

2019 Visiting Team Report Master of Architecture Program Ryerson University

The Canadian Architectural Certification Board

1 Nicholas Street, Suite 710 Ottawa (Ontario) Canada K1N 7B7 Voice: (613) 241-8399

Fax: (613) 241-7991 E-mail: info@cacb.ca

Web Site: www.cacb-ccca.ca

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I. Introduction • CACB Accreditation

The CACB is a national independent nonprofit corporation. The directors are elected from individuals nominated by the Canadian Architectural Licensing Authorities (CALA), the Canadian Council of University Schools of Architecture (CCUSA), and the Canadian Architecture Students Association (CASA). The CACB is a decision-making and policy-generating body. It is the sole organization recognized by the architectural profession in Canada to assess the educational qualifications of architecture graduates (Certification Program) and to accredit professional degree programs in architecture that are offered by Canadian universities (Accreditation Program).

The CACB head office is in Ottawa, Ontario. It adheres to the principles of fairness, transparency, clarity, and ethical business practices in all of its activities.

By agreement of the licensing authorities (the councils of nine provincial institutes and associations), the CACB was established in 1976 to assess and certify the academic qualifications of individuals holding a professional degree or diploma in architecture who intended to apply for registration. In 1991, the CACB mandate to certify degree credentials was reaffirmed, and its membership was revised to reflect its additional responsibility for accrediting professional degree programs in Canadian university schools of architecture. L'Ordre des Architectes du Québec joined the CACB in 1991 and the Northwest Territories Association of Architects joined in 2001.

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

The CACB only accredits *Programs* that are intended by their institution to be professional degrees in architecture that lead to licensure. 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 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 (B.Arch) or a master of architecture (M.Arch) degree.

The *Programs* 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 accreditation process requires a self-assessment by the institution or *Program*, an evaluation of the self-assessment by the CACB, and a site visit and review conducted by a team representing the CACB.

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

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

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

Terms of Accreditation

Term for Initial Accreditation

Programs seeking initial *accreditation* must first be granted candidacy status. The maximum period of candidacy status is six years.

Programs that achieve initial *accreditation* at any time during the six-year candidacy will receive an initial three-year term, indicating that all major program components and resources are in place. Some additional program development may be necessary and/or deficiencies may need to be corrected. Additionally, to be eligible for CACB certification, students cannot have graduated from the *Program* more than two years prior to the initial *accreditation*.

Terms for Continuing Accreditation

- a) Six-year term: Indicates that deficiencies, if any, are minor and that a process to correct these deficiencies is clearly defined and in place. The *Program* is accredited for the full six-year period.
- b) Six-year term with a "focused evaluation" at the end of three years: Indicates that significant deficiencies exist in meeting the requirements of the <u>CACB Conditions and</u>

- <u>Terms for Accreditation;</u> consideration of these deficiencies will form the basis of a focused evaluation. The *Program* is required to report on its particular deficiencies during the third year.
- c) 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. If the Program receives two consecutive three-year terms of accreditation, then the Program must achieve a six-year accreditation term at the next accreditation visit. If the Program fails, it will be placed on a two-year probationary term. If the Program fails to achieve a six-year term at its subsequent accreditation visit, then its accreditation shall be revoked.
- d) 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* will be revoked. If the two-year probationary term is following the sequence described in "c," the *Program* must receive at least a six-year term or its *accreditation* shall be revoked.
- e) Revocation of accreditation: Indicates that insufficient progress was made during a twoyear probationary term to warrant a full three-year or six-year *accreditation* term. Notwithstanding, the foregoing *accreditation* of any *Program* can be revoked at any time if there is evidence of substantial and persistent non-compliance with the requirements of the <u>CACB Terms and Conditions for Accreditation</u>.

Term for Reinstated Accreditation

Should the accreditation of a *Program* lapse or be revoked, the procedures for reinstatement shall be the same as those applicable to initial candidacy. The term of reinstated *accreditation* is the same as the term of initial *accreditation*. If the *Program* is successful in achieving *accreditation* at any time during the six-year candidacy, the *Program* will receive a three-year term of *accreditation*.

II. Summary of Team Findings

2.

1. Team's General Comments.

The Department has been diligent in addressing many of the deficiencies noted in the 2013 VTR. These include the introduction of additional critical theory and practice studios and seminars, serious efforts to address HVAC concerns, studio conditions (including a new gallery space) and other SPC's previously Not Met, including Sustainable Design and Accessibility.

The Program is to be commended for better positioning itself within the Canadian Architectural Education context (winning international competitions and student/faculty publications). More importantly, the Team acknowledges that in spite of ongoing challenges, the Program places the interests of students at the forefront of its agenda.

The establishment of a network of international student exchanges, an ongoing commitment to experiential learning and travel abroad, and the new CO-OP Program have expanded the student experience at the DAS. It is significant that since its first mention in the 2013 APR, the CO-OP Program was quickly introduced in 2014 and through consistent high demand has now doubled in size.

Finally, the Team anticipates a realistic action plan to resolve the many issues identified with the current building / facility. Such a plan must engage the Department, the Faculty and the University to be successful.

Conditions for Accreditation "met" and "not met": a summary Not Met Met 1. Program Self-Assessment [X] 2. Public Information [X] 1 3. Equity, Diversity and Inclusion [X] 4. 4. Student Composition, Well-Being, and Enrichment [X] 5. Faculty and Staff Resources [X] 6. Space and Technology Resources [] [X] 7. Information Resources [X] 8. Financial Resources [X] [] 9. Administrative Structure [X] 10. Professional Degrees and Curriculum [X] 11. Performance Criteria

11.1. Program Performance Criteria (PPC)

Global perspectives and environmental stewardship

Professional development

Design education

2.

