2025 ACCREDITATION REPORT

AN OVERVIEW OF THE OUTCOMES OF THE ACCREDITATION VISITS CONDUCTED FROM 2019-2025

Canadian Architectural Certification Board

www.cacb.ca

Introduction

The Canadian Architectural Certification Board (CACB) is pleased to present the *2025 Accreditation Report: An Overview of the Outcomes of the Accreditation Visits Conducted From 2019-2025*. The purpose of this report is to demonstrate compliance with the accreditation conditions and to present the outcomes of the accreditation process for the current accreditation cycle. This publication provides an overview of the outcomes from Accreditation Visits conducted between 2019 and 2025, following the implementation of the updated *Conditions and Terms for Accreditation* in 2017.

During the accreditation period, eleven out of twelve schools were visited under the updated conditions. Notably, Laurentian University underwent two visits: an Initial Accreditation in 2021 and a Maintenance Accreditation in 2024. McGill University has been omitted from these statistics, as its accreditation visit—originally scheduled for 2025—was deferred due to its probation status. McGill will be included in the 2026 accreditation cycle. Its previous visit, conducted in 2018, was assessed under a different set of accreditation conditions and procedures, which are not directly comparable to the current framework.

The CACB extends its sincere appreciation to all the dedicated volunteers who contributed their time and expertise to these visits. Their efforts have been essential in upholding the quality and consistency of accreditation processes for professional architecture programs across the country. We hope this report serves as a valuable communication tool for schools of architecture and the broader profession.

CACB remains committed to collaborating with academic institutions, professional partners, and our valued volunteers in support of our mission.

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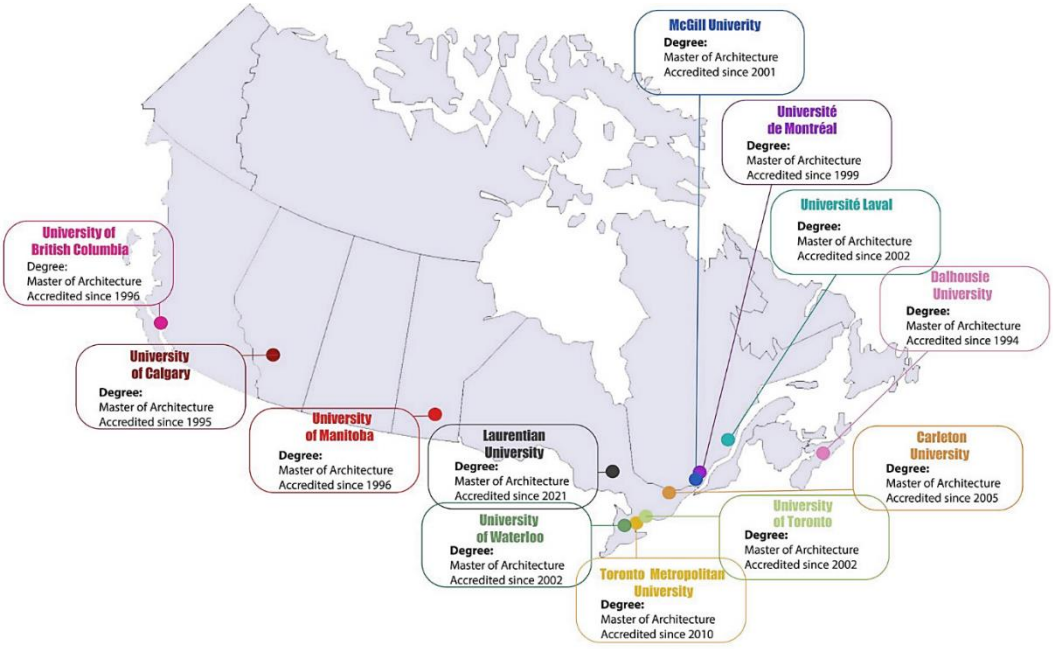
The Canadian Architectural Certification Board (CACB)

The CACB is a national independent non-profit corporation, established in 1976. It is the sole organization recognized by the architectural profession in Canada to assess the educational qualifications of architecture graduates (Certification Program) and (since 1991) to accredit professional architecture degree programs offered by Canadian universities (Accreditation Program). The CACB mandate additionally includes: (since 2012) certifying professional qualifications of broadly experienced foreign architects (BEFA Program); and (since 2010) collaborating in conducting research, nationally and internationally, as it relates to architectural accreditation and academic certification. The CACB is a decision-making and policy-generating body, with its head office in Ottawa, Ontario.

The CACB receives its mandate from its two members: (1) the Regulatory Organizations of Architecture in Canada (ROAC), formerly named the Canadian Architectural Licensing Authorities (CALA), representing all provincial and territorial regulators of the profession of architecture in Canada; and (2) the Canadian Council of University Schools of Architecture (CCUSA), representing all accredited university architecture programs in Canada.

During the 2019–2025 accreditation cycle covered in this report, twelve programs across Canada hold accredited status. All of these are Master of Architecture (M.Arch.) programs.[1]



[1] Program names have been omitted from this report. For those interested in the accreditation outcomes of a specific institution within this cycle, the Visiting Team Reports are publicly available on our website. These reports provide comprehensive information regarding each program's compliance with the Conditions for Accreditation.

Architectural Accreditation in Canada

CACB Accredited Professional Programs

The CACB's accreditation process is designed to assess whether a program substantially meets the criteria that collectively define a comprehensive and well-rounded architectural education, equipping graduates for the responsibilities of professional practice.

Accreditation is the public recognition that a professional program meets established academic and professional standards through rigorous evaluation. It maintains the standards and ensures program quality to promote continuous improvement. The Association of Accrediting Agencies of Canada defines accreditation as a process of quality assurance through which recognition is granted by competent authorities to confirm that standards of education established by professional authorities have been met. In Canada, the term "accreditation" is not used in the case of individuals; it applies to educational programs of study.

In Canada, accreditation is a mandatory requirement for all institutions granting professional degrees in architecture, as recognized by provincial and territorial licensing authorities. Earning a degree from an accredited program is therefore an essential step toward becoming a licensed architect.

The following twelve (12) university schools of architecture have been granted CACB accreditation for their professional architecture programs. Currently, all accredited programs confer a Master of Architecture (M.Arch) degree. The Terms of Accreditation for each program are publicly available on the CACB website.

- University of British Columbia;
- University of Calgary;
- Carleton University;
- Dalhousie University;
- Laurentian University
- Université Laval;
- University of Manitoba;
- McGill University;
- Université de Montréal;
- Toronto Metropolitan University;
- University of Toronto; and
- University of Waterloo

Since 2019, the CACB has conducted (1) Initial Accreditation and eleven (11) Accreditation visits.

Of these visits, the following decisions were made:

- Five (5) Programs were granted a full six-year term of accreditation;
- Five (5) Programs were granted a six-year term, with a focused evaluation scheduled at the end of three years; and
- One (1) Program was granted a three-year term of accreditation.

Definitions of the Terms of Accreditation, are provided in Appendix 1.

