

University of Toronto

Major Modification Proposal:

Significant Modifications to Existing Graduate and Undergraduate Programs

This template should be used to bring forward all proposals for major modifications to existing graduate and undergraduate programs for governance approval under the University of Toronto's Quality Assurance Process.

Program being modified: Please specify exactly what program and which components of that are being modified; e.g., BA...specialist, major and minor components.	Master of Architecture
Proposed major modification:	Change the mode of delivery by reducing the program length and requirements by 1.5 FCE
Department/unit (if applicable):	N/A
Faculty/academic division:	John H. Daniels Faculty of Architecture, Landscape, and Design
Dean's office contact:	Kate Nelischer, Assistant Dean, Academic Planning and Governance
Proponent:	Dean Richard Sommer
Version date:	April 3, 2019

1 Summary

- Please provide a brief summary of the change(s) being proposed as it relates to the current structure of the program.

This proposal is to change the existing professional Master of Architecture (MArch) program. This is a rigorous and comprehensive program for students who do not already hold a professional degree in architecture, preparing graduates for the full range of activities. It provides a thorough base of knowledge in history, theory, technology, ecology, society, and professional practice, while developing skills in design through an intensive sequence of design studio courses. The program aims to develop critical, creative, and independent thinking and research that responds to current design issues and societal change.

The program is currently structured across seven semesters, excluding summers. This fall-winter sequence equates to 3.5 years in total (F/W/F/W/F/W/F). Although students complete their final semester in the fall, all students graduate the following June. The Faculty is concerned that this existing structure creates barriers for students and presents challenges for the Faculty in remaining competitive with comparable first-degree programs at peer Canadian and American institutions that are 3 years in length (see Appendix C). The existing 3.5-year length of the Master of Architecture program at the Daniels Faculty places an additional financial burden on students as compared to 3-year programs. Students are required to pay tuition for an additional semester, remain in Toronto for an additional semester, and delay seeking full-time post-graduation employment for an additional two semesters (summer and fall). The financial and time-saving advantages of a 3-year program renders our existing 3.5-year MArch program less desirable to prospective students.

The Faculty believes that restructuring the MArch program to 3 years in length will address these issues and will attract a larger candidate pool. This proposed modification to the mode of delivery by reducing the total length will allow the program to remain competitive in attracting the strongest students. It will support students by lessening their tuition and living expenses and allow them to seek full-time employment sooner following program completion. This modification will maintain the alignment of the program with other Daniels graduate programs that follow fall-winter sequences, assisting the Faculty in administering courses and assigning instructors and advisors. A 3-year curriculum will also align the Master of Architecture thesis with the Master of Landscape Architecture and Master of Urban Design theses, allowing for cross-disciplinary collaboration. The Faculty is confident that this proposed repackaging will reinvigorate the program and ensure its sustainability over the long term.

2 Effective Date

September 1, 2020.

The proposed modifications are expected to receive governance approval in 2019. The revised options will be advertised in advance of the 2019-20 applications cycle, and would come into effect for students entering in Fall 2020.

3 Academic Rationale

- What are the academic reasons for the change proposed, and how do they fit with the unit's and division's academic plans?

The Master of Architecture program at the Daniels Faculty is among a very few first-degree MArch programs in Canada and the United States that stretch beyond three years (see Appendix C). The Faculty has known for some time that the additional semester of study is a burden to many of the students in the MArch program, who with the combination of four-year bachelors and professional masters are being asked to study for one-and-a-half years more than their peers in professional programs that require four years of undergraduate studies combined with two years of graduate studies. A similar issue affected the Faculty's Post-Professional (also known as advanced-standing) options in the Master of Architecture and Master of Landscape Architecture programs, which at 1.5 years were one semester longer than most comparable programs at peer institutions. To address this issue, the Post-Professional options underwent a major modification process in 2018 to reduce the length to 1-year. By making the Master of Architecture program more financially feasible for students, it will be better equipped to attract the best students and compete with similar programs in North America.

A secondary benefit to this change is that the Master of Architecture program would align with the Daniels Faculty Master of Landscape Architecture program, offering additional opportunities for overlap and collaboration amongs students. Additionally, within a 3-year curriculum students graduating from the Master of Architecture program who are interested in continuing their studies at the Daniels Faculty would (if accepted) enter the Post-Professional Master of Architecture program in the fall following the completion of their final winter term (instead of waiting two full terms following their fall program completion).