[]

[X]

[X]

[X]

| 4. Collaboration, leadership, and community engagement5. Technical knowledge6 Breadth of education | [X] [X] [X] | [] [] [] |
|---|--------------------------|--------------------------|
| 11.2. Student Performance Criteria | | |
| A. Design A1. Design Theories, Precedents, and Methods A2. Design Skills A3. Design Tools A4. Program Analysis | [X] [X] [X] | [] [] [] |
| A5. Site Context and Design A6. Urban Design A7. Detail Design A8. Design Documentation | [X] [X] [X] | [] [] [] |
| B. Culture, Communications, and Critical Thinking B1. Critical Thinking and Communication B2. Architectural History B3. Architectural Theory B4. Cultural Diversity and Global Perspectives B5. Ecological Systems | [X] [X] [X] | [] [] [X] [] |
| C. Technical Knowledge C1. Regulatory Systems C2. Materials C3. Structural Systems C4. Envelope Systems C5. Environmental Systems | [X] [X] [X] [X] | [] [] [] [] |
| D. Comprehensive Design D1. Comprehensive Design | [X] | [] |
| E: Professional Practice E1. The Architectural Profession E2. Ethical and Legal Responsibilities E3. Modes of Practice E4. Professional Contracts E5. Project Management | [X] [X] [X] [X] | [] [] [] [] |

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

Response to Previous Team Concerns (from 2018 APR)

Concern 1

The Team has concerns about the sustainability of the

Library's Architectural resources in consideration of the expanding demands of the new Master of Architecture program.

This Concern has been addressed.

Concern 2

The assignment of inappropriately qualified faculty is a concern. The program is encouraged to ensure continuity in course curriculum and student assessment regardless of the instructor assigned to the course.

This Concern has been addressed.

Concern 3

The Team supports a review of the lower level wood and digital fabrication workshop facilities practices and policies in consideration of staff workload and student access.

Student concerns regarding the hours of operation and the effect on Workshop access remain.

Concern 4

The support staff is working at or beyond capacity.

This Concern has been addressed

Concern 5

Air quality concerns continue to be raised. The Department is encouraged to communicate the proposed building upgrade schedule to students.

This Concern remains.

Concern 6

Students are concerned about non-departmental access to studio spaces.

This Concern has been addressed.

Response to Previous Conditions Not Met

SPC A7 - Cultural Diversity, is now considered and discussed in SPC B4, below.

SPC B4 - Sustainable Design, is now considered and discussed in SPC B5 & SPC C5, below.

SPC B5 – Accessibility is now considered and discussed in SPC C1 & SPC E2, below.

4. Program Strengths

1 Program's continuing commitment to inclusive and integrated teaching of Architecture, Building Science and Project Management, making it a program that is in high demand.

- 2 Strength of the technical education component.
- 3 Connection to the profession and the construction industry, including through the Co-operative Education Program.
- 4 The Greater Toronto Area as a teaching resource to understand complex urban sites.
- 5 Engagement of the student body, at both the undergraduate and graduate levels, with the community and with affairs of the Program.
- 6 Strong, supporting relationship between Graduate and Undergraduate student bodies.
- 7 Excellence of the student publication **325**, reflecting the skills acquired in the undergraduate core as well as the quality of the 4th year and Masters' studios.
- 8 Agility of support staff and faculty in response to student needs and well being.

5. Causes of Concern and Team's recommendations

- 1 Ongoing building health and safety conditions, space issues and need for a clear, institutionally-supported plan for their resolution.
- 2 Lack of clarity with respect to the place of the Department within the Faculty and the effectiveness of the Department's advocacy on their own behalf.
- Public awareness of the Program nationally, internationally and occasionally within the University, could be strengthened by increased attention to public information as the nature and achievements of the developing professional Masters program move beyond historic strengths of technical skills and employability.
- 4 No clear Operating Policies and Procedures for Program administration staff, sometimes resulting in conflicting or inconsistent direction from faculty members and a sense by staff that they are not valued.
- Ability of the Computer Lab to provide the number and capability of computer stations as demands of new software exceeds the capabilities of the students' personal computers.
- 6 Balance of technical focus and critical thinking early in the program.
- 7 Weak application of Global Perspectives in Architecture and Urban Design studio work.

III. Compliance with the Conditions for Accreditation

Program Self-assessment

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

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The Program has conducted a significant series of broad-based assessments at the Department, Faculty and University levels during this period. However, the apparent lack of focused assessments on, for instance, previously identified student performance weakness increases the possibility that they will not always be thoroughly addressed.

This Condition is MET

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."

| Met | Not Me |
|-----|--------|
| [X] | [] |

Team comments:

Information is clearly presented on the Department's web site with references to appropriate documents and to the CACB website.

This Condition is MET

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The program's APR outline of required policies and procedures is extensive and complete.

This Condition is MET.

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The Program provides continuous and ample enrichment opportunities for students that include guest lectures, visiting critics, seminars, and public exhibitions of student and faculty work. Students feel that they are valued by both the University and the profession. The majority of students come from the culturally diverse population of the Greater Toronto area.

This Condition is MET.

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The current complement of academic faculty appears balanced and adequate, although there is some uncertainty around potential retirements and the upcoming development of new programs. The Team has cautionary concern for the continued availability of critical IT support staff currently on limited term appointments. The Program also appears to be adequately staffed for support of daily operations, although support staff is often stretched beyond capacity when needed for special events and initiatives or at end of term assignment dates. This appears to be due in part to there being no clear Operating Policies and Procedures for Program administration staff, sometimes resulting in conflicting or inconsistent direction from faculty members during these periods, and leading staff to feel that they are not being allowed to do their jobs.

This Condition is MET.

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.

| Met | Not Met |
|-----|---------|
| [] | [X] |

Building

While the program provides the physical resources for the range of uses as described above, the quality of the building envelope and its environmental control systems remain a problem. Air quality and sound control are difficult in studio areas. Exhibition types are limited in the Gallery due to lack of air quality control. Control of noxious fumes in the fabrication areas and workshop is a health risk. These conditions result not only in inconvenience and occasional disruption, but are affecting the health and comfort of its occupants. These situations have existed for a number of years and have been regularly documented, but remain unresolved. The Team understands that the University at large is itself constrained by space and funds, but considers this circumstance to be unacceptable. It is necessary for the Program and the University to prepare a considered functional, technical, regulatory compliance and financial analysis, and a development plan for the resolution of this situation. This analysis and plan should also consider the questions of space arising from any new initiatives and program changes as noted below, as well as the effect on the teaching program of what may be significant construction resulting from such plans.

Studio space

Students generally agree that their studio spaces are adequate in size and number, although adequate storage space for materials and models is not available for all students and comment was made as to the difficulty of studio desk crits given the compact individual work spaces. Newly renovated studio areas are appreciated. Anticipated development of new academic programs will require additional space or significant reassignment.

Technical spaces

Fabrication/workshops, building science lab and IT facilities are currently adequate and generally well-equipped. Material storage in the workshop is beginning to exceed capacity and movement of new materials through the public corridors causes some safety issues. As the nature of the digital work by students and faculty becomes more sophisticated and puts greater demand on the specialized equipment in the CAD Lab, this will need to be addressed.