Statistical Analysis of Visiting Team Reports

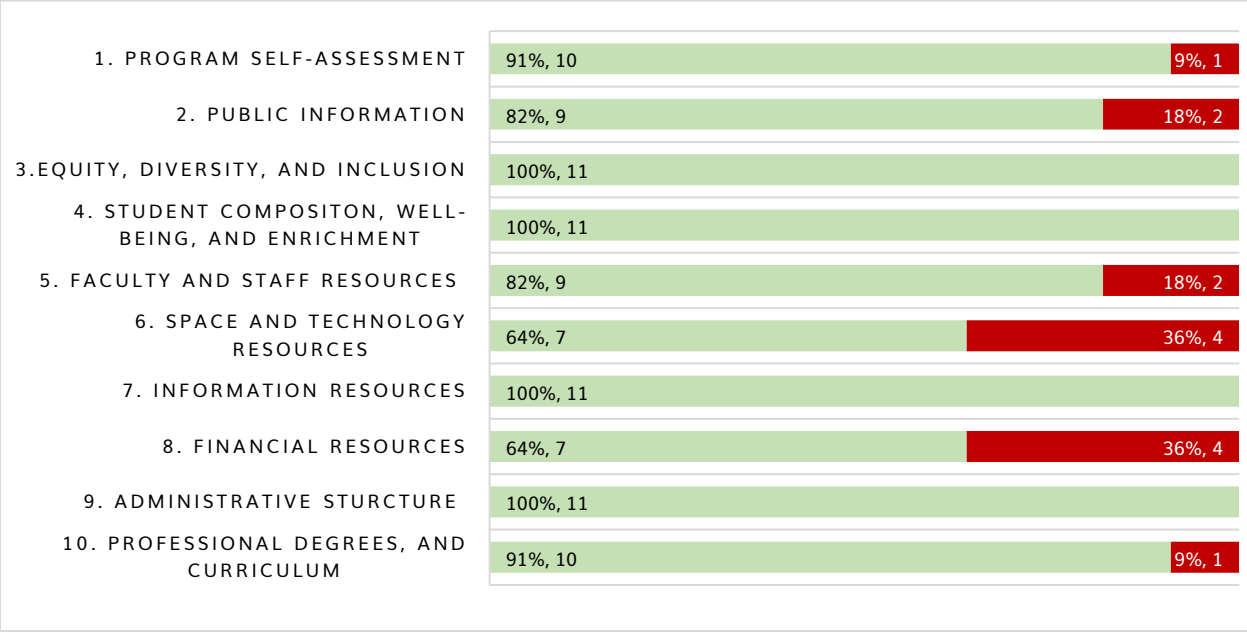
Outcomes from Accreditation Visits

The following analysis is based on information and data gathered from the Visiting Team Reports of the eleven Accreditation visits conducted since 2019 under the 2017 version of the *Conditions and Terms for Accreditation*. This includes visits to eleven Programs, with McGill University omitted due to its probation status. The data thus only represents ≈91% of the twelve accredited schools in Canada. The purpose of this analysis is to present information and data regarding the performance levels of the Programs in relation to the *Conditions for Accreditation*.

The specific requirements for each of the Conditions are provided in Appendix 2.

Condition for Accreditation 1 – 10

An analysis of the eleven accreditation visits conducted between 2019 and 2025 shows that, on average, over 87% of the conditions are being met across institutions. The strongest performance observed in Condition 3 (Equity, Diversity, and Inclusion) Condition 4 (Student Composition, Well-Being, and Enrichment), Condition 7 (Information Resources) and Condition 9 (Administrative Structure), all at 100%, and the lowest in Condition 6 (Space and Technology Resources) and Condition 8 (Financial Resources) at 64%. This suggests that Programs are facing challenges in securing adequate financial support and physical infrastructure.



The extent to which Programs met Condition 1 to 10 is as follows:

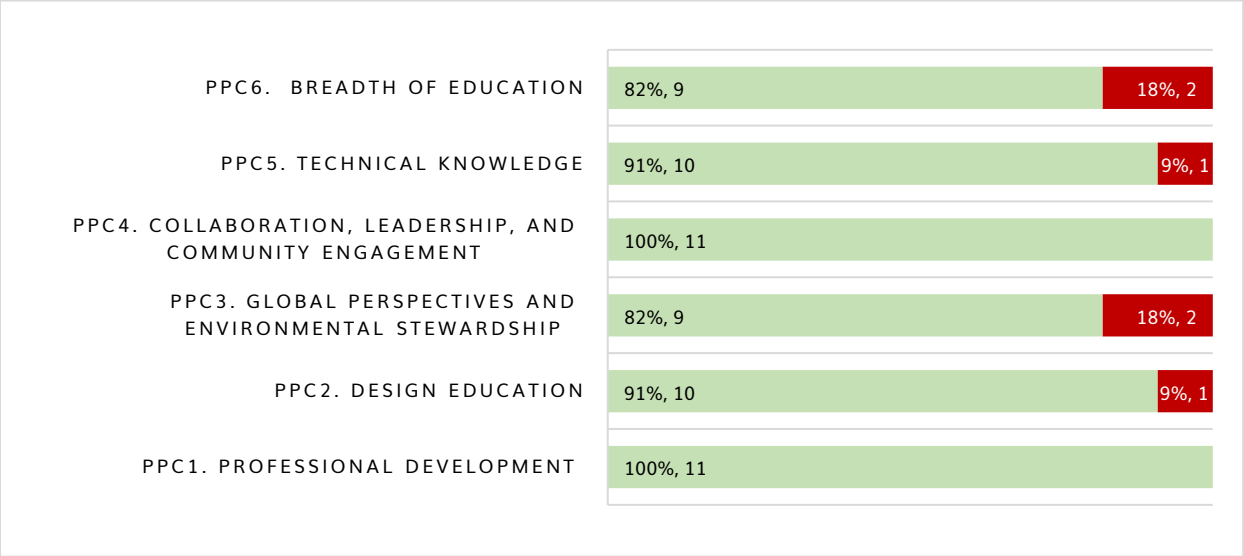
- Two (2) Programs met all Conditions;
- Six (6) Programs did not meet one of the Conditions;
- Two (2) Programs did not meet two of the Conditions; and
- One (1) Program did not meet four of the Conditions.

Condition for Accreditation 11 (Performance Criteria)

Condition 11 of the 2017 *Conditions and Terms for Accreditation* requires Programs to demonstrate satisfactory performance in two distinct but interrelated components. The first is the *Program Performance Criteria (PPC)*, which are the measures used to evaluate the Program itself for accreditation. The second is the *Student Performance Criteria (SPC)*, which are the measures used to evaluate student outcomes and identify the skills and knowledge that graduates of the Program must attain for accreditation.

A. Program Performance Criteria (Six PPCs)

The analysis shows that, on average, each PPC criteria was met by an average of 91%. The strongest performance observed in PPC1 (Professional Development), and PPC4 (Collaboration, Leadership, and Community Engagement) both at 100%, and the lowest in PPC3 (Global Perspectives and Environmental Stewardship), and PPC6 (Breath of Education) both at 82%. This highlights general strengths in professional preparation and collaborative engagement, and potential areas for development in fostering global awareness and ensuring a well-rounded educational experience.