To achieve a 3-year curriculum, the Faculty is proposing innovations in the format and delivery of the MArch program that will maintain existing program learning outcomes and the breadth and depth of content delivered. This includes organizing the curriculum in ways that will allow those aspects of the pedagogy that require sustained periods of study and practice, such as the design studio and courses focused on reading and writing, to be extended over longer periods of time. At the same time the revised program will integrate modules and workshops for certain subject areas in technology and representation, and more intensive formats for specialized topics. Short, intensive workshops offered in the last week in August and first week in September prior to the regular fall session is a structure already successfully employed by the Faculty's Master of Landscape Architecture program and Post-Professional Master of Architecture and Master of Landscape Architecture options. This approach will allow the program to address certain subjects and themes in a more focused way, including specific subjects such as housing design, and more thematic areas such as design for health and environmental resilience.

The Faculty has discussed and considered extending the curriculum through the summer to achieve the total 3-year length of the program. However, as the majority of programs at the Daniels Faculty do not offer core courses in the summer terms, the Faculty decided against this option. The Faculty believes it is in the best interest of the MArch students to maintain the program's alignment with other Daniels programs, which follow a fall-winter sequence.

This will support MArch students in connecting with other students and faculty and will create more extra-curricular opportunities for project-based collaborations across programs, including design-build projects and school-sponsored charrettes.

4 Description of the Proposed Major Modification(s)

- Please describe in detail what changes are being proposed. Major modifications include changes to the program requirements that will significantly change what students will know and be able to do when they complete the program.
- Other major modifications that may be included are significant changes to admissions requirements, significant changes to faculty engaged in program and; a change to mode of delivery, change to the language of the program and offering the program at another location or institution.
- Please be explicit about how the learning outcomes have changed and include both previous and proposed learning outcomes or one version of the current learning outcomes with the new learning outcome in track changes. You may wish to use Appendices A and B.
- Describe how the modification reflects universal design principles and/or how the potential need to provide mental or physical health accommodations has been considered in the development of this modification.
- Please provide calendar copy, either in track changes or as two separate documents in appendices C and D as applicable.

The proposed curricular changes are outlined in the table below. New courses are highlighted in yellow. Courses that have been moved are highlighted in orange. Courses with FCE highlighted in blue will have modified content. Courses highlighted in red have been removed and/or course content has been redistributed.

		Existing		Revised	
		Course Code and Name	FCE	Course Code and Name	FCE
YEAR 1	August Intensive			ARC1021H Visual Communications 1	0.5
	Term 1	ARC1011Y Architectural Design Studio 1	1	ARC1011Y Architectural Design Studio 1	1
		ARC1021H Visual Communication 1	0.5	ARC1022H Visual Communications 2	0.5
	Term 2	ARC1031H Historical Perspectives on Topics in Architecture 1	0.5	ARC1031H Historical Perspectives on Topics in Architecture 1	0.5
		ARC1041H Architecture in its Technological-Ecological Context	0.5	ARC1041H Architecture in its Technological-Ecological Context	0.5
		ARC1012Y Architectural Design Studio 2	1	ARC1012Y Architectural Design Studio 2	1
		ARC1022H Visual Communication 2	0.5	ARC2044H Structures 1	0.5

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

		ARC1032H Historical Perspectives on Topics in Architecture 2	0.5	ARC1032H Historical Perspectives on Topics in Architecture 2	0.5
		ARC1042H Site Engineering and Ecology	0.5	ARC2043H Building Science, Materials, and Construction 1	0.5
YEAR 2	August Intensive			ARC1042H Site Engineering and Ecology	0.5
	Term 3	ARC2013Y Architectural Design Studio 3	1	ARC2013Y Architectural Design Studio 3	1
		ARC2023H Intermediate Computer Applications	0.5	ARC2023H Intermediate Computer Applications	0.5
		ARC2043H Building Science, Materials, and Construction 1	0.5	ARC2047H Environmental Systems	0.5
		ARC2044H Structures 1	0.5	ARC20XXH Research Methods	0.5
	Term 4	ARC 2014Y Architectural Design Studio 4	1	ARC2014Y Architectural Design Studio 4	1
		ARC2046H Structures 2	0.5	ARC2046H Structures 2	0.5
		ARC2045H Building Science, Materials, and Construction 2	0.5	ARC2045H Building Science, Materials, and Construction 2	0.5
		ARC2047H Environmental Systems	0.5	Elective	0.5
YEAR 3	Term 5	ARC3015Y Architectural Design Studio 5: Option Studio	1	ARC3015Y Architectural Design Studio 5: Option Studio	1
		ARC3052Y Professional Practice	1	ARC3017H Thesis Research and Preparation	0.5
		Elective	0.5	Elective	0.5
				Elective	0.5
	Term 6	ARC3016Y Architectural Design Studio 6: Research Studio	1	ARC4018 Architectural Design Studio 6: Thesis	1
		ARC3017H Thesis Research and Preparation	0.5	ARC30XXH Professional Practice	1
		Elective	0.5	Elective	0.5
		Elective	0.5		
YEAR 4	Term 7	ARC4018Y Architectural Design Studio 7: Thesis	1.5		
		Elective	0.5		
		Elective	0.5		
Total FCE			17.5		16
Course Changes					
In order to move from a 3.5-year curriculum to a 3-year curriculum, the timing of some courses must be shifted. Additionally, some courses must be reimagined to ensure the					