Presentation spaces, Lecture Halls and Classrooms.

The program relies on classroom space for lectures elsewhere on campus since ARC 108 is controlled by University scheduling, and not always available for Architecture. This has reduced the number of spaces available for unscheduled meetings or presentations. The Paul H Cocker Gallery serves as the dedicated exhibition space for both student work and visiting exhibitions.

Offices and Social spaces

Administrative and faculty offices appear to be adequate and recent renovations are appreciated. Pending development of new academic programs will require additional space or significant reassignment. Staff expressed the need for a dedicated staff lounge. Students also expressed the need for space for casual gathering and quiet reflection.

The Team considers this Condition is NOT MET.

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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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

The Team found evidence that the Library digital and analog holdings (including GIS Resources) are entirely adequate for the general and research needs of Undergraduate and Graduate Students. In addition, there is sufficient staff support and guidance to support those needs.

This Condition is MET

8. Financial Resources

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

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

The current Departmental budget is sufficient and well-managed. The Team has concern that recent and potential budget cuts, including those possible by the Government of Ontario, may compromise the ability of the Department to deliver the current Program and will affect future plans requiring additional expenditures. The uncertainty of future capital funds is particularly concerning, given the Team's comments on Condition 6.

This Condition is currently MET

9. Administrative Structure (Academic Unit & Institution)

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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

Upon review of the organizational structure of the University, Faculty and Department of Architectural Science, including the role of the Yeates School of Graduate Studies, the Team considers that:

This Condition is MFT.

10. Professional Degrees and Curriculum

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 (B.Arch) or a master of architecture (M.Arch) degree.

The Programs 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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

Ryerson University Department of Architectural Science offers the following two degrees towards a career path in architecture:

- A two-year first-professional Master of Architecture (M.Arch)
- A four-year non-professional Bachelor of Architectural Science (B.Arch.Sc)

While the accredited professional degree is the *Master of Architecture*, not all of the Student Performance Criteria under Condition 11 are satisfied by the two years of instruction in the MArch curriculum. Throughout the Ryerson ARP and this Visiting Team Report "architecture program" refers to the professional architecture curriculum delivered by the Department of Architectural Science at both the graduate and undergraduate levels. This includes both the two-year professional Master of Architecture program and the four-year pre-professional Bachelor of Architectural Science program.

A portion of the B.Arch.Sc. program may be required by students entering the MArch program with another degree and which part depends on the nature and content of the first degree. In this case the Associate Chair considers placement and/or make-up courses on a case-by-case basis in compliance with the CACB requirements and Ryerson's internal policies and standards.

This Condition is MET.

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.

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The Team recognizes that the Department's academic plan and professional engagement initiatives are consistent with the University's history and focus on professional education. The Department's graduates are well-respected within the professional community, and while licensure is the goal of most MArch candidates, the professional options in Building Science and Project Management are clearly acknowledged and supported.

This Criterion is MET.

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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

The Team found evidence that the Program has a coherent plan for integrating technical and professional competence into the design stream. The focus on technical competency early in the program helps students to understand *how* buildings are constructed. This requires special attention, as the student's program develops, to assure that they understand *why*, and for what purpose a building is built. To this end, the Program is developing new graduate-only elective courses and preparing undergraduate students to better engage architectural theory.

This Criterion is MET

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.

Met Not Met [X]

Team comments:

The Team found evidence at both the undergraduate and graduate levels, that the Program addresses local, global and environmental interests in its curriculum and the many outreach and travel initiatives. Of particular note is the high degree of success in national and international competitions such as Zero House and Race to Zero. It did note that while global interests are clearly present in Department programs, they are not clearly present in much of the student work (see SPC B4). This may be due in part to the Program's significant focus on Toronto as the site and generator of student projects.

This Criterion is MET

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.

Met Not Met [X]

Team comments:

The Team found evidence at both the undergraduate and graduate levels, that students are comfortable with collaboration and team work, including working with community groups.

This Criterion is MET

PPC 5. Technical Knowledge

| The Program must describe how it engages fundamental and emerging technical aspects | Of |
|---|----|
| building construction. | |

Met Not Met [X]

Team comments:

The Team found evidence at both the undergraduate and graduate levels, that students are well prepared for fundamental and current technologies, and that the context of the MArch stream within the Faculty and the Department provides potentially excellent exposure to emerging technologies in the engineering and building science areas.

This Criterion is MET

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.

Met Not Met [X]

Team comments:

The Team found evidence in curriculum documents, transcripts and instructional material that:

This Criterion is MET.

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.

Met Not Met [X]

Team comments:

The Team found evidence in graduate studios that students are achieving a satisfactory level of ability in Design Theories, Precedents and Methods.

This Criterion is MET

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.

Met Not Met [X]

Team comments:

The Team found evidence in studio courses that students are achieving a satisfactory level of ability in *Design Skills*.

This Criterion is MET.

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.

Met Not Met [X]

Team comments:

The Team found evidence that students are achieving a satisfactory level of *ability* in the use of *Design Tools*.

This Criterion is MET

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.

Met Not Met [X]

Team comments

The Team found evidence at both the undergraduate and graduate levels, that students are achieving a satisfactory level of *ability* in *Program Analysis*.

This Criterion is MET

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

The Team found evidence of student ability to analyze site context and design response with evidence in ASC101, ASC200, ASC201, ASC401, ASC403, & ASC520. This was particularly well done on ASC401.

This Criterion is MET

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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

The Team found evidence of student ability to analyze the urban context and design a response with evidence in ASC401, ASC403, PLX599, ASC520, & ASC8101. The team is concerned that ASC8101 is the only comprehensive example of urban design inquiry while noting that ASC401 developed a strong design response to the urban context.

This Criterion is MET

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.

| , | 71 | |
|---|-----|---------|
| | Met | Not Met |
| | [X] | [] |

Team comments:

The Team found evidence of student *ability* to analyze site context and in design response with evidence in ASC202, ASC304, ASC622, & ASC623. Work in ASC622 convinced the Team by its iterative approach to review and development of details indicative of the learning process.

This Criterion is MET

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

The Team found evidence of student ability to analyze site context and in design response with evidence in ASC520, ASC620 & AS622. We were impressed by the completeness of the documentation package presented in AS622 and, again, the sequential process employed to achieve it.