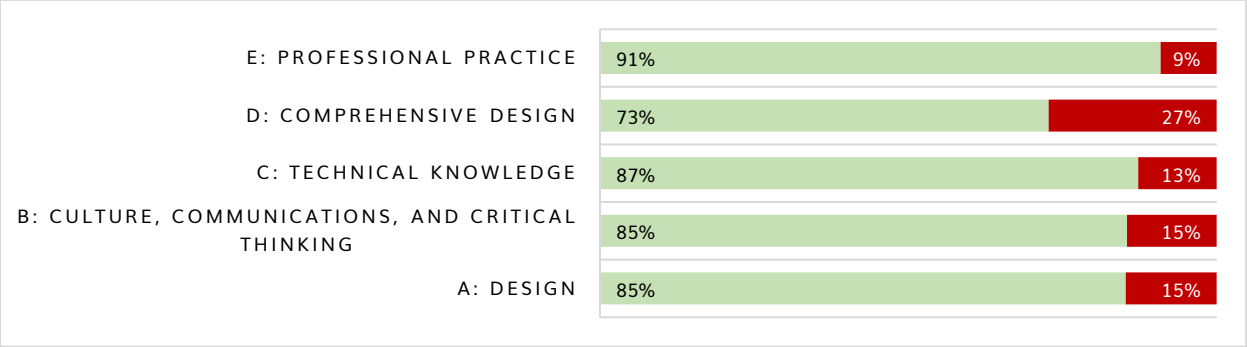
The extent to which Programs met Conditions 11A (PPCs) is as follows:

- Five (5) Programs met all PPC Conditions; and
- Six (6) Programs did not meet one of the PPC Conditions.

B. Student Performance Criteria (Twenty-Four SPCs)

The analysis shows that each SPC criteria was met by an average of 84%. The strongest performance observed in SPC-E (Professional Practice) of 91%, and the lowest in SPC-D (Comprehensive Design) at 73%. This indicates overall strengths in practice-related

competencies, with opportunities for development in areas requiring integrated and comprehensive design solutions.



While most criteria were consistently met, recurring gaps in Program Analysis (A4), Site Context and Design (A5), Urban Design (A6), Cultural Diversity and Global Perspectives (B4), Environmental Systems (C5), Comprehensive Design (D1), and Project Management (E5) indicate areas for consideration to enhance compliance with the criteria.

- SPCs Met by All Programs (11/11 – 100%)
    - A1 – Design Theories, Precedents, and Methods;
    - A2 – Design Skills;
    - A8 – Design Documentation;
    - C3 – Structural Systems;
    - C4 – Envelope Systems;
    - E3 – Modes of Practice; and
    - E4 – Professional Contracts.
- SPCs Met by 10/11 Programs (91%)
    - A7 – Detail Design;
    - B1 – Critical Thinking and Communication;
    - B2 – Architectural History;
    - B3 – Architectural Theory;
    - C2 – Materials;
    - E1 – The Architectural Profession; and
    - E2 – Ethical and Legal Responsibilities.
- SPCs Met by 9/11 Programs (82%)
    - A3 – Design Tools;
    - B5 – Ecological Systems; and
    - C1 – Regulatory Systems.
- SPCs Met by 8/11 Programs (73%)
    - A5 – Site Context and Design;
    - A6 – Urban Design;
    - B4 – Cultural Diversity and Global Perspectives;
    - D1 – Comprehensive Design; and
    - E5 – Project Management.

- SPCs Met by 7/11 Programs (64%)
    - A4 – Program Analysis.
    - C5 – Environmental Systems;

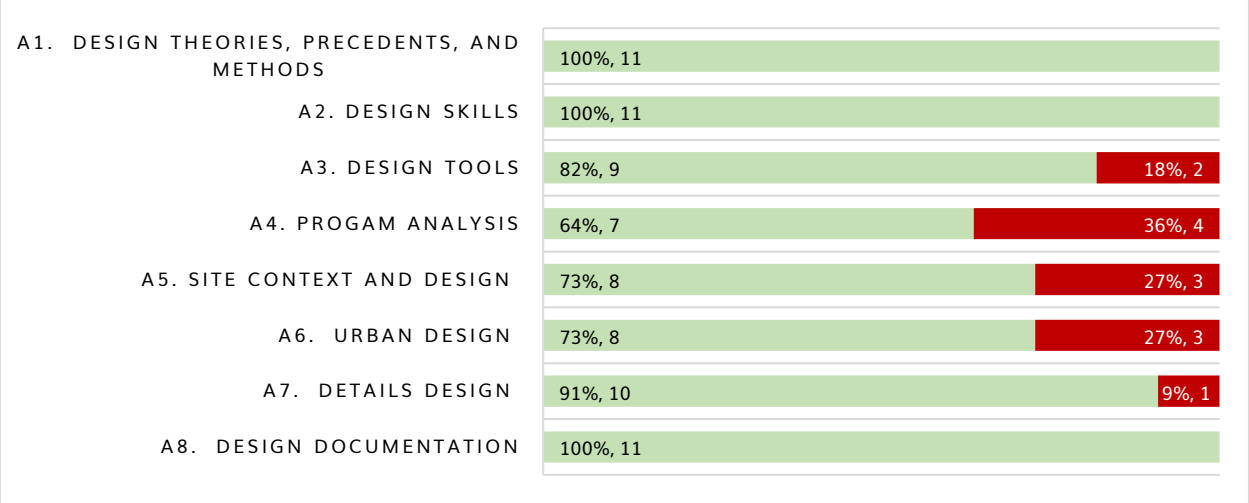
The extent to which Programs met Conditions 11B (SPCs) is as follows:

- One (1) Program met all SPC Conditions;
- Three (3) Programs did not meet one SPC Condition;
- One (1) Program did not meet two SPC Conditions;
- One (1) Program did not meet three SPC Conditions;
- Two (2) Programs did not meet four SPC Conditions;
- One (1) Program did not meet six SPC Conditions; and
- Two (2) Program did not meet seven SPC Conditions.

Performance per SPC Criteria

A. Design (Eight SPCs)

SPC-A was met by an average of 85%, with the strongest performance observed in (Design Theories, Precedents, and Methods), A2 (Design Skills), and A8 (Design Documentation) all at 100%, and the lowest in A4 (Program Analysis) (64%). This suggests strong capabilities across theoretical and conceptual areas of design education, with opportunities for improvement in analytical and contextual aspects of programming and design development.

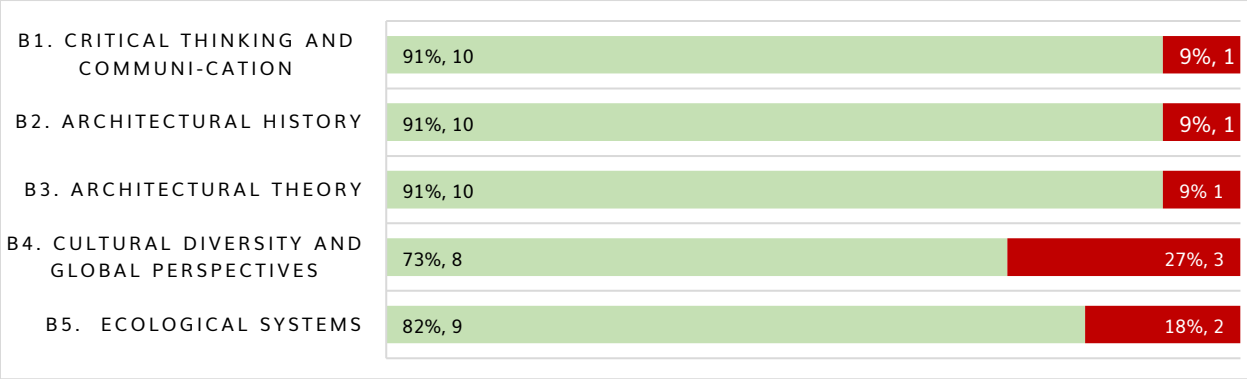


The extent to which Programs met Conditions 11 SPC-A. is as follows:

- Four (4) Programs met all SPC Design Conditions;
- Three (3) Programs did not meet one SPC Design Condition;
- Two (2) Programs did not meet two SPC Design Conditions; and
- Two (2) Programs did not meet three SPC Design Conditions.