program maintains its existing learning outcomes. Maintaining existing learning outcomes is vital to the ongoing accreditation of the program.

The Faculty also believes this major modification presents an opportunity to further improve the existing curriculum and continue to support existing program learning outcomes. The revised curriculum will provide students with a stronger technical foundation in the first year of study, which will better prepare them for subsequent studios. The second year is envisioned to more heavily focus on history and theory courses. Additionally, building science courses have been included in each of the first four semesters. Specific course changes are highlighted below, and will be approved through minor modifications and timetable adjustments:

- ARC1042 Site Engineering and Technology will be moved to an August/September two-week intensive course in Term 3, serving as a valuable precursor to ARC2013 Design Studio 3
- ARC30XX Research Methods will be a new offering within the History/Theory sequence and it will reduce the required History/Theory elective requirement from 1 FCE to .5 FCE, as a result. The course will introduce research methodologies in order to prepare students for Thesis the following year.
- ARC3016 Architectural Design Studio 7: Research Studio will be eliminated leaving a total of 6 Design Studios in the 3-year curriculum. This is consistent with the total number of design studios offered by competitor programs (see Appendix C). It is anticipated that ARC3017H Thesis Research and Preparation will adapt to the elimination of this studio which once served as a pre-cursor to Thesis.
- ARC4018 Thesis will be reduced from 1.5 FCE to 1.0 FCE through a minor modification to better reflect the effort and time required of students. The Faculty agrees that ARC4018 is comparable to design studio courses, which each have a 1.0 FCE value.

August Intensives

In the revised schedule, ARC 1021H Visual Communication 1 and ARC1042 Site Engineering and Technology will be offered as a two-week intensives in the last week of August and first week of September, receiving final assessment in September in alignment with School of Graduate Studies policies for fall start dates. The Daniels Faculty currently uses this model for the Master of Landscape Architecture program and the Post-Professional Master of Architecture and Master of Landscape Architecture options and has found it to be successful. Due to this success, the Faculty is confident that students in the MArch program can complete ARC 1021H Visual Communication 1 and ARC1042 Site Engineering and Technology within this condensed time and that the excellence in teaching will remain consistent with a full-term course structure. Additionally, requiring incoming first year students to complete ARC 1021H Visual Communication 1 prior to the start of other fall courses will set them up for greater success in their introductory studio courses.

Electives

Electives are advanced elective courses offered in the Master of Architecture, Master of Landscape, and Master of Urban Design programs. The existing curriculum requires that 1.0 FCE in elective courses must be in the History and Theory stream. With the addition of a new core History/Theory course, ARC20XXH Research Methods, the required FCE in elective courses in the History and Theory stream will be reduced to .5 FCE.

5 Impact of the Change on Students

- Outline the expected impact on continuing students, if any, and how they will be accommodated.
- Please detail any consultation with students.

The proposed changes will not affect continuing students.

Students entering year 2 of study in fall 2020 will be given the option to either complete the 3.5-year program, or to “transfer” into the modified 3.0-year program. This will be further elaborated on in a transition document, to be completed by the Office of the Registrar and Student Services (ORSS). The transition document will specify which courses are exclusions to one another to help existing students determine what courses they will need to complete if they “transfer” to the new program. ORSS and the Program Director will also develop a communication plan to advise students of their options, and students will be asked to submit their choices in writing. Elected student representatives currently enrolled in the Master of Architecture program were consulted on this proposal through their positions on the Daniels Faculty Curriculum Committee. Additionally, alumni representatives were consulted through their positions on the Daniels Faculty Curriculum Committee.

6 Consultation

- Describe the impact of the major modification on other programs and any consultation undertaken with the Dean and chair/director of relevant academic units.

