projects.

Visiting Team Compliance Assessment

Met ✓ Not Met ☐

The series of history courses in the BEDS provide students with a grounding in architectural history, including global histories. The focus is largely on material categories (order, transparency, craft, and material). The relevance to the contemporary condition is not always clear. Graduate humanities courses (ARCH 51xx) extend this historical understanding with in-depth examinations of particular topics. There is little evidence that 20th century urban scale is discussed.

B3. Architectural Theory

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

In ARCH 4113, students become familiar with diverse theoretical sources and interpret them actively in a design situation. This anticipates focused theoretical work in MArch courses, including the two thesis terms, ARCH 9012 and 9013.

Visiting Team Compliance Assessment

Met ✓ Not Met ☐

Evidence that students understand conceptual and theoretical frameworks and how they have shaped architecture and urban design is found in ARCH 4113. Exposure to recent urban design theories was found to be very limited.
B4. Cultural Diversity and Global Perspectives

The student must have an understanding of the diverse needs, values, behavioural 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.

Alongside the B1 Design case studies of buildings from around the world, ARCH 3106 and 3107 are relatively new history courses with a more global attention to locations, cultures, and environmental scales. (They are also open to other senior undergraduate students in the university.) The main assignment in ARCH 4112 considers architects based outside North America and western Europe. Human behaviour is a central topic in the private dwelling for B2 Design (ARCH 3002) and the public building for B3 Design (ARCH 4003). It is considered most intensely in the urban bath project for B5 Design (ARCH 4005), which challenges North American behavioural norms.

Visiting Team Compliance Assessment

Clear study of diversity and global perspectives is present in only a few courses. Evidence is sparse that diverse needs of different cultures or groups are studied or considered in design courses. Previous criticism from Section D of 2015 CACB Report is addressed somewhat but still persists.

VT is concerned that the program does not address social and spatial patterns in which contemporary practice participates.

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.

Attention to environment and ecology is most prevalent in ARCH 4212, which is part of the B5 comprehensive term. The inclusion of this SPC in Section B: Culture, Communications, and Critical Thinking, suggests that it's not just a technical issue but also a cultural issue. In this way, it would be evident also in M2 Design courses.

Visiting Team Compliance Assessment

Student work in ARCH 4212 establishes a basic foundation for ecological engagements limited to environmental perspectives.

Evidence for broader ecological study can be found in Master level design courses but specifically in the M1 studios.

There are concerns that ARCH 5013 design-build studio will not consistently address these issues term by term.
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.

ARCH 4304 focuses on codes.

Visiting Team Compliance Assessment

This CACB condition is met as demonstrated in ARCH 4303 and ARCH 4304. In ARCH 4304, students work on a preliminary code review exercise that includes code matrices, building code simulation, fire and life safety, and accessibility diagrams, as well as an exercise to understand the integration of building code and design.

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.

Materials are the primary focus of ARCH 3207 and a secondary emphasis in ARCH 3208.

Visiting Team Compliance Assessment

Following preliminary introduction to material characteristics in ARCH 3207, thermal and barrier performance of building materials is found in ARCH 3208 and ARCH 4211. Studio projects explore aesthetic qualities of materials. Considerable thought is given to resources & environmental impact, and evidence of durability is shown in ARCH 5210.

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.

In ARCH 4211, structural systems are the focus of building case studies. Structure is also a major factor in the concurrent design project in ARCH 4003.

Visiting Team Compliance Assessment

An understanding of structural principles is demonstrated in ARCH 4211. Evidence of the integration of design and structure can be found in the student process portfolios in studios ARCH 4003 and ARCH 4005.
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.

Envelope systems are the primary focus of ARCH 3208 and a secondary emphasis in ARCH 4211.

Visiting Team Compliance Assessment

This criterion has been met through ARCH 3208, 4211 as well as through the design of a large scale institutional project in ARCH 4212.

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.

Environmental systems are the main focus of ARCH 4212. This is also a major factor in the concurrent design project in ARCH 4005.

Visiting Team Compliance Assessment

This criterion has been met in ARCH 4212, with further evident explorations in ARCH 5211 and ARCH 5212.