B. Culture, Communications, and Critical Thinking (Five SPCs)

SPC-B was met by an average of 85%, with the strongest performance observed in B1 (Critical Thinking and Communication), B2 (Architectural History), and B3 (Architectural Theory) all at 91%, and the lowest in B4 (Cultural Diversity and Global Perspectives) at 73%. This suggests strong performance in foundational and theoretical aspects of architectural education, with room for improvement in addressing cultural diversity and global perspectives more comprehensively.

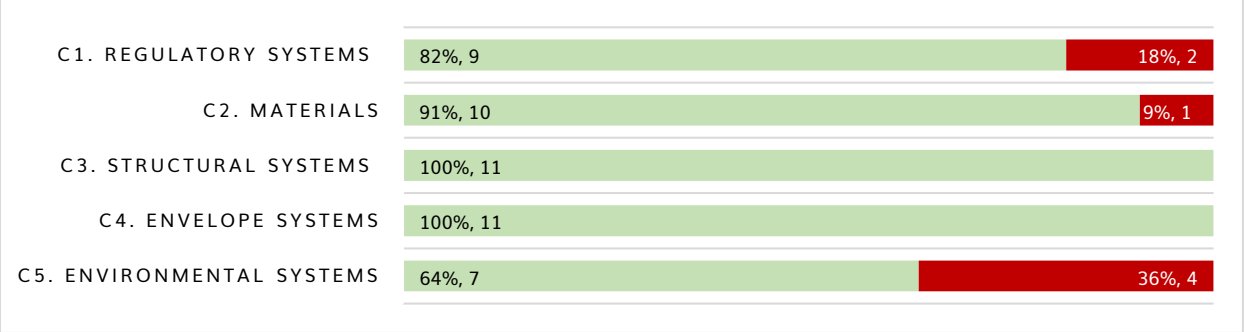


The extent to which Programs met Conditions 11 SPC-B. is as follows:

- Five (5) Programs met all SPC Culture, Communications, and Critical Thinking Conditions;
- Four (4) Programs did not meet one SPC Culture, Communications, and Critical Thinking Condition; and
- Two (2) Programs did not meet two SPC Culture, Communications, and Critical Thinking Conditions.

C. Technical Knowledge (Five SPCs)

SPC-C was met by an average of 87% with the strongest performance observed in C3 (Structural Systems), and C4 (Envelope Systems) both at 100% and the lowest in C5 (Environmental Systems) at 64%. This suggests a strong foundation in building envelope and structural systems, while revealing a need for further development in integrating environmental systems and regulatory knowledge within the curriculum.



The extent to which Programs met Conditions 11 SPC-C. is as follows:

- Six (6) Programs met all SPC Technical Knowledge Conditions;
- Three (3) Programs did not meet one SPC Technical Knowledge Condition; and
- Two (2) Programs did not meet two SPC Technical Knowledge Conditions.

D. Comprehensive Design (One SPC)

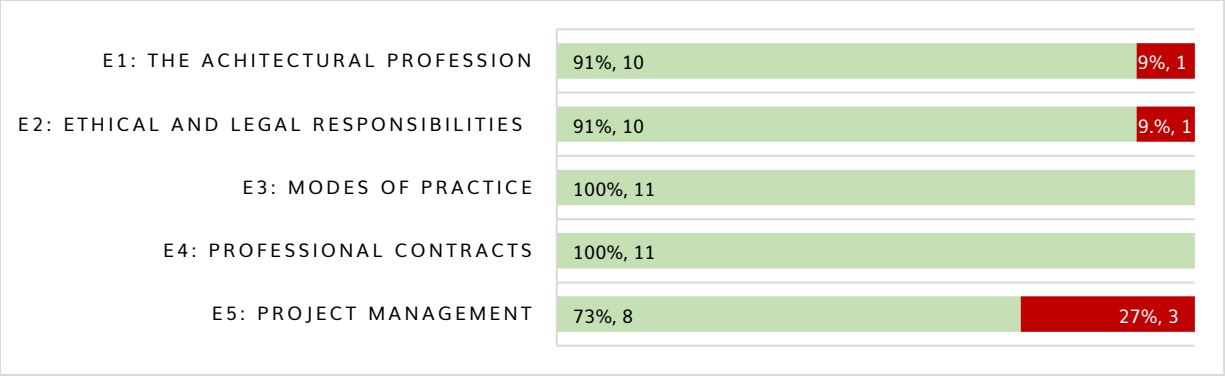
SPC-D was met by an average of 73%, indicating generally strong performance with some room for improvement in fully meeting comprehensive design expectations.

The extent to which Programs met Conditions 11 SPC-D. is as follows:

- Eight (8) Programs met the SPC Comprehensive Design Condition; and
- Three (3) Programs did not meet the SPC Comprehensive Design Condition.

E. Professional Practice (Five SPCs)

SPC-E was met by an average of 91%, with the strongest performance observed in E3 (Modes of Practice) and E4 (Professional Contracts) both at 100%, and the lowest in E5 (Project Management) at 73%. This suggests solid understanding and preparation in core professional responsibilities and practice management, with some opportunities to strengthen project management skills.



The extent to which Programs met Conditions 11 SPC-E. is as follows:

- Seven (7) Programs met all SPC Professional Practice Conditions;
- Three (3) Programs did not meet one SPC Professional Practice Condition; and
- One (1) Programs did not meet two SPC Professional Practice Conditions.

Condition Compliance Summary

Analysis of the Visiting Team Reports for the eleven Programs evaluated between 2019 and 2025 indicates **an average compliance rate of 87.27% across all *Conditions for Accreditation***, indicating a generally high level of adherence to established standards among Canadian architecture programs.