This Criterion is MET

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.

| ession and with the general public. | | |
|-------------------------------------|-----|---------|
| | Met | Not Met |
| | [X] | [] |

Team comments:

The Team found evidence from work at the graduate level that students are achieving a satisfactory level of *ability* in *Critical Thinking & Communication*.

This Criterion is MET

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

This criterion is met in the sequence of history ASC206, ASC306 & ASC406. The team is concerned with the almost exclusive focus on western history with little evidence of analysis of vernacular or Canadian architecture.

This Criterion is MET

B3. Architectural Theory

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

| Met | Not Met |
|-----|---------|
| [X] | [] |

The team observed that theory is introduced in ASC103 and supports the proposed addition of classes in the fourth year that will reinforce the presence of theory at the undergraduate level. The criterion is met in AR8102 and with the recent addition of AR8109, this course further strengthens the understanding of contemporary theory at the Master's level.

This Criterion is MET

B4. Cultural Diversity and Global Perspectives

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

| Met | Not Me |
|-----|--------|
| [] | [X] |

Team comments:

While the Program reviewed and refined course content in response to Team comments in the 2013 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.

This Criterion is NOT MET

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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

The Team found evidence of student understanding of Ecological Systems in ASC200, the energy modeling studies in the third-year studios, and in the analysis assignment of AR8103. The Team would like to see compulsory analysis and application of energy modeling, in which the Department has significant ability, in studio projects. There is a need for inquiry into natural ecological systems, beyond human ones.

This Criterion is MET

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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

In response to Team comments in the 2013 report, the Program reviewed and refined course content with respect to *Accessibility*. The Team found evidence in the instructional material (ASC203, ASC303, ASC402 & CVL407) and as applied in studio courses (ASC401, ASC520 & ASC620) that students are achieving a satisfactory level of *understanding* of *Regulatory Systems*. It was noted that basic building code principles were not consistently applied to studio work.

This Criterion is MET

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.

| Met | Not Me |
|-----|--------|
| [X] | [] |

Team comments:

The Team found evidence in a number of courses that students are achieving a comprehensive level of *understanding* of *Materials*.

This Criterion is MET

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.

Met Not Met

[X] []

Team comments:

The Team found evidence in a number of courses that students are achieving a comprehensive level of *understanding* of *Structural Systems*. The dedicated courses (ASC203, ASC303 & CVL407) were particularly well done.

This Criterion is MET

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.

| Met | Not Met |
|------|---------|
| [X] | [] |

Team comments:

The Team found evidence in the instructional material (ASC202 & ASC302) and as applied in studio courses (ASC401 & ASC620) that students are achieving an exemplary level of *understanding* of *Envelope Systems*.

This Criterion is MET

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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

In response to Team comments in the 2013 report, the Program reviewed and refined course content with respect to *Sustainable Design*. The Team found evidence in the instructional material (ASC200 & ASC402) and as applied in studio courses (ASC401 & ASC620) that students are achieving a satisfactory level of *understanding* of *Environmental Systems*.

This Criterion is MET.

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The Team found evidence in a number of courses that students are achieving a Satisfactory level of *ability* in *Comprehensive Design*.

This Criterion is MET

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.

| Met | Not Met |
|-------|---------|
| [X] | [] |

Team comments:

Team found evidence in the course work (ASC102, ASC304 & AR8104) that students are achieving a satisfactory level of *understanding* of *The Architectural Profession*.

This Criterion is MET

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

In response to Team comments in the 2013 report with respect to *Accessibility*, the Program reviewed and refined course content. The Team found evidence in the course work (ASC102, ASC522 & AR8102) that students are achieving a satisfactory level of *understanding* of *Ethical & Legal Responsibilities*.

This Criterion is MET

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The Team found evidence in courses (ASC102, ASC304, ASC522 & AR8104) that students are achieving a comprehensive level of *understanding* of *Modes of Practice*.

This Criterion is MFT.

E4. Professional Contracts

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

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The Team found evidence in courses (ASC102, ASC304, ASC522, ASC622 & AR8104) that students are achieving a comprehensive level of *understanding* of *Professional Contracts*.

This Criterion is MET.

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.

| Met | Not Met |
|-----|---------|
| [X] | [] |

Team comments:

The Team found evidence in courses (ASC102, ASC304 & ASC522) that students are achieving a comprehensive level of *understanding* of *Project Management*.

This Criterion is MET.

IV. Appendices

Appendix A: Program Information

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

1. Brief History of Ryerson University

In 2018 Ryerson University celebrated 25 years as a university and 70 years as an academic institution. Since its founding as an Institute of Technology in 1948, Ryerson has been mandated to serve its larger community through the provision of applied education, a focus that we are proud to maintain. *Mente et Artificio*—with mind and skill—is the motto on the university crest, signifying the dual goals of educating students while also training them for specific careers. Ryerson is located in the very heart of Canada's largest and most culturally diverse city, less than a block from the corner of Yonge and Dundas Streets, with a campus that is embedded in the urban fabric.

The Ryerson Institute of Technology was founded in 1948 as an experiment in postsecondary education. Established primarily as a training centre for the growing workforce of a booming post-war economy, the Institute was a novel alternative to the traditional apprenticeship system of technical learning. When it moved into the century-old buildings of the Toronto Normal School in historic St. James Square, the Institute followed in the footsteps of its namesake, Egerton Ryerson, the architect of Ontario's education system. It was on this site that Ryerson established the province's first teacher-training facility, as well as a museum, an art school, and an agricultural laboratory. These endeavours influenced cultural and scientific developments in Ontario for years to come and enhanced the Square's reputation as the province's cradle of education. In its early years, Ryerson offered short trades-oriented programs geared to prospective job markets, and as such served an important role in preparing young veterans of the Second World War to re- enter civilian life. Under the guidance of its founding principal, Howard Kerr, it matured into an institution with a curriculum that increasingly emphasized management skills and the humanities, hallmarks which would later distinguish Ryerson from other vocational institutions. In the late 1950s, a multi-million dollar modernization program was launched to accommodate the Institute's rapid growth. Ryerson's expansion led to further changes in 1963-1964, when a provincial bill provided for the appointment of a board of governors, changed the Institute's name to Ryerson Polytechnical Institute and effectively gave the 15-year- old institution a mandate for reorganization and self-determination. Several years later, wide-ranging recommendations were introduced in the areas of physical resources and facilities, academic policies and procedures, and communications. These resulted in three important developments: a building program incorporating new facilities for classrooms, administrative and student services, learning resources and technology; a more open and experimental approach in the classroom; and, most importantly, the authority to grant degrees in 1971. Despite the financial difficulties of postsecondary educational institutions, especially in the early to mid-1970s, the capacity to grant degrees imbued Ryerson with a renewed sense of purpose and direction, and the institution continued to grow. The implementation of the Ryerson Community Plan and an updated Ryerson Act completed a decade of frenetic activity.