Faculty and staff at the Daniels have been consulted on the proposed modification. Discussions of this change have been ongoing for over five years. Structured meetings with faculty members dedicated to this modification began in the 2017-18 academic year. At a meeting of core MArch faculty on November 7, 2018, Program Director

Shane Williamson presented three potential strategies for a revised 3.0-year program for faculty review. The Program Director held additional meetings with faculty to discuss these potential changes. Feedback received during all of these meetings led to the development of a draft major modification proposal, which was presented to the Daniels Faculty Curriculum Committee for review and comment on February 8, 2019. This draft was reviewed in greater detail at a meeting of core MArch faculty on February 27, 2019. Feedback received at this meeting, in follow-up correspondence, and via an anonymous online survey provided by the Program Director, informed subsequent iterations of the proposal. A revised draft was reviewed again at a core MArch faculty meeting on March 25, 2019, and the resulting final 3-year curriculum is presented in this document. There is broad support for this change across all programs within the Faculty. Program Directors of the Master of Architecture, Master of Landscape Architecture, Master of Urban Design, Master of Visual Studies, Bachelor of Arts, Architectural Studies, and the Bachelor of Arts, Visual Studies are fully aware of this proposal, as is the Dean of the Faculty. All believe that the proposed change is positive and necessary to the sustainability of the MArch program.

As a professional program, the Master of Architecture is accredited by the Canadian Architectural Certification Board (CACB) every six years. The Faculty has discussed the potential of modifying the MArch program with the CACB and has received positive feedback. The Faculty detailed this intention in the recent 2019 Architecture Program Report, submitted in fall 2018 for the program's 2019 accreditation review. The modification was prioritized in the program's Action Plan and Objectives (an accreditation requirement).

Additionally, the Daniels Faculty has been in discussions with the University of Toronto's Planning and Budget Office on the impact of this proposal.

7 Resources

- Describe any resource implications of the change(s) including, but not limited to, faculty complement, space, libraries and enrolment/admissions.
- Please be specific where this may impact significant enrolment agreements with the Faculty/Provost's office.
- Indicate if the major modification will affect any existing agreements with other institutions, or will require the creation of a new agreement to facilitate the major modification (e.g., Memorandum of Understanding, Memorandum of Agreement, etc). Please consult with the Provost's office (vp.academicprograms@utoronto.ca) regarding any implications to existing or new agreements.

Facility Impact

In 2017 the Daniels Faculty celebrated the official opening of its new home, the Daniels Building at One Spadina Crescent — a site of deep historical significance in Toronto. The original heritage building has been renovated and integrated with a new, stunning work of contemporary architecture and landscape. One Spadina is a showcase for the city and the University, and a world-leading venue for studying, conducting research, and advocating for art, architecture, landscape, and urban design. This new facility provides excellent space for Master of Architecture students. Students are provided with desks in the graduate studio and have access to computation and fabrication facilities, the computer lab, meeting/seminar space, a colour laser printer and large format scanner, the graduate student lounge, and the new Eberhard Zeidler Library. The proposed modification will not impact student space, facilities, or library access.

Faculty Impact

The proposed modification will not affect the existing faculty complement.

Enrolment and Admissions Impact

The proposed modifications will not affect the existing enrolment and admissions processes at the Daniels Faculty. Staff in the Office of the Registrar and Student Services will continue to support enrolment and admissions for the MArch program.

Financial Impact

The Faculty does not anticipate any material resource impact. Enrolment losses from the elimination of semester 7 may be offset by small increments in the post-professional programs, such that the Faculty’s overall graduate FTE level remains stable.

8 UTQAP Process

The UTQAP pathway is summarized in the table below.

Steps	Approvals
Development/consultation within unit	N/A
Consultation with Dean’s office (and VPAP)	March-April, 2019; VPAP sign-off April 10, 2019
	Unit-level approval as appropriate
	Faculty/divisional council
Submission to Provost’s office	
Reported to the Provost and included in annual report to AP&P	May 8, 2019
Ontario Quality Council—reported annually	July 2019

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Major Modifications Proposal:
Professional MArch Program

9 Appendix A: Current Learning Outcomes, and Degree-Level Expectations

Address how the design, structure, requirements and delivery of the program support the program learning outcomes and degree-level expectations.