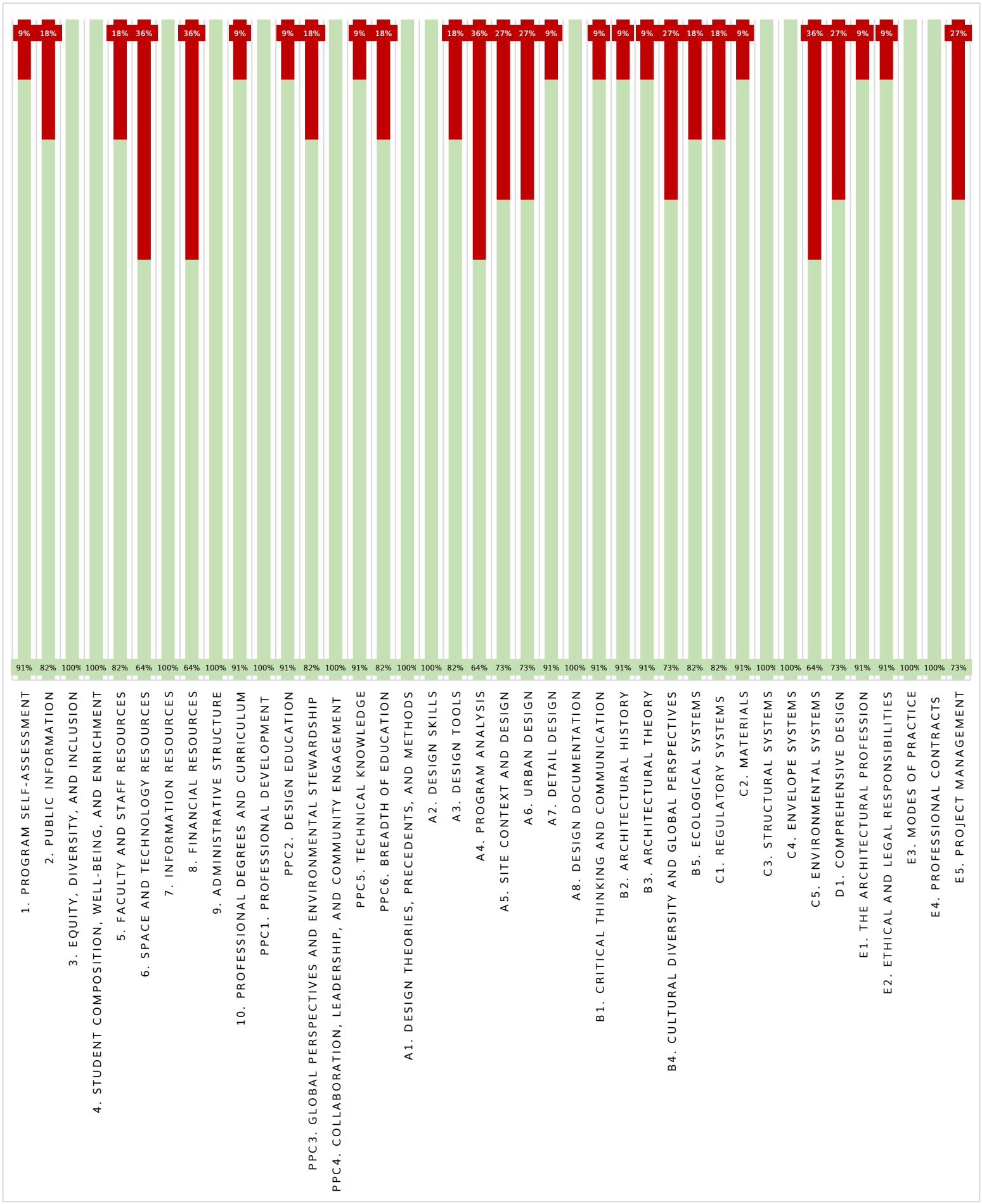
While most Conditions and Criteria were consistently met, the data reveals recurring areas of non-compliance that warrant further attention. Specifically, deficiencies were observed in Condition 6: Space and Technology Resources and Condition 8: Administrative Structure, highlighting institutional challenges related to infrastructure and governance.

In terms of student learning outcomes, several Student Performance Criteria (SPCs) were frequently identified as unmet. These include:

- SPC A4: Program Analysis;
- SPC A5: Site Context and Design;
- SPC A6: Urban Design;
- SPC B4: Cultural Diversity and Global Perspectives;
- SPC C5: Environmental Control Systems;
- SPC D1: Comprehensive Design; and
- SPC E5: Project Management.

These findings suggest that while overall program quality remains strong, certain pedagogical and operational aspects require continued attention to ensure alignment with accreditation expectations.

A summary of compliance across all Conditions, Program Performance Criteria (PPCs), and Student Performance Criteria (SPCs) is provided in the table below.


1. PROGRAM SELF-ASSESSMENT 91% 9%
2. PUBLIC INFORMATION 82% 18%
3. EQUITY, DIVERSITY, AND INCLUSION 100%
4. STUDENT COMPOSITION, WELL-BEING, AND ENRICHMENT 100%
5. FACULTY AND STAFF RESOURCES 82% 18%
6. SPACE AND TECHNOLOGY RESOURCES 64% 36%
7. INFORMATION RESOURCES 100%
8. FINANCIAL RESOURCES 64% 36%
9. ADMINISTRATIVE STRUCTURE 100%
10. PROFESSIONAL DEGREES AND CURRICULUM 91% 9%
PPC1. PROFESSIONAL DEVELOPMENT 100%
PPC2. DESIGN EDUCATION 91% 9%
PPC3. GLOBAL PERSPECTIVES AND ENVIRONMENTAL STEWARDSHIP 82% 18%
PPC4. COLLABORATION, LEADERSHIP, AND COMMUNITY ENGAGEMENT 100%
PPC5. TECHNICAL KNOWLEDGE 91% 9%
PPC6. BREADTH OF EDUCATION 82% 18%
A1. DESIGN THEORIES, PRECEDENTS, AND METHODS 100%
A2. DESIGN SKILLS 100%
A3. DESIGN TOOLS 82% 18%
A4. PROGRAM ANALYSIS 64% 36%
A5. SITE CONTEXT AND DESIGN 73% 27%
A6. URBAN DESIGN 73% 27%
A7. DETAIL DESIGN 91% 9%
A8. DESIGN DOCUMENTATION 100%
B1. CRITICAL THINKING AND COMMUNICATION 91% 9%
B2. ARCHITECTURAL HISTORY 91% 9%
B3. ARCHITECTURAL THEORY 91% 9%
B4. CULTURAL DIVERSITY AND GLOBAL PERSPECTIVES 73% 27%
B5. ECOLOGICAL SYSTEMS 82% 18%
C1. REGULATORY SYSTEMS 82% 18%
C2. MATERIALS 91% 9%
C3. STRUCTURAL SYSTEMS 100%
C4. ENVELOPE SYSTEMS 100%
C5. ENVIRONMENTAL SYSTEMS 64% 36%
D1. COMPREHENSIVE DESIGN 73% 27%
E1. THE ARCHITECTURAL PROFESSION 91% 9%
E2. ETHICAL AND LEGAL RESPONSIBILITIES 91% 9%
E3. MODES OF PRACTICE 100%
E4. PROFESSIONAL CONTRACTS 100%
E5. PROJECT MANAGEMENT 73% 27%

Analysis of Conditions with Lowest Levels of Compliance

The following analysis presents a review of the *Conditions for Accreditation* that demonstrated the lowest levels of compliance across Canadian architecture programs during the 2019–2025 Accreditation Cycle.[2] Using insights from the Visiting Team Reports, this analysis highlights areas of concerns where progrms most frequently did not meet the established criteria. Conditions that were met by only 64% (7 out of 11 programs) and 73% (8 out of 11 programs) are discussed below, as they represent the most commonly unmet expectations across the reviewed visits. The aim is to inform ongoing improvement efforts by identifying patterns in unmet conditions.

The specific requirements for each of the Conditions are provided in Appendix 2.