In the 1980s, Ryerson strived to continue its active partnership with business, industry, and government in areas of educational concern ranging from social services to high technology. Growth and progress were emphasized through the construction and renovation of buildings and the addition

of state-of-the-art equipment. Important initiatives such as the Centre for Advanced Technology Education, the Academic Computing Information Centre, the Office of Research and Innovation, and the Rogers Communications Centre, as well as the accreditation of Ryerson engineering programs, paved the way for what is perhaps Ryerson's greatest milestone as a post-secondary educational institution.

Building on this momentum, in 1993 a bill was passed to grant Ryerson full university status and the commensurate funding necessary to conduct research and establish graduate programs, and the institute was rechristened Ryerson Polytechnic University. Following several years of economic hardship in Ontario, a Vision Task Force was established to identify and focus on areas of concern and improvement and to provide the university with clear goals for the future. By 1998, the year of its 50th anniversary, Ryerson was poised to face the challenges of the new millennium.

In June 2002, in order to reflect Ryerson's emergence as a full-fledged university with a mandate to grant graduate degrees and engage in advanced research, the new name of Ryerson University was approved by the provincial government. In the first decade of the 21_{st}century, Ryerson continued to undergo significant changes in both its curriculum and its infrastructure. Graduate programs and research centres in a variety of disciplines were established and new structures and additions – including the Ronald D. Besse Information and Learning Commons, the G. Raymond Chang School of Continuing Education, the George Vari Engineering and Computing Centre and the Ted Rogers School of Business Management – enhanced the Ryerson Campus and helped to accommodate a quickly growing student population. Although Ryerson continues to evolve and grow, its mission remains the same today as it was in 1948: to provide leadership in career-focused education and to fulfill contemporary societal needs

Ryerson Today

Ryerson University has evolved into a major university, with some 36,000 full-time undergraduate students, more than 2,100 master's students, 500 doctoral students, and over 60,000 annual enrolments in what has become Canada's leading institution for continuing education, the G. Raymond Chang School of Continuing Education. Ryerson is now recognized as a leading institution for research and innovation, being ranked the top institution for undergraduate research in Canada in 2014. In the past decade, the university has launched various research centres and institutes, as well as Zone Learning, a system of incubators for students and business professionals interested in entrepreneurship.

Ryerson offers over 80 degree programs for full-time students, embedded in six faculties:

- Faculty of Arts
- · Faculty of Business
- Faculty of Communication & Design
- Faculty of Community Services
- Faculty of Engineering and Architectural Science
- Faculty of Science

Many of these programs are both innovative in scope and unique among Canadian universities, including Disability Studies, Early Childhood Education, Fashion, Graphic Communications Management, Health Services Management, Image Arts, International Economics, and Radio and Television Arts.

Graduate programs at the Master and/or Doctoral level are now offered in 34 different disciplines. This rapid growth in graduate education is seen as one component of the equally rapid maturation of

the institution and its growing scholarly, research and creative (SRC) activities. The university is also growing rapidly in physical terms. Its location at the heart of downtown Toronto has inspired numerous strategic partnerships with surrounding businesses and spaces. The most significant recent development is the construction of five new Ryerson buildings: the Mattamy Athletic Centre at Toronto's historic Maple Leaf Gardens, the award-winning Student Learning Centre on Yonge Street, the Ryerson Image Centre on the pedestrianized Gould Street, the Daphne Cockwell Health Sciences Complex on Church Street, and the Centre for Urban Innovation (a redevelopment of the Ontario College of Pharmacy building) on Gerrard Street, these last two currently under construction. Nevertheless, the institution is short of space and expansion is particularly challenging given the downtown location of the campus. In April 2018, a second campus in Brampton was announced. The university plans to begin operating there with students, faculty, etc. in September 2020.

Truth and Reconciliation at Ryerson

In November 2015, the President and former Provost, Mohamed Lachemi, launched a community-wide consultation on the response to the Truth and Reconciliation Commission's final report. The report, entitled *Truth and Reconciliation at Ryerson: Building a Foundation for Generations to Come*, was presented to the president and provost in a community celebration in January 2018. The celebration included the unveiling of a plaque to accompany the statue of Egerton Ryerson as a reminder to the university's commitment to truth and reconciliation in light of our namesake's connection to residential schools. Ryerson's student population is highly diverse in cultural and ethnic terms. The majority of students come from the greater Toronto area, and they represent the broad diversity of the region's population; in addition, currently some 1,250 international students study at Ryerson. Although recent developments have significantly increased student residential spaces on campus, many students will continue to be commuters, living with family, often in the outer areas of the city.

2. Institutional Mission

Ryerson's mission statement was adopted by Ryerson's Board of Governors on October 4, 1994. The special mission of Ryerson University is the advancement of applied knowledge and research to address societal need, and the provision of programs of study that provide a balance between theory and application and that prepare students for careers in professional and quasi-professional fields. As a leading centre for applied education, Ryerson is recognized for the excellence of its teaching, the relevance of its curriculum, the success of its students in achieving their academic and career objectives, the quality of its scholarship, research and creative activity, and its commitment to accessibility, lifelong learning, and involvement in the broader community.

The Strategic Mandate Agreement between the University and the Province sets out Ryerson's vision: Ryerson University will be a comprehensive innovation university, recognized as a national leader in high-quality professional and career-related bachelor, masters, and doctoral programs, and relevant research. It will be a global leader in interdisciplinary, entrepreneurial zone learning. Ryerson's students, graduates, and faculty will contribute significantly to Ontario's and Canada's economic, social, and cultural well-being.

Ryerson will expand its strong foundation of distinctive career-related academic programs and related scholarly, research, and creative activities, producing graduates who enable change. Ryerson will enhance its leadership in experiential learning, adult learning, and transfer pathways. As a City Builder,

Ryerson will build partnerships that foster social and cultural innovation, and economic development. The university's current five-year academic plan, Our Time to Lead (2014 – 2019), outlines the university's vision to become Canada's leading comprehensive innovation university, recognized for its high quality, career-related programs and relevant SRC activities, where students, graduates, and faculty contribute significantly to Ontario's and Canada's social, cultural, and economic well-being (see section 1-2). One of the values in this plan focuses on respect for Aboriginal perspectives. The university aims to continue to cultivate and develop relationships with Aboriginal communities, both within and outside the university. The campus environment must embrace Aboriginal learners, faculty, and staff, and support Aboriginal people in taking a leading role in the advancement of Aboriginal education at Ryerson.