Master of Architecture DLEs

Master’s DLEs (based on the Ontario Council of Academic Vice-Presidents [OCAV])	Master’s Program Learning Objectives and Outcomes	How the Program Design and Requirements Supports the Attainment of Student Learning Outcomes
Expectations: This Master of Architecture is awarded to students who have demonstrated:		
<p>1. Depth and Breadth of Knowledge A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of the academic discipline, field of study or area of professional practice.</p>	<p>Depth and breadth of knowledge is defined in the Master of Architecture program as a thorough understanding of a substantial body of knowledge that is at the forefront of the architectural academic discipline and area of professional expertise.</p> <p>As a result of an analytical and materially engaged pedagogy, students will demonstrate an understanding of:</p> <ol style="list-style-type: none"> 1. Architectural design principles and methods, and the various histories, technologies, precedents, and representational tools that define the field 2. Ways in which architecture can address questions of cultural relevance, modern craft, and environmental durability 3. The political, socio-cultural, environmental, economic, and technological contexts within which architecture exists 	<p>The core required courses, including the sequencing of courses within each stream, ensures students achieve the breadth and depth of knowledge required.</p> <p>These include the following streams:</p> <p>Design:</p> <ul style="list-style-type: none"> • ARC1011Y Architectural Design Studio 1 • ARC 1012Y Architectural Design Studio 2 • ARC2013Y Architectural Design Studio 3 • ARC2014Y Architectural Design Studio 4 • ARC2015Y Architectural Design Studio 5 <p>Visual Communications:</p> <ul style="list-style-type: none"> • ARC1021H Visual Communications 1 • ARC1022H Visual Communications 2 <p>History-Theory:</p>

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Master's DLEs (based on the Ontario Council of Academic Vice-Presidents [OCAV])	Master's Program Learning Objectives and Outcomes	How the Program Design and Requirements Supports the Attainment of Student Learning Outcomes
	<p>This understanding is reflected in students who are able to effectively articulate a design process grounded in theory and practice and based on a concept, a building program, and a site.</p>	<ul style="list-style-type: none"> • ARC1031H Historical Perspectives on Topics in Architecture 1 • ARC1032H Historical Perspectives on Topics in Architecture 2 • ARC20XXH Research Methods <p>Building Science and Technologies:</p> <ul style="list-style-type: none"> • ARC1041H Architecture in its Technological-Ecological Context • ARC2023H Intermediate Computer Applications • ARC1042 Site Engineering and Technology • ARC2044H Structures 1 • ARC2043H Building Science, Materials, and Construction 1 • ARC2047H Environmental Systems • ARC2046H Structures 2 • ARC2045H Building Science, Materials, and Construction 2 <p>Professional Practice:</p> <ul style="list-style-type: none"> • ARC3052H Professional Practice 1 • ARC30xxH Professional Practice 2

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Master’s DLEs (based on the Ontario Council of Academic Vice-Presidents [OCAV])	Master’s Program Learning Objectives and Outcomes	How the Program Design and Requirements Supports the Attainment of Student Learning Outcomes
<p>2. Research and Scholarship A conceptual understanding and methodological competence that</p> <ul style="list-style-type: none"> • Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline; • Enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and • Enables a treatment of complex issues and judgments based on established principles and techniques; and, on the basis of that competence, has shown at least one of the following: <ul style="list-style-type: none"> ▶ The development and support of a sustained argument in written form; or ▶ Originality in the application of knowledge. 	<p>Students will demonstrate an understanding of:</p> <ol style="list-style-type: none"> 4. Relevant conceptual and theoretical frameworks and how they shape architecture and urban design 5. Various research techniques common to the discipline and practice of architecture 6. The value of drawing influence and information from cognate fields and bodies of knowledge 7. Approaches to applying design theories, methods, and precedents to the conception, configuration, and design of buildings, spaces, and tectonic components 8. Approaches to synthesizing research findings and comparatively evaluating information <p>This understanding is reflected in students who are able to effectively participate in critical intellectual inquiry and engage in a process of discovery through complex problems.</p>	<p>The program design and requirements that ensure these student outcomes for research and scholarship are:</p> <p>The required History and Theory courses are designed to equip students with research and analytical skills, modelling exemplary critical methods and assessing current issues within the study of architecture. These courses include ARC1031 Historical Perspectives on Topics in Architecture 1, ARC1032 Historical Perspectives on Topics in Architecture 2, and ARC20XXH Research Methods. These courses require students to collect data and write research papers.</p> <p>Advanced studios and courses in the third year of study also require students to engage in further research and critical thinking to inform design approaches.</p> <p>Participation in graduate level elective courses in cognate disciplines across the University enable students to develop the skills necessary to translate and communicate disciplinary expertise beyond design.</p>
<p>3. Application of Knowledge Competence in the research process by applying an existing body of knowledge in the critical analysis of a new</p>	<p>Students will demonstrate an understanding of:</p> <ol style="list-style-type: none"> 9. Approaches to program and site analysis, and how to test 	<p>Course work requires the development of design concepts and their representation through drawings and models, along</p>