Conditions and Student Performance Criteria (SPCs) with a "Met" Rate of 64%

Condition 6. Space and Technology Resources

As per the 2017 *Conditions for Accreditation*, 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 a variety of learning modalities, office space for the exclusive use of each full-time faculty member, and related instructional support space. The *Program* must demonstrate that all students, faculty, and staff have convenient, equitable access to appropriate visual, digital, and fabrication resources that support professional education in architecture.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition 6 during the accreditation visit:

- A recent VTR identified two major recurring problems with Space and Resources. The first was the "ongoing building health and safety conditions." The second was the suitability and availability of spaces for both current and planned teaching and research programs. Progress has been made on environmental quality, with some smaller projects completed and two major projects planned to begin in the near future. When completed, these will be a significant achievement. However, the Team has concerns that project costs may not allow this work to go ahead. We also noted both the consultant's recommendation that HVAC system work should be accompanied by related work on the building envelope, and indications elsewhere in the document that the university is not considering envelope upgrades at this time. It is important that this question be resolved soon, in the interest of the occupants' health and safety. Progress has also been made on improving aspects of the existing space through the Program's own initiative and resources. These are useful responses and confirm the importance of the Program having completed a detailed plan relating their ongoing activities to their space needs. Given the challenges

[2] The comments have been anonymized to avoid identifying specific programs. References to university names and cities have been replaced with "X," and course codes have been changed to "XX" to maintain confidentiality. Additionally, comments originally in French have been translated into English to ensure consistency and anonymity across both English and French programs.

presented by the University's position in X, the FERT team recommends that, in addition to planning future space needs, the Program should explore how it can better utilize existing space. As the Program's long-promised strategic plan is completed, it should rely more on actions that are under the Program's control, and on new initiatives such as the University's Future of Work Program. This strategic plan needs to be completed, and the space issues at the Department of Architectural Science building addressed.

- The VTR reiterates that several resources fall significantly below the standard expectations for schools of architecture, particularly in terms of "practical and equitable access to appropriate visual, digital, and fabrication resources." The result for CACB Criterion A3 is directly linked to this unmet condition. Students noted that during the fall term, there is a recurring lack of designated workspaces for third-year students residing in X, as well as for those in the preparatory session for the final project (thesis).
- The report outlines recent improvements and additions to the Architecture Building, including design studio spaces, lecture rooms, seminar rooms, faculty offices, project review areas, exhibition spaces, washrooms, ventilation, and skylights. This indicates attention to the overall physical environment of the building. It also mentions studies aimed at building renewal and improvement. However, there is no equitable access to the fifth-floor addition. This has been a concern of accreditation teams for at least twelve years. The APR highlights efforts to improve accessibility, including upgrades to access ramps, gender-inclusive bathrooms, and plans for accessible routes to different floors. These measures provide a level of access but without an elevator to the fifth floor the building does not provide equitable access for all students, faculty, and staff within the building. The concept of equitable access includes the physical isolation of the fifth-floor studios from the broader student community, hampering their access to peer-to-peer learning. The APR describes resources available in workshops and fabrication labs, including equipment, infrastructure, and staff support. While there are reports of problems with student access, the resources are particularly good, the staff is essential, and the workshops and labs are well used. The report discusses computer facilities, including computer labs, hardware specifications, software licenses, and networking infrastructure. The resources are good.
- The Program is to be commended for interim upgrades to the teaching spaces and for the development of a new, shared fabrication lab. However, the underlying problems of physical resources that have been called out in several CACB maintenance visits remain. Faculty are united in their concern over their own safety and that of their students in the event of a major seismic event. There is a strong desire for all elements of X to be collocated in order to encourage cross-pollination of ideas. The issue of facilities for the Program has gone on for several CACB accreditation cycles and must be resolved.

Condition 8. Financial Resources

As per the 2017 *Conditions for Accreditation*, the Program must have access to sufficient institutional support and financial resources.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition 8 during the accreditation visit:

- The school has suffered and continues to suffer from chronic underfunding. The school's funding model does not appear to provide sufficient resources to meet the needs of a professional architecture program. As a result, the school has experienced a rapid decline in the number of full-time faculty members since the last CACB visit. While teaching has been delivered by an increasing number of excellent sessional and contract faculty, the Team is concerned that the growing burden of administrative, coordination, and program development responsibilities on the remaining full-time faculty has reached unsustainable levels. The Team is also concerned that 99% of the school's budget is allocated to fixed salary costs, leaving very little financial flexibility to support special projects, student and research initiatives, or to manage unforeseen expenses.
- This condition is not met in relation to the institutional support from X. The APR contains a detailed financial outline that paints a picture of the MArch being in good financial health, with a surplus of revenue over expenses of approximately $2 million. In the current budgeting model used by the university, revenue generated at MArch is shared with other departments. Some funds, such as the X endowment or revenue generated from the rental of MArch spaces, are kept within the school and are used to fund experiential learning opportunities, scholarships, and grants, but cannot be used to fill faculty and staff positions, as these appointments are decided at the University level. Enrollment at the undergraduate level is lower than projected, impacting negotiations between the M.Arch and X regarding sessionals and faculty appointments. While M.Arch is in good financial health, there are misunderstandings regarding required support at the institutional level. Faculty and students feel isolated and forgotten by the main campus. Faculty complained that X upper administration does not understand the nature of architectural education. Faculty observed that they have to constantly advocate for resources and support that are standard at other schools of architecture (for example, dedicated librarian, digital fabrication technologist, portfolio submission platform, etc.), causing frustration, tension, and an erosion of trust between X and MArch..
- The Program, Faculty and University have taken steps to ameliorate financial concerns. An external audit in X concluded that the repeated deficit "is mostly, though not entirely a result of insufficient budget allocation," and provided six recommendations requiring actions by the Program, Dean, Provost and Province. While the audit process and resulting intentions are encouraging, the implementation of plans to stabilize the Program's financial situation are not yet evident. These concerns are compounded by a recent Provincial announcement that will limit University funding; a new University budget model with unclear impacts; and fee structures that charge the program for main campus services that architecture students have difficulty accessing.
- Since the previous visit, the Program's expenditures have remained essentially consistent, with no evidence of increases to account for inflation. Meanwhile, the Program's budget has decreased by approximately 20% over this same period, resulting in a significant deficit in the last year recorded.

SPC A4. Program Analysis

As per the 2017 *Conditions for Accreditation*, the student must demonstrate an ability to analyze and respond to a complex program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws, and site selection and design assessment criteria.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition SPC A-4 during the accreditation visit:

- The Visiting Team observes that programming is approached primarily through the lens of studio project requirements. Not all projects demonstrate the ability to address a "complex program" and its impact on project development, as outlined in the criterion. Several final thesis projects (XX) address programming, but according to the Visiting Team, the outcomes are inconsistent.
- The 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. XX and XX studios and design thesis offer opportunities to engage in complex programs, but outcomes of deep analysis are inconsistent.
- There is no evidence that students analyze architectural programs in the studio stream. In some cases students are presented with programs (eg. XX), and in other cases they develop a program (eg. XX). Students do work with relatively complex programs throughout the curriculum, and buildings are generally well-organized. Students work with clients in the comprehensive studio (XX and XX). There is evidence throughout the studios that students work with precedents. They also have an understanding of space and equipment standards (furnishings), have good knowledge of relevant laws, and address site selection criteria. Selected course offerings provide real-world scenarios where students respond to detailed programs developed by 'clients.'
- In XX, XX, XX, and XX, a design response to precedent research is evident in student work, but the ability to analyze and respond to client and user needs, determine appropriate space and equipment requirements, or account for relevant laws and site selection, is often weak and inconsistent. Student work in XX includes much analysis, but the design responses fall short of a cohesive outcome that integrates all requirements of the SPC.