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 final BEDS term is where the program emphasizes comprehensive design. ARCH 4005 (design and ARCH 4212) technology are integrated.

Visiting Team Compliance Assessment

Student projects produced in ARCH 4003, ARCH 4005 and ARCH 4212 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 and regulatory requirements. Environmental stewardship is not as visible in this work but is explored in some M1 and M2 studios.
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.

ARCH 4303 introduces students to office management, preparing them for the following undergraduate work term (ARCH 8892) and the later graduate work term (ARCH 5308–5309).

Visiting Team Compliance Assessment

Students reach an overall understanding of the architectural profession through diverse activities, including courses, coop terms, conferences, School presentations from the Provincial Associations, encouragement to join the Associations as Student Members, and meetings with architects. The Program also facilitates the initiation of the IAP log book at the second coop term.

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.

Preceded by ARCH 4303 and 8892, this subject is learned mainly in the graduate work term (ARCH 5308–5309).

Visiting Team Compliance Assessment

While most of these criteria are covered in a variety of ways by the program, the team found little evidence of some topics being addressed fully. It remains unclear whether all students veritably achieve an understanding of specific items, notably legal responsibilities and ethical matters pertaining to the profession and practice.

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.

This subject is introduced in ARCH 4303. It is most evident when students return from their two work terms, ARCH 8892 and ARCH 5308–5309, and present their work experience to faculty and other students.

Visiting Team Compliance Assessment

Students reach an overall understanding of different modes of practice through a series of professional practice courses, coop work terms, site visits, guest speakers, and meetings with architects during a professional practice week.
E4. Professional Contracts

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

*This is one of the topics in ARCH 4303.*

Visiting Team Compliance Assessment

Met ✓ Not Met □

*The basic principles of the architectural profession including contracts are covered in Professional Practice ARCH 4303.*

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.

*This topic is introduced in ARCH 4303 and is the focus of ARCH 5311 in the final term of the MArch program.*

Visiting Team Compliance Assessment

Met ✓ Not Met □

*Students are exposed to various aspects of project management through simulations in course assignments and through observation in the coop work terms.*

4. Supplemental Information

4.1 Introduction to the Institution and Program History

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.

Visiting Team Review

Reviewed ✓

4.1.2 Program History

The appendix of the APR must provide a brief Program history.

Visiting Team Review

Reviewed ✓

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.

Visiting Team Review

Reviewed ✓
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.

Visiting Team Review

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.

Visiting Team Review

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.

Visiting Team Review

4.6 Annual Reports

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

Visiting Team Review
IV. Appendices

Appendix A: The Visit Agenda

<table>
<thead>
<tr>
<th>Visiting Team Members • Time zones</th>
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<tr>
<td><strong>MST</strong></td>
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Appendix B: Report Signatures

Stage A: Program Signatures

University Name: Dalhousie University
Program Name: Master of Architecture

Name: Diogo Burnay
Title: Director, School of Architecture, Dalhousie University
Date: 2021-11-14
E-Signature: [Signature]

Stage B: Visiting Team Signatures

Voting Members

Name: Claudio BRUN DEL RE - Chair
Representing: the practitioners
E-Signature: [Signature]

Name: Lindsay ANDREAS
Representing: the practitioners
E-Signature: [Signature]

Name: Colin RIPLEY
Representing: the educators
E-Signature: [Signature]

Name: Olivier VALLERAND
Representing: the educators
E-Signature: [Signature]

Name: Ron Christopher ADRIANO
Representing: the students
E-Signature: [Signature]

Non-Voting Members

Name: Alec BROWN
Representing: the Program
E-Signature: [Signature]

Name: Tania MARTIN
Representing: the CACB-CCCA
E-Signature: [Signature]

Name: Maya PRZYBYLSKI
Representing: the CACB-CCCA
E-Signature: [Signature]

Name: Anna RICHTER
Representing: the CACB-CCCA
E-Signature: [Signature]

Name: Ipek TURELI
Representing: the CACB-CCCA
E-Signature: [Signature]

Observer
Name: Joyce NYAMU
Representing: the CACB-CCCA
E-Signature: [Signature]