3. Program History

Ryerson University's Department of Architectural Science has a long history of offering education for the Architecture, Engineering and Construction (AEC) Industry, and has championed the teaching of architectural science for over 60 years. Building-related education at Ryerson University can be traced to the university's founding days in 1948 when the School of Architectural Draughting was one of Ryerson's first programs. It was originally created to provide returning servicemen and women with a two-year diploma preparing them for careers as architectural assistants. In 1951, it evolved into the School of Architectural Technology and introduced a three-year diploma with third year options in architecture or building technology. In 1973, Ryerson Polytechnic Institute became a degree-granting institution, and the Architectural Science program introduced a four-year degree with two foundation years and two years of specialized study in Architecture, Building Science, or Project Management. This development paralleled Ryerson's general expansion of programs from two- and three-year diplomas to four-year Bachelor of Technology and Bachelor of Applied Arts degrees. Ryerson achieved full university status in 1993 with a renewed emphasis on research and the introduction of graduate programs. While Ryerson offers education that is equivalent in quality to that of a traditional university, it has consistently maintained the distinct focus on the immediate professional relevance of its education. This is what makes Ryerson unique, has been the source of its success, and in marketing terms, continues to provide it with a niche. Professional relevance has been maintained through curriculum, faculty practitioners, contract lecturers in ongoing practice, industry-responsive research, and advisory committees. Students graduating from the former four-year Bachelor of Technology and the current Bachelor of Architectural Science programs have gone on to continue their studies in professionally accredited graduate programs in architecture across Canada and the United States, and overseas.

Fifteen years after Ryerson achieved full university status, the Department of Architectural Science reconfigured the undergraduate Bachelor of Architectural Science degree to be interdependent with the new Master of Architecture degree, thereby creating its own professionally accredited program in architecture. The M.Arch. program admitted its inaugural class in September 2007 and was supported by the hiring of additional faculty and the renovation of facilities. An additional graduate program in Building

Science was launched in September 2008 at the master's level, which will soon be followed by a PhD program.

The professional architecture program achieved candidacy status from the CACB in the Spring of 2008 and full accreditation in the Spring of 2010. The program had a successful CACB maintenance visit in

2013, and was granted an unconditional six-year term of accreditation. Subsequent to that visit, in 2014 the program added the Architectural Science Co-operative Education Internship (ASCEI) program, initially with the equivalent of one studio section (15 to 16 students, between the third and fourth years of the undergraduate program), which was increased to two sections (32 students) in 2018. The program has also increased its international reach via expanded mobility opportunities, including establishing an annual graduate study trip to the Venice and Chicago Architecture Biennales in alternate years, by increasing the number of undergraduate students travelling for one term on exchange at other universities (with reciprocal participation by foreign students coming to Ryerson), and by establishing a research partnership, including the participation of graduate students, with the Bergen School of Architecture in Norway.

4. Program Mission

The Mission Statement of the Department of Architectural Science was prepared with input from the program's constituents, the Program Advisory Council, students, alumni associations and faculty members. It was approved November 30, 2006 by the Department Council. It is reproduced in the Student Handbook and on the department website, and follows below.

The Mission of the Department of Architectural Science is:

- To provide education for a wide range of professional roles in the design, construction and
 management of the built environment by developing, enhancing and maintaining undergraduate, graduate and certification programs of applied study, and research in the areas of design,
 building science, project management and landscape.
- To prepare professionals for leadership roles in the AEC (Architecture, Engineering and Construction) Industry in the Greater Toronto Area, in Canada, and internationally by focusing on the development of the fundamental skills, knowledge and critical judgment necessary for effective participation in a complex, collaborative, cross-disciplinary workplace.
- To foster a comprehensive vision of architecture as a social, technical, political and cultural
 practice in the context of sustainability and evolving environmental and societal needs, and to
 utilize our combined expertise for the benefit of the larger community.
- To cultivate an environment conducive to lifelong learning and the pursuit of scholarly, research and creative activity by faculty and students.

The Mission of the Master of Architecture Program:

Within the broad mission of the Department of Architectural Science, the specific mission of the Master of Architecture program is to prepare the next generation of architectural leaders to think critically, act collaboratively and respond with sustainable solutions to local opportunities and global challenges. To do so, the program focuses on the study of architectural *practice* as distinct from, but encompassing, architectural design and architectural culture. The program has identified three broad overlapping areas of research interest: Sustainable Design, Emerging Technologies, and Global Communities.

Program Action Plan

The Faculty of Engineering, Architecture and Science has formulated six goals that are listed below. The full Faculty Strategic Academic Planning document also includes specific outcomes of the goals and the steps proposed to accomplish these goals.

- 1. Achieving "Excellence" in the quality of our undergraduate and graduate engineering, architecture and science programs. This requires the continued upgrading not only of programs' curricula and the related teaching/learning innovations, but also of the operational and environmental parameters that have direct impact on the quality of the programs offered by FEAS.
- The development and the implementation of new societally relevant and needed high quality undergraduate and graduate programs.
- 3. Faculty Restructuring: The Faculty currently offers 15 undergraduate programs and 11 graduate programs in the various disciplines of engineering, architecture and science. It serves over 4500 undergraduate students and 800 graduate students. It is in fact larger than a significant number of Canadian and North American Universities, and can certainly be described as a "college", with a number of "school" clusters. The number of planned growth initiatives will certainly add more operational challenges and demands on its finite resources and management, let alone its expanding diversity.
- 4. Establishment of National and International Partnerships: The Faculty and its stakeholders cannot ignore the reality of today's "globalization" and "internationally-based economy". Neither can we afford to overlook the fact that our professional programs cannot continue to provide Ontario and Canada with high quality graduates without the input and the support of institutions and corporations that will eventually employ these graduates.
- 5. Enhancing and Strengthening SRC Activities and Outcomes: Research excellence and productivity are intricately connected to the research-based graduate programs. This is particularly true in the various fields of engineering and science. As our Faculty's mission statement indicates, the creation of knowledge through advancements in research in order to support societal needs, is a key Faculty objective.
- 6. Enhancement of the Students' and Graduates' Engagement and Satisfaction: The level of satisfaction of the program students, and of the program graduates with their program's learning experience is certainly a key indicator of the quality of education the program provides to its clientele. Students' engagement with their programs' curriculum, its services and its educational environment, further provides appropriate constructive feedback for quality improvements.