SPC C5. Enviromental Systems

As per the 2017 *Conditions for Accreditation*, the student must have an understanding of the basic principles that inform the design of passive and active environmental modification and building service systems, the issues involved in the coordination of these systems in a building, energy use and appropriate tools for performance assessment, and the codes and regulations that govern their application in buildings.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition SPC C-5 during the accreditation visit:

- Student work in design courses show poor consideration for passive environmental system design, ie louvre placement, passive ventilation design; it is particularly concerning when it occurs in the studio focused on environmental ecology. Renewable technologies, environmental separations of high humidity spaces (greenhouses) are not properly addressed, and overall mechanical requirements to serve intensive indoor plant systems seems.
- Though XX achieves the desired level of design resolution and understanding to satisfy a portion of this SPC, there is insufficient evidence to confirm that students are gaining an understanding of electrical and mechanical systems such as indoor air quality, heating, ventilation, plumbing, etc.
- Though course outlines and some evidence of environmental systems in student work is found in XX, XX, the majority of XX in both low and high pass examples does not indicate an understanding of the requirements of this SPC. There is minimal evidence that energy use and tools for performance assessment are being taught.
- This SPC was not met. There was very limited evidence of understanding the issues of passive and active system integration in the low pass work. It was also noted that there appears to be a wide variation between what is considered high and low pass in XX.

Conditions and Student Performance Criteria (SPCs) with a "Met" Rate of 73%

SPC A5. Site Context anf Design

As per the 2017 *Conditions for Accreditation*, the student must demonstrate an ability to analyze and respond to local site characteristics, including urban, non-urban, and regulatory contexts; topography; ecological systems; climate; and building orientation in the development of an architectural design project.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition SPC A-5 during the accreditation visit:

- Evidence of basic, local site characteristics (outlines of buildings, streets, sidewalks, and trees) are evident in student presentations and drawings, and topography and drainage are explored in XX in relation to the last project in XX. However, robust analysis of ecological, climatic, site orientation (sunlight and wind directions, etc.), and fine-grain urban (including demographic and cultural) characteristics of site appear to be missing or inconsistent in both high and low pass studio work in all studios.
- The Visiting Team did not find consistent examples across the range of projects demonstrating the required attention to the analysis of ecological systems and climatic conditions. In addition, regulatory context is absent from the analyses.

- Evidence provided from XX shows that students are able to analyze physical site conditions. In student work from design studio courses, analysis focuses especially on physical aspects such as circulation and solar position. Analysis of other site conditions along with larger cultural, economic, historical, social, and ecological contexts is inconsistent, missing, or ignored. There is little evidence showing how a project directly responds to local site character.

SPC A6. Urban Design

As per the 2017 *Conditions for Accreditation*, the student must demonstrate an ability to analyze and respond to the larger urban context where architecture is situated; its developmental patterning and spatial morphologies; the infrastructural, environmental, and ecological systems; to understand the regulatory instruments that govern this context; the broader implications of architectural design decisions on the evolution of cities; and the impact of urbanism on design.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition SPC A-6 during the accreditation visit:

- The visiting team was unable to find evidence of a sustained discussion of the contemporary urban condition. Although some of the XX 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.
- The Visiting Team found little evidence of student work addressing large scale design decisions around development of urban fabric, building density, typologies and urban form. Studio projects quickly center on the architectural scale and propose a formal object that largely ignores integration into existing morphologies, environmental or ecological systems. Consideration of regulatory contexts is unclear from work presented. The lack of such considerations in Design Studios is not consistent with the stated ambitions of the School in moving to a downtown site and deeply engaging the challenges of City Building.
- Urban design is inconsistently treated across all sections of the XX studio. Only one section considered historical, social, physical and regulatory complexities before suggesting appropriate building typologies and proposing architectural volumes adequate for the urban fabric. In XX, the section co-taught with a professor from City Planning touches on urban design, however, the other sections limit student work to rudimentary analysis of urban conditions. Documentation regarding urban analysis, even from a qualitative perspective, is difficult to locate across all projects presented. From the evidence provided, few students effectively respond to urban context in the design process and in their resulting project.

SPC B4. Culture, Diversity and Global Perspectives

As per the 2017 *Conditions for Accreditation*, 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.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition SPC B-4 during the accreditation visit:

- 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 is addressed somewhat but still persists. VT is concerned that the program does not address social and spatial patterns in which contemporary practice participates.
- While the Program reviewed and refined course content in response to Team comments in the previous report, the Team saw little evidence of such understanding being applied in required studio work, which remains almost exclusively urban and western focused and with almost no reference to, or acknowledgement of, Indigenous values and traditions.
- Student work provided suggests that not all students meaningfully engage with "…implications of diversity on the societal roles and responsibilities of architects." The architectural history/theory sequence (XX, XX, XX, and XX) primarily focuses on a Western canon. Although some effort is made to include Asian and Ottoman examples, they often exemplify the dominant architectural narrative, rather than as works of architecture in their own right. The visiting team notes that students are given a choice to explore non-Western building projects, but it remains a personal initiative.

SPC D1. Comprehensive Design

As per the 2017 *Conditions for Accreditation*, 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 following excerpts are from Visiting Team Reports for the Programs that did not met Condition SPC D-1 during the accreditation visit:

- While some studios demonstrate the achievement of certain competencies, no single studio shows that each student has met the full range of competencies required for Comprehensive Design. The projects reviewed in concentration studios primarily involve very limited building programs and do not address the complexity of architectural design, including spatial and building systems considerations, necessary to demonstrate achievement of the criterion. The regulatory context is almost entirely absent, even for basic requirements such as universal accessibility, among others.

- Evidence for this SPC was primarily found in XX and XX. The Team commends the Program for the work they have done on the Comprehensive Design Studio, aligning it with XX in particular and the implementation of climate software analysis. It is clear that students emerge with a good grasp of passive environmental design. However, as the project selected for XX involved a "systemless" building, a position that the team understands and appreciates from an environmentally responsible view, student work integrated structural and environmental (mechanical) systems only on a very rudimentary level. The Team was unable to find consistent examples of the integration of structural and environmental systems in other coursework. In addition, the student work showed little ability to apply regulatory standards to design work, particularly in the area of universal design and accessibility.
- While some elements of this criteria (environmental systems, building envelope and assemblies, and regulatory requirements) are seen in other courses (XX and XX), they are not sufficiently and consistently integrated in student work in the comprehensive design studios XX and XX.

SPC E5. Project Mamagement

As per the 2017 *Conditions for Accreditation*, the student must have an understanding of the relationships among key stakeholders in the design process; the methods for selecting consultants and assembling teams; building economics and cost control strategies; the development of work plans and project schedules; and project delivery methods.

The following excerpts are from Visiting Team Reports for the Programs that did not met Condition SPC E-5 during the accreditation visit:

- Whilst the referenced course XX fully addresses the issues related to the development of work plans and resource allocation, calculating consultant fee structure and determining the best construction delivery methodology for a given scenario, there is no evidence of students understanding the methods for selecting consultants, assessing teams, determining project performance, risk management, project scheduling and limited evidence of managing costs.
- Met in the XX with two-year XX M.Arch since it includes XX, however it is not covered in the three-year M.Arch. XX covers many aspects of this criterion but does not cover building economics and cost control strategies and work plans and project schedules.
- While there is evidence of understanding of some aspects of project management in XX and XX, there is no indication of learning about building economics or cost control strategies.

Appendix 1: Terms of Accreditation

Terms of Continuing Accreditation

Six-Year Term
Indicates that deficiencies, if any, are minor and that a process to correct these deficiencies is clear and in place. The Program is accredited for a full six-year period.

Six-Year Term with a 'Focused Evaluation' at the end of Three years
Indicates that significant deficiencies exist in meeting the CACB Conditions for Accreditation and that consideration of such deficiencies will form the basis of a Focused Evaluation. The Program is required to report on its particular deficiencies during the 3rd year.