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Master’s DLEs (based on the Ontario Council of Academic Vice-Presidents [OCAV])	Master’s Program Learning Objectives and Outcomes	How the Program Design and Requirements Supports the Attainment of Student Learning Outcomes
question or of a specific problem or issue in a new setting.	<p>potential alternative outcomes against criteria and standards</p> <p>10. The relationships between built form, site, urban context, and ecological conditions</p> <p>11. Principles used in the effective application of architectural materials and the design of building envelope systems, along with principles of structural behaviour</p>	<p>with their formal presentation. To achieve this, students must successfully draw from knowledge gained through research, lectures, and readings to inform their design concepts.</p> <p>Additionally, course work requires the writing of academic papers to engage students in developing, refining, and defending ideas.</p>
<p>4. Professional Capacity/ Autonomy</p> <ul style="list-style-type: none"> • The qualities and transferable skills necessary for employment requiring <ul style="list-style-type: none"> ▶ The exercise of initiative and of personal responsibility and accountability; and ▶ Decision-making in complex situations • The intellectual independence required for continuing professional development; • The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and • The ability to appreciate the broader implications of applying knowledge to particular contexts. 	<p>Students will demonstrate an understanding of:</p> <p>12. The societal roles and responsibilities of architects, including meeting legal and ethical standards</p> <p>13. The regulatory systems and instruments that govern the context within which architecture exists</p> <p>14. Principles and types of practice organization, including financial management and business planning</p> <p>This understanding is reflected in students who demonstrate their preparedness to pursue professional opportunities in architecture and the civic art of building and their understanding of the role of architects as global citizens.</p>	<p>The core required courses ARC3052H Professional Practice 1 and ARC30XXH Professional Practice 2 focus on preparing students to be competent and ethical practitioners.</p>
5. Communications Skills		All core courses support students in developing

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Master's DLEs (based on the Ontario Council of Academic Vice-Presidents [OCAV])	Master's Program Learning Objectives and Outcomes	How the Program Design and Requirements Supports the Attainment of Student Learning Outcomes
<p>The ability to communicate ideas, issues and conclusions clearly.</p>	<p>Students will demonstrate an understanding of:</p> <p>15. How to write, speak, and use visual media to communicate on architectural subject matter within the profession and with the general public</p> <p>16. 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</p> <p>17. The value of critiques, group discussions, and formal reviews in aiding the design process</p> <p>This understanding is reflected in students who are able to articulate ideas through hand drawing and computer generated images and models at various scales, along with specifications, and present these representations effectively in front of critics and peers.</p>	<p>communication skills, whether written, verbal, or visual.</p>
<p>6. Awareness of Limits of Knowledge Cognizance of the complexity of knowledge and of the potential contributions of other interpretations, methods, and disciplines.</p>	<p>Students will demonstrate an understanding of:</p> <p>18. The value of collaborating with colleagues from cognate disciplines and engaging in practice-based networking of ideas and skills</p>	<p>All core courses support students in developing an awareness of the limits of knowledge.</p>

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Master’s DLEs (based on the Ontario Council of Academic Vice-Presidents [OCAV])	Master’s Program Learning Objectives and Outcomes	How the Program Design and Requirements Supports the Attainment of Student Learning Outcomes
	<p>19. The possibilities and potential limitations of architecture, including the philosophical and methodological basis for new modes of practice best suited to facing the evolving challenges of the profession</p>	

Appendix B: Calendar Copy with Changes Tracked

Master of Architecture

Program Description

The Master of Architecture (MArch) is a professional degree program and provides a thorough base of knowledge in history, theory, technology, ecology, society, and professional practice, while developing skills in design through an intensive sequence of design studio courses. These are supported by courses in visual communication and architectural representation including computer modelling and other new media. The program aims to develop critical, creative, and independent thinking and research that responds to current design issues and societal changes. The greater Toronto region is used as an urban laboratory for the development of new knowledge and forms of practice.

MArch Program (3-year Option)

Deleted: .5

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Faculty of Architecture, Landscape, and Design's additional admission requirements stated below.
- An appropriate bachelor's degree (BA, BSc, BAsC, BES, BFA, BCom) with a final-year grade point average of at least mid-B, and showing leadership potential in the field.
- Recommended: courses in secondary calculus, secondary physics, and university architectural history (0.5 full-course equivalent [FCE]).
- Recommended: preparation in the visual arts, such as drawing, sculpture, graphics, photography, film, or new media, as well as computing and advanced writing skills.
- Applicants whose primary language is not English and who graduated from a university where the language of instruction and examination was not English must demonstrate proficiency in English. See [General Regulations section 4.3](#) for requirements.