Department of Architectural Science Strategic Academic Plan 2015-2020

In response to Ryerson's five-year academic plan and the FEAS strategic plan, the department prepared a Self-Study Report (2015) which informed its strategic and academic priorities for 2015-2020. The key priorities of the plan are to:

- Design and provide resources for an administrative structure with the capacity to effectively and sustainably:
- Meet current and future demands of all programs, with a focus on student engagement and experiences;
- Identify and maximize opportunities that support all programs;
- Encourage advanced levels of engagement with disciplines, professions, industry, communities, and city building initiatives;
- Establish strategies to resource, coordinate and enhance SRC activities and outcomes;
- Nurture a critically creative, culturally, socially, and environmentally conscious atmosphere of innovation.
- Renovate and add facilities to support the above.

Below is a summary of the goals of the DAS Strategic Plan 2015-2020:

Goal A1: Maintain and augment Faculty Academic/Administrative Team positions

In 2015, the department established the role of Curator of the Paul H. Cocker Gallery. In 2018, the responsibilities pertaining to the role of Associate Chair of the B.Arch.Sc. program were reapportioned among two faculty members: one focusing on student issues, and the other on curriculum development and mobility. A further objective to create an Associate Chair for SRC activities has yet to be implemented.

Goal A2: Recruit New Faculty.

One new tenure track appointment and one limited term appointment (three years) have been filled and joined the department in Summer 2018. A further new tenure track appointment is expected in 2019.

Goal A3: Recruit New Staff.

Over the last three years the department has hired two new lab technicians, an additional IT technician, and an administrative coordinator. This addresses most of the objectives of the plan, although two positions are currently on a two year contract. The department is working to upgrade these to permanent positions. The intended upgrade of two lead hand positions to formal management roles has not occurred outside of the administrative office.

Goal B1: Maintain and enhance the excellence of the undergraduate programs.

The department conducts curriculum meetings in the spring and summer to coordinate and develop course outlines and schedules for the following academic year. A new Associate Chair for Curriculum Management and Mobility was appointed in 2018 to oversee curriculum implementation and development, including coordination and review of course outlines. The department has also developed a mechanism for compiling a curriculum archive of course materials for ongoing reference. In the 2017-2018 academic year, the department produced Periodic Program Reviews (PPRs) for all three of its programs, each of which identified a series of corresponding development goals (see below).

Goal B2: Develop the co-op program.

The cohort of students invited to join the Architectural Science Cooperative Education Internship (ASCEI) program doubled from 16 to 32 participants in 2018. This change was implemented one year ahead of schedule.

Goal C1: Support current graduate programs to ensure they remain key components of the Department of Architectural Science.

The graduate funding model has evolved to better support graduate students.

Goal C2: Expand the number of graduate programs.

The department's proposal to establish a PhD program in Building Science has been approved by the Provost and Yeates School of Graduate Studies and is awaiting final approval from Senate. In addition, the department is working with the Department of Civil Engineering and Ted Rogers School of Management on a Letter of Intent for a graduate program in Project Management in the Built Environment.

Goal C3: Improve the lab facilities and availability and access to equipment.

A new lab technician was hired in 2017 to establish a fully functioning building science lab. In addition, the workshop has purchased additional digital fabrication equipment including a robotic arm.

Goal D1: Establish research themes and clusters.

The department submitted a proposal for an SRC cluster for the Ryerson Centre for Sustainable Built Environments (CSBE). Unfortunately, this has not yet been approved by FEAS. The department is nevertheless proposing to move forward with activities in this field. Also a research cluster in New Wood Architecture has recently been established in association with the Bergen School of Architecture in Norway.

Goal D2: Improve research funding.

Research funding in the department has increased in the last few years due mainly to the activities of a few faculty members.

Goal D3: Improve research support.

It has not yet been possible to establish an Associate Chair for SRC, whose mandate would include mentorship of faculty and support for and coordination of SRC activities. However, closer working relationships with the Office of the Vice-President, Research and Innovation (OVPRI) and other research

support services have contributed to an increase in successful funding applications.

Goal E1: Review and fully implement current Mobility guidelines.

Mobility guidelines have been developed and adopted to help facilitate travel opportunities for students.

Goal E2: Continue to develop exceptional learning opportunities for students, exposing them to the diversity of learning environments and cultural contexts.

The number of agreements with international partners continues to grow, with more opportunities for travel

for our students and for international students to come to Ryerson. Travel opportunities embedded in courses are encouraged.

Goal F1: Complete the David E. Handley Studio Project in anticipation of Goal F2 below.

This project has been completed with renovation of, and provision of new furniture to, all studio spaces on level four of the Architecture Building. The department is exploring further fundraising opportunities to improve the building.

Goal F2: Further to Goal F1 above, plan for the commissioning of a feasibility study to outline space needs and building upgrades required, as well as for the development of a comprehensive strategy to meet the department's facilities and space needs in the future.

This goal has not yet been addressed. However, informal discussions with a variety of university administrators including the Dean of FEAS and the Provost have suggested that funding is not readily available but the department should develop a strategy for the site and building.

Goal F3: Immediately undertake a needs and feasibility study of the building science lab to achieve consistent support for faculty SRC, and increased availability of the lab for undergraduate and graduate curricular requirements.

This activity is ongoing and facilitated by the hiring of the building science lab technician.

Appendix B: The Visiting Team

VOTING MEMBERS

Dale Taylor Educator

1702 7th Avenue NW Calgary, AB T2N 0Z4 Tel: . (403) 283-6850 Cell: (403) 616-6850 Email: dtaylo@ucalgary.ca

Jean-François Lejeune Educator University of Miami School of Architecture 1223 Theo Dickinson Dr, Coral Gables, FL

33146, USA Tel.: (305) 772-6729

E-mail: flejeune@miami.edu

Rodney Kirkwood Practitioner

Principal Stantec

4910 53 Street, PO Box 1777 Yellowknife NT X1A 2P4 Phone: 867.920.2882 ext 258

Cell: 867.446.1471

E-Mail: rodney.kirkwood@stantec.com

Sylvain Lagacé Practitioner

Caron Lagacé Architectures and Design Inc.