Three-Year Term
Indicates that major deficiencies are affecting the quality of the Program, but the intent to correct these deficiencies is clear and attainable. The Program is accredited for a full three-year period. Should the Program receive two consecutive Three-Year terms of accreditation, then such Program must achieve a Six-Year accreditation term at its next accreditation visit, failing which it shall be placed on a Two-Year Probationary term. Should such Program fail to achieve a Six-Year term at its subsequent accreditation visit, then its accreditation shall be revoked.

Two-Year Probationary Term
Indicates that CACB deficiencies are severe enough to seriously question the quality of the Program and the intent or capability to correct these deficiencies is not evident. A Program on probation must show just cause for the continuation of its accreditation, and at its next scheduled review, the Program must receive at least a three-year term, or accreditation shall be revoked.

Revocation of Accreditation
Indicates that insufficient progress was made during a two-year probationary term to warrant a full three-year accreditation term.

Appendix 2: Conditions for Accreditation

3.1 Program Self-Assessment
The *Program* must provide an assessment of the degree to which it is fulfilling its mission and achieving its strategic plan. The CACB requires absolute candor in conducting and reporting the self-assessment. If done well, it will anticipate the VTR.

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.

3.2 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."

In addition to the previous text, all *Program*s that have been granted candidacy status must include the following in its entirety:

"The CACB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicates that a program should be accredited within six years of achieving candidacy if its plan is properly implemented."

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.

3.3 Equity, Diversity, and Inclusion
The *Program* must conform to provincial and institutional policies that augment and clarify the provisions of the Charter of Rights and Freedoms as they apply to social equity. Policies in place that are specific to the school or professional *Program* should be clearly stated, as well as the

means by which the policies are communicated to current and prospective faculty, students, and staff.

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

3.4 Student Composition, Well-Being, and Enrichment

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, as well as an interpersonal milieu that embraces cultural differences. The *Program* must demonstrate that it benefits from and contributes to its institutional values. Given its particular mission, the APR may cover issues such as: how students participate in establishing their individual and collective learning agendas; how they are encouraged to cooperate, assist, and share decision-making with and give respect to students who may be different from them; students' access to the critical information needed to shape their futures; and how the diversity, distinctiveness, self-worth, and dignity of students is nurtured in the academic environment.

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.

3.5 Faculty and Staff Resources

The *Program* must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient complement of appropriately qualified faculty, administrative, and support staff, and an administrative head that devotes no less than fifty percent of his or her time to program administration. Student enrollment and the scheduling of design studios must assure adequate time for an effective tutorial exchange between faculty members and students. The student/faculty ratio in the studio should be between 12:1 and 15:1,

with 15:1 as the maximum. The total teaching load should allow faculty members adequate time to pursue supervision, research, scholarship, and/or practice. The *Program* must have a clear policy outlining both individual and collective opportunities for faculty and staff growth within and outside the *Program*.

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.

3.6 Space and Technology 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 a variety of learning modalities, office space for the exclusive use of each full-time faculty member, and related instructional support space. The *Program* must demonstrate that all students, faculty, and staff have convenient, equitable access to appropriate visual, digital, and fabrication resources that support professional education in architecture.

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.

3.7 Information Resources

The *Program* must provide ample, diverse, and up-to-date resources for faculty, staff, and students to support research and skills acquisition. The *Program* must demonstrate that all students, faculty, and staff have convenient, equitable access to literature and information resources that support professional education in architecture and access to librarians, visual resource, and information technology professionals who provide services, teach, and develop skills related to each of these resources.

The APR must include:

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

3.8 Financial Resources

The *Program* must have access to sufficient institutional support and 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.

3.9 Administrative Structure

The *Program* must be part of an institution accredited for higher education by the authority having jurisdiction in its province. The *Program* must have a degree of autonomy that is comparable to that afforded to the other relevant professional programs in the institution and sufficient to ensure conformance with the requirements of the *CACB Conditions and Terms for Accreditation*.

The APR must include:

- a description of the *Program*'s administrative structure, a comparison of this structure with those of other professional programs in the institution, and a list of any other programs offered if the *Program* is part of a multi-discipline unit.

3.10 Professional Degrees, and Curriculum

A CACB-accredited professional *Program* in architecture prepares students to enter the practice of architecture as architectural interns. *Accreditation* is based on the overall quality of the program objectives and the specific performance criteria that students meet through coursework.

The CACB only awards accreditation to professional degree *Programs* in architecture. A CACB-accredited professional *Program* in architecture is defined as the totality of a student's post-secondary education culminating in a designated professional university degree, which may be a bachelor of architecture (BArch) or a master of architecture (MArch) degree.

The *Program*s include:

- a minimum of five years of post-secondary study culminating in a master of architecture degree, which follows a *pre-professional* bachelor's degree, except in Quebec, where the minimum is four years of professional studies following two years of CEGEP;
- a minimum of six years of post-secondary study culminating in a master of architecture degree, which follows a bachelor's degree in any discipline and includes a minimum of three years of professional studies in architecture; or
- a minimum of five years of post-secondary study culminating in a bachelor of architecture degree.

In keeping with the principal of outcome-based *Accreditation*, the CACB does not restrict the structure of a professional *Program* and/or the distribution of its coursework.

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*.

3.11 Performance Criteria

The *Program* must demonstrate satisfactory performance in relation to *program performance criteria* (PPC), and *student performance criteria* (SPC) as detailed below. The CACB does not specify the structure and content of educational programs nor the forms of evidence used to satisfy the criteria. *Programs* are therefore encouraged to develop unique learning and teaching strategies, methods, and materials to satisfy these criteria.

For PPCs, evidence of performance may take many diverse forms not limited to course work and its outcomes. The *Program* must describe and demonstrate that it creates an environment in which these criteria are satisfied.

For SPCs, evidence of performance must include student work and the pedagogical objectives and assignments of any given course. With respect to fulfilling the criteria, the *Program* must demonstrate that all of its graduates have achieved, at minimum, a satisfactory level of accomplishment.

The roster of six PPCs and twenty-four SPCs is intended to foster an integrated approach to learning. Their order is not intended to imply a weight assigned to each.

A. Program Performance Criteria (Six PPCs)

- Professional development

- 2. Design education
- 3. Global perspectives and environmental stewardship
- 4. Collaboration, leadership, and community engagement
- 5. Technical knowledge
- 6. Breadth of education

B. Student Performance Criteria (Twenty-Four SPCs)

- A. Design (eight SPCs)
- B. Culture, communications, and critical thinking (five SPCs)
- C. Technical knowledge (five SPCs)
- D. Comprehensive design (one SPC)
- E. Professional practice (five SPCs)

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.

3.11 A. 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.

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.

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.

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.

PPC 5. Technical Knowledge: The *Program* must describe how it engages fundamental and

emerging technical aspects of building construction.

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.

3.11 B. Student Performance Criteria

A. Design (Eight SPCs):

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.

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.

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.

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.

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.

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.

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.

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.

B. Culture, Communications, and Critical Thinking (Five SPCs):

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.

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.

B3. Architectural Theory: The student must have an *understanding* of conceptual and theoretical frameworks and how they have shaped architecture and urban design.

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.

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.

C. Technical Knowledge (Five SPCs):

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.

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.

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.

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.

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.

D: Comprehensive Design (One SPC):

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.

E: Professional Practice (Five SPCs):

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.

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.

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.

E4. Professional Contracts: The student must have an *understanding* of the various contracts common to the practice of architecture.

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.