Program Requirements

- The course of study is a rigorous full-time, comprehensive program and prepares graduates for the full range of professional activities in architecture. The core program is extensive, and students are required to use their electives to develop an area of special skill and knowledge through an independent study program that culminates in a design thesis.
- Students study full-time, taking all required courses in each given session. An FZ (fail) in any one course, or a B– grade in two studio courses or in any three courses normally results in a recommendation to the School of Graduate Studies to terminate the student's registration in the degree program.

- There is no additional language requirement other than proficiency in English on admission. Writing support is integrated into the program in order to develop specialized skills that are essential to effective learning and communication in the design fields.
- Progress in the program is dependent upon satisfactory completion of studio and required core courses in sequence. Exceptions can be made at the discretion of the Program Director.
- Students who complete their Master of Architecture program and are eligible to convocate will have their relevant information automatically forwarded by the John H. Daniels Faculty of Architecture, Landscape, and Design to the Canadian Architectural Certification Board (CACB), unless the student opts out in writing. The certification confirms the individual's academic qualifications in compliance with the Canadian Education Standard (CES) in Architecture for entry to the profession. CACB grants and issues certification to applicants who meet the Education Standard and maintains a National Register of those certified and confidential records of all pertinent documentation for all applicants.
- Coursework. Students must complete a total of 16 full-course equivalents (FCEs) as follows:

- 16.0 FCEs in core courses

- 4.0 FCEs Design Studios
- 1.0 FCEs Option Design Studios
- 0.5 FCE Thesis Preparation and Research course
- 1.0 FCEs Design Thesis
- 1.0 FCE Visual Communications courses
- 1.5 FCE History courses
- 0.5 FCE Computer Modelling course
- 3.5 FCEs Technics and Planning courses
- 1.0 FCE Professional Practice course

- 2.0 FCEs in electives, of which 0.5 FCE must be in the History category.

Program Length

6 sessions full-time (typical registration sequence: F/W/F/W/F/W)

Time Limit

4 years full-time

Deleted: 5

Deleted: 2

Deleted: 5

Deleted: 0

Deleted: 5

Deleted: 1.

Deleted: 7

Deleted: /F

Appendix C: Comparison of Existing Daniels Faculty MArch Curriculum with Competitor First-Degree North American Master of Architecture Programs

		University of Toronto (MArch)		UBC (MArch)		University of Calgary (MArch)		
Year	Term	Code	Course Title	Code	Course Title	Code	Course Title	
1	Term 1	ARC 1011Y	Architectural Design Studio 1	ARCH 500	Architectural Design Studio I	EVDS 580	Studio I: Design Thinking	
		ARC 1021H	Visual Communication 1	ARCH 502	Introductory Workshop	EVDS 523	Sustainability in the Built Environment	
		ARC 1031H	Historical Perspectives on Topics in Architecture 1	ARCH 504	Architectural History I	EVDA 523.01	History of Architecture & Human Settlements I - Pre-Modern Traditions of the World	
		ARC 1041H	Architecture in its Technological-Ecological Context	ARCH 512	Architectural Structures I	EVDA 541		Graphics Workshop I
			ARCH 515	Design Media I				
	Term 2	ARC 1012Y	Architectural Design Studio 2	ARCH 501	Architectural Design Studio II	EVDA 582	Studio II in Architecture	
		ARC 1022H	Visual Communication 2	ARCH 505	Architectural History II	EVDA 511	Building Science & Technology I	
		ARC 1032H	Historical Perspectives on Topics in Architecture 2	ARCH 511	Architectural Technology I	EVDA 523.02	History of Architecture & Human Settlements II - The Rise of Modernity, 1750-Present	
		ARC 1042H	Site Engineering and Ecology	ARCH 517	Design Media II	EVDA 543	Graphics Workshop II	
	Summer			ARCH 551	Communicating Construction			
					Electives			
	2	Term 3	ARC 2013Y	Architectural Design Studio 3	ARCH 513	Environmental Systems and Controls I	EVDA 682.02	Intermediate Studio
			ARC 2023H	Intermediate Computer Applications	ARCH 520	Architectural Design Studio III	EVDA 613	Structures for Architects I
			ARC 2043H	Building Science, Materials, and Construction 1	ARCH 531	Architectural Technology II	EVDA 617	Architectural Lighting Design
			ARC 2044H		Structures 1	ARCH 568	Research Methods	EVDA 621
						EVDS 697	Leadership & Architecture	
Term 4		ARC 2014Y	Architectural Design Studio 4	ARCH 521	Architectural Design Studio IV	EVDA 682.04	Comprehensive Studio	
		ARC 2046H	Structures 2 Building Science, Materials, and Construction 2	ARCH 523	Contemporary Theories in Architecture	EVDA 611	Building Science & Technology II	
		ARC 2045H		Structures II	ARCH 532	Architectural Structures II	EVDA 615	Environmental Control Systems