82, Timberland Drive

South Tetagouche, NB E2A 4Z2

Tel.: (506) 545-6334 E-mail: <u>sylvain@cladinc.ca</u>

Lindsay Andreas Intern

195 Edgemont Estates Dr NW Calgary, Alberta T3A 2M4 Cell: (403) 589 6121

E-mail: lindsandreas@gmail.com

NON-VOTING MEMBERS

CACB-CCCA

Carole Nadeau Practitioner Nadeau Soucy Ellis Architects

257 Champlain Street. Dieppe, NB E1A 1P2

Tel.: (506) 383-8821 Cell.: (506) 381-7776

Email: Carole.Nadeau@n2se.ca

PROGRAM

David Campbell Practitioner

David Campbell

Arup

2 Bloor Street East Suite 2400 Toronto ON M4W 1A8 Canada Email: david.campbell@arup.com

Appendix C: The Visit Agenda

SATURDAY, MARCH 9, 2019

| TIME | EVENT | LOCATION | PARTICIPANTS |
|------|---|-----------------|--------------------|
| | Team members arrive and check-in at hotel | Hotel Pantages | Team Members |
| 5:00 | Visiting Team Introductions | Hotel Pantages | Team Members |
| 5:30 | Entrance Meeting with Mark Gorgolewski | Pantages Lounge | Team Members, MG |
| 6:30 | Dinner – casual, | The Elm | Visiting Team only |
| 8:30 | Visiting Team Discussion and Assignment of Duties | Pantages Lounge | Team only |

SUNDAY, MARCH 10, 2019

| TIME | EVENT | LOCATION | PARTICIPANTS | | |
|----------------|---|------------------|----------------------------------|--|--|
| Morning | | | | | |
| 7:30- 8:45 | Team only working breakfast | Pantages Rest. | Team Members only | | |
| 9:00 | Orientation with Facilities Coordinator, (keys, wifi, contacts, etc.) | | Team Members, | | |
| 9:15 10:30 | Team Room Orientation with Dept. Admin | ARC 205 & 206 | Team Members,, Admin | | |
| 10:30 12:00 | Initial Review of Student Exhibits & Records | ARC 206 | Team Members | | |
| | | | | | |
| 12:00 -1:00 | Faculty Lunch | ARC 200A | Team Members + faculty | | |
| Afterno | Afternoon | | | | |
| 1:00- 2:00 | Entrance meeting with Architecture faculty | The Pitt/Arc 203 | Team Members + faculty | | |
| 2:00- 3:00 | Tour of the facilities: | | Team Members + facilities staff: | | |
| 3:00- 6:00 | Continued Review of Exhibits and Records | ARC 206 | Team Members | | |
| | | | | | |
| 7:30 | Dinner & Debriefing | Queen & Beaver | Team Members only | | |

MONDAY, MARCH 11, 2019

| TIME | EVENT | LOCATION | PARTICIPANTS |
|-----------------|---|---|-----------------------------------|
| Mornin | g | | |
| 7:00- 8:30 | Team working breakfast with Chair Mark Gorgolewski | Pantages | Team Members, MG |
| ENTRA | NCE MEETINGS WITH CHIEF ACADEMIC OFFICERS: | | |
| 9:00- 9:30 | Team Meeting with Provost Benarroch | JOR 1300 | Team Members Provost Benarroch |
| 10:00- 10:30 | | | Team Members Dean Duever |
| 10:30- 12:00 | Continued Review of Exhibits and Records | ARC205 / 206 Team Table | Team Members |
| 12:00- 1:00 | Team LUNCH meeting with Student Leaders | ARC 200A | Team Members: Student leaders |
| 1:00 | Meeting with undergraduate Associate Chairs | ARC 205 | Team Members: JK, PF, VH |
| Afterno | on | | |
| 2:00 – 6:00 | Continued review of exhibits and records, Observation of Architecture Design studios (all M.Arch & B.Arch.Sc Options) | Team Table Various rooms | Team Members |
| 6:00 – 7:30 | RECEPTION with alumni, OAA, practitioners, & Program Advisory Council | actitioners, & Atrium & Gallery Team Members & Gu | |
| 8:00 | Team Dinner & Debriefing | Mercato | Team Members Only |

TUESDAY, MARCH 12, 2019

| TIME | EVENT LOCATION PARTICIPAN | | PARTICIPANTS | |
|-----------------|--|-----------------------------|-----------------------------------|--|
| Mornin | g | | | |
| 7:30- 8:30 | Team working breakfast with Department Chairs Pantag | | Team Members + MG, JC, MP | |
| 9:00- 11:00 | Continued review of exhibits & records - Review of general studies, electives & related work | Team Table Various rooms | Team Members | |
| 11:00- 12:00 | CONCURRENT MEETINGS WITH STAFF | | | |
| | Library Tour & Meeting with Carol Shepstone & Sonny Banerjee | Chief Librarian's Office | Selected Team Members + CS, SB | |
| | Tour Tech Labs, Workshops & Meeting with Frank Bowen & Leo Roytman | | Selected Team Members + FB, LR | |
| | Meeting with Administrative Staff | AR203 | Selected Team Members + Staff | |
| 12:00- 1:00 | School-wide Meeting with Students | The Pitt/Arc 203 | Team Members + assembled students | |
| Afterno | oon | | | |
| 1:00- 12:00 | ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' | | Team Members | |
| | Team only Dinner | | Team Members Only | |

WEDNESDAY, MARCH 13, 2019

| TIME | EVENT | LOCATION | PARTICIPANTS | |
|-----------------|--------------------------------------|----------|-------------------|--|
| Morning | | | | |
| 8:00 | Team breakfast w/ Mark Gorgolewski | Hotel | Team Members; MG | |
| 9:00 | Check out of the hotel | | | |
| 9:30- 10:30 | Exit meeting w/ Dean Duever | ENG 354 | Team Members; DD, | |
| 10:30- 11:15 | Exit meeting with Provost: Bannaroch | FOR 1315 | Team Members; DB | |
| 11:30 | Team de-briefing | ARC 205 | Team Members Only | |
| 12:00 | Visiting Team Member departures | | | |
| | | | | |

V. Report Signatures

Dale Taylor, Chair representing the educators

Jean-Francois Lejeune representing the educators

Rodney Kirkwood representing the practitioners

Sylvain Lagacé representing the practitioners

Lindsay Andreas representing the Interns

Carole Nadeau CACB non-voting member

David Campbell School non-voting member