New Graduate Programs in Architecture

The Azrieli School of Architecture and Urbanism proposes introduction of four new graduate programs to complement the existing professional Master of Architecture (MArch) program.

Briefly, the Master of Architecture 1 program will allow students with bachelor degrees not in professional architecture (BAS) to become qualified as professional architects through additional terms of study. This will result in two paths to complete the MArch degree depending on preparation before admission. Students in the Master of Architecture (both streams) will also be able to register for a Graduate Diploma in Architectural Conservation, which will prepare students for work in architectural conservation heritage.

Two non-professional degrees with research focus are also proposed: Master of Architectural Studies and Ph.D. in Architecture. The new programs are described briefly below. Full presentations are available in the program appraisal documents.

MArch 1

There has been continued growth in applications to the limited enrolment graduate program at the Azrieli School of Architecture and Urbanism over the past five years. Other Ontario universities offering professional programs in architecture are experiencing a similar increase in demand. In response to this interest, Ryerson University inaugurated a professional graduate program in architecture in the spring of 2007 and Laurentian University has recently indicated their interest in developing a school of architecture. At the Azrieli School of Architecture and Urbanism we feel a responsibility to increase the number of students in our graduate program to more appropriately reflect public interest. Additionally at the graduate level, we have seen a marked increase in applications from students with undergraduate degrees in other disciplines. Students holding degrees in Art History, Fine Arts, and Engineering make up the majority of applicants in this category, however we have also seen applicants from disciplines as diverse as the Medical Sciences, Music and Religious Studies.

The School sees an opportunity to enrich our graduate student body and the profession of architecture as a whole by considering applications from students who hold an honours degree in a discipline other than architecture. In addition our new Majors in the BAS (Conservation and Sustainability, Urbanism, Philosophy and Criticism) will graduate students who in some cases will be seeking advanced studies in architecture as a professional degree. To do this, the School must satisfy the rigorous demands of both the Ontario College of Graduate Studies (OCGS) and the Canadian Architectural Certification Board (CACB). We are confident that this challenge can be met by introducing the M.Arch1. The University of Toronto, for example, offers a similar program in their Faculty of Architecture and Landscape Architecture. We see an opportunity to diversify our student body by making an education in Architecture available to individuals who are interested in entering the profession after completing an undergraduate honours degree in an unrelated field or a non-accredited architecture program. Importantly, our non-design Majors represent a significant new pool of graduate program candidates. This program proposal is for the M.Arch 1 Professional Masters in Architecture. The M.Arch 1 adds to the existing Professional M.Arch program by admitting applicants from fields of study other than architecture.

Diploma in Architectural Conservation

In 2008, the former Director-General of UNESCO, Koichiro Matsuura, argued that "The preservation of cultural heritage is essential for two separate sets of reasons: because of its universal aesthetic and historic value on the one hand and because of its importance to the societies and cultures that are its custodians on the other. Cultural heritage provides a link between past and present and as such boosts individuals' and communities' sense of identity and social cohesion. In this way it also cements the foundation on which societies build their future."

Canada has close to twenty-five thousand properties designated as architectural heritage by local, provincial, and federal authorities. In addition, over 200,000 sites are listed on heritage inventories with an average of two thousand properties added each year. There is current and growing demand for qualified specialists to shepherd these valuable cultural resources. For example, The
Heritage Conservation Directorate of Public Works and Government Services Canada has estimated that a cohort of 250 to 300 conservation professionals from various disciplines must be maintained over the next twenty years to address federally owned heritage buildings alone. When we consider that the federal government currently manages less than 5% of Canada's designated heritage properties, the magnitude of the demand becomes clear.