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

	Summer	ARC 2047H: Building Science, Illumination, and Acoustics	ARCH 533	Environmental Systems and Controls II	EVDA 619	Structures for Architects II
				Electives		
3	Term 5	ARC 3015Y: Architectural Design Studio 5	ARCH 540	Architectural Design Studio V	EVDA 782	Senior Research Studio in Architecture I
		ARC 3052Y: Professional Practice	ARCH 548	Graduate Project Part I	EVDS 671	Urban Design Theory (Required if in Calgary)
			ARCH 561	Seminar: History and Theory		Elective
		Elective				Elective
	Term 6	ARC 3016Y: Architectural Design Studio 6	ARCH 541	Professional Practice	EVDA 782	Senior Research Studio in Architecture II
		ARC 3017H: Thesis Research and Preparation	ARCH 549	Graduate Project Part II	EVDA 661	Architectural Professional Practice I
		Elective				Elective
		Elective				Elective
4	Term 7	ARC 4018Y: Architectural Design Studio 7: Thesis				
		Elective				
		Elective				

Year	Term	University of Toronto (MArch)		Columbia (MArch)		University of Michigan (MArch)	
		Code	Course Title	Code	Course Title	Code	Course Title
	Summer					ARCH402	Architectural Design
1	Term 1	ARC 1011Y	Architectural Design Studio 1	A4001	Core Studio I	ARCH416	Design Fundamentals
		ARC 1021H	Visual Communication 1	A4111	Architectural Technology I	ARCH412	Architectural Design History of Architecture
		ARC 1031H	Historical Perspectives on Topics in Architecture 1	A4348	Questions in Architectural History 1	ARCH413	Structures I
		ARC 1041H	Architecture in its Technological-Ecological Context	A4023	Visual Studies I: Architectural Drawing and Rep I	ARCH314	Structures I
			ARCH417	Construction			
	Term 2	ARC 1012Y	Architectural Design Studio 2	A4002	Core Studio II	ARCH417	Construction
		ARC 1022H	Visual Communication 2	A4112	Architectural Technology II	ARCH422	Architectural Design
		ARC 1032H	Historical Perspectives on Topics in Architecture 2	A4349	Questions in Architectural History II	ARCH422	Arch History Elective
		ARC 1042H	Site Engineering and Ecology	A4024	Visual Studies II: Architectural Drawing and Rep II	ARCH324	Structures II
	Summer					ARCH425	Environmental Systems

Major Modifications Proposal:
Professional MArch Program

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

2	Term 3	ARC 2013Y:	Architectural Design Studio 3	A4003	Core Studio III	ARCH552	Architectural Design
		ARC 2023H:	Intermediate Computer Applications	A4113	Architectural Technology II	ARCH516	Representation
	Term 4	ARC 2043H:	Building Science, Materials, and Construction 1	A4114	Architectural Technology IV	ARCH515	Sustainable Systems
		ARC 2044H:		Structures 1	History/Theory I		
		ARC 2014Y:	Architectural Design Studio 4	A4004	Advanced Studio IV	ARCH562	Architectural Design
		ARC 2046H:	Structures 2	A4115	Architectural Technology V	ARCH537	Fabrication
		ARC 2045H:	Building Science, Materials, and Construction 2	ARCH 532	History/Theory II	ARCH572	Arch Theory and Criticism
ARC 2047H:	Building Science, Illumination, and Acoustics	ARCH 533	Visual Studies Elective	Electives			
Summer							
3	Term 5	ARC 3015Y:	Architectural Design Studio 5	A4005	Advanced Studio V	ARCH672	Architectural Design
		ARC 3052Y:	Professional Practice	A4116	Architectural Technology VI	ARCH660	Thesis Seminar
		Elective		History/Theory III	ARCH527	Integrative Systems Professional Practice or Elective	
		Elective	A4560	Professional Practice			Elective
Term 6	ARC 3016Y:	Architectural Design Studio 6	A4006	Advanced Studio VI	ARCH662	Thesis	
	ARC 3017H:	Thesis Research and Preparation		History/Theory IIII	ARCH582	Professional Practice or Elective	
		Elective		Elective			Elective
4	Term 7	ARC 4018Y:	Architectural Design Studio 7: Thesis		Elective		Elective
			Elective				
			Elective				