Despite this growing demand for architects with the specialized knowledge and skills necessary to deal with the challenges of built heritage, only one of Canada's professional schools of architecture currently offers a specialization in conservation. The Université de Montréal is unique in Canada, with a Conservation de l'environnement bâti option in the Maîtrise en architecture program. While this program is of a very high calibre, it also has a very limited enrollment. Furthermore, the curriculum is offered exclusively in French. Simply put, the Université de Montréal cannot provide the number of professional architects that are needed across Canada in the field of architectural conservation over the next two decades. While post-graduate certificate programs at the Université de Québec à Montréal (UQAM), University of Victoria and Athabasca University provide training to individuals from a variety of culture and heritage related fields, specialized programs at the graduate level are lacking for professional architects.

One of the most significant heritage conservation programmes in Canada was developed at Carleton in 1990 in the School of Canadian Studies and in collaboration with the School of Architecture. With close to 200 M.A. graduates working in various disciplines around the world, Carleton has established an international reputation for excellence in this field. The M.Arch with a Diploma in Architectural Conservation will build on this foundation by augmenting our existing professional degree with a focus architectural conservation.

The Azrieli School of Architecture and Urbanism is poised to offer an exceptional program in the conservation of architectural heritage. Our location in the National Capital Region (which contains the great majority of the public sector heritage professionals, programmes and research resources in Canada), and affiliation with relevant federal agencies, ongoing collaborations with international heritage agencies, junior and senior faculty expertise, an established research program, and integration into the professional stream make this specialization unique in Ontario and in Canada.

**Master of Architectural Studies**

The overall structure of education in architecture at Carleton has two distinct pillars, the first being Professional and the second intended to focus on Research. The Professional education in architecture is what the Azrieli School of Architecture and Urbanism has excelled at since its inception. The Professional pillar is supported by the existing Bachelor of Architectural Studies and the Professional Master of Architecture program (M.Arch) that together produce an accredited degree in Architecture, certified by the Canadian Architectural Certification Board.

The research pillar is currently supported by faculty research and by our leading edge laboratories that are growing and contributing to critical areas of architecture such as conservation, visualization, representation and sustainability through community engaged teaching, research, critical practice and contracts. We wish to capitalize on this intellectual growth by developing a Master of Architectural Studies program with a focus on the culture of practice in architecture. This program is a priority for the school and its initiatives are generously supported by the Azrieli Endowment and Agreement.

The Master of Architectural Studies (M.A.S.) will be a research-based (and non-accredited) Master’s degree for students interested in pursuing in-depth architectural research. For students new to architecture, or without a professional degree in architecture, it will serve as a degree from which they could enter the PhD in Architecture should they wish to continue on the path of research.

There are many good reasons to establish a Master of Architectural Studies program in architecture at Carleton.

Carleton provides a unique environment for students of architecture to develop an expertise in the circular path between ‘making’ and ‘critical reflection’. Students will be involved in the study of protocols in the field of architecture through the technique of micro-histories. This is aimed at advancing the profession and practice of architecture.
Carleton provides a unique environment for students of architecture to develop an expertise in the circular path between ‘making’ and ‘critical reflection’. Students will be involved in the study of protocols in the field of architecture through established research methods. This is aimed at advancing the profession and practice of architecture at the graduate level.

**Doctoral Program in Architecture**

The doctoral program in Architecture at Carleton University, Azrieli School of Architecture & Urbanism will lead to the degree of PhD in Architecture. The school intends to offer one field entitled “The Culture of Practice”

The objective of the program is to prepare candidates for a career in teaching, research or the critical practice of architecture.

**Intellectual Objectives**

Carleton University’s PhD in Architecture is an advanced and internationally competitive program that addresses the culture of practice in architecture. Exceptionally talented and thoughtful architects are invited to undertake original, speculative, and experimental research within the well-established trinity of pathos, ethos, and logos that has come to distinguish the School of Architecture at Carleton. As an innovative comprehensive doctoral program that fuses research with critical practice in architecture, it will be the first of its kind in Canada. Subsequent graduates will be essential to reframe the discipline of architecture in the light of the future evolution of the profession and strengthen the pedagogical basis in Carleton and other educational institutions throughout Canada.

Carleton University’s proposed PhD program in Architecture will be one of only three doctoral programs worldwide following the engaged approach of projective factures interfaced with the time-honored approach of treatise writing. This is reinforced by the seminar and colloquium systems of knowledge, learning and dialogue.

**Pedagogical Objectives**

Unique in Canada, Carleton is one of a few universities worldwide that has available resources and a School of Architecture with the structure necessary to offer a doctoral program in architecture designed to provide students with the opportunity to conduct far-reaching and comprehensive supervised research in an area of their own selection and definition. The PhD in Architecture will draw on the Carleton School of Architecture’s established research strengths in architectural pedagogy and tactics of projective ‘constructions’ of architecture. In the School, the education of architects is based on the interaction of experimental making, theoretical investigation, and cultural insight. The doctoral program will follow the recognized scholarly tactic in adapting the demonstrated effectiveness of architectural investigation through project-based ‘constructions’, while simultaneously engaging the traditional methodologies of drawing and writing as documentations of speculative representation, critical thinking, and philosophical argument. Consequently, these doctoral investigations are made public through a scholarly, emotional, scientifically astute, and ethically verified covenant between an authored project and an authoritative text.

**Critical Intellectual Foci of the School**

Research and pedagogy at the School of Architecture are structured by four critical foci: genetic representation, deformation, alterity, and materiality. This research agenda draws on the School’s established strengths in the pedagogy and factura of architecture. At Carleton, architectural research is informed by the interaction of experimental making, theoretical investigation, and cultural insight. Our faculty members are recognized internationally for contributions to architectural history and theory, material and form studies, and the architectural and pedagogical applications of immersive and digital technologies.
1) **Craft:** The profession and discipline of architecture must address the relations between conceiving and making, not only from the industrial technological level, but also from an increasingly threatened culture of craft. The construction of buildings is a hybrid relationship between industrial processes and craft. Craft should here be understood as that skilled excellence in conceiving and making. The facilities at Carleton allow for these two facets of architectural production to be simultaneously explored by architecture students in their research. Existing facilities include the Carleton Solids and Light Tectonics laboratory in materiality as well as our unique materials workshops and established digital and material fabrication techniques that all allow for physical construction and testing. These facilities are unique among all schools of architecture in Canada.

2) **Advanced Digital Representation:** The extensive deep technology facilities available at the Carleton Immersive Media Studio (CIMS) will enable architecture students to investigate and re-examine urgent questions of digital and analogue representation in the practice of architecture.

3) **Community and Engagement:** Architecture without architects is proliferating. Architectural knowledge in the public realm is shrinking. The graduate research degrees advance the public understanding of architecture via our key placement in Ottawa, access to a variety of public institutions, public forums and interdisciplinary debates and exchanges. At Carleton, this will build upon our current interdisciplinary relationships with Canadian Studies, Neuroscience, Computer and Systems Engineering, Civil Engineering, Journalism, Industrial Design, Computer Science, English, Philosophy, Social Work, Geography and Law.

At the doctoral level the following are also critical foci:

4) **Languages:** The PhD will require students to acquire working knowledge to research and operate in a language in addition to English or French. This understanding of alternate cultures through language is enhanced by our location in multi-cultural Ottawa and with the many languages offered by faculties at Carleton.

5) **Public Policy:** Design is action at a distance. Construction reinforces excellence. The focus of our PhD will necessarily require integration with policy-makers and regulatory processes. Ottawa is the headquarters of the Royal Architecture Institute of Canada and the Parliament of Canada. The access to policy-makers in the profession and in the policy-making process is critical to the success of this PhD as it negotiates current issues in the profession of architecture.

**History of the School**

The School of Architecture at Carleton held its first classes in the fall of 1968, with twelve students and four faculty. The School offered a five-year undergraduate professional degree (B.Arch.) accredited by the Ontario Association of Architects.

The first degree was awarded in 1973. In the fall of 1972, the School moved into its present purpose-built facility, designed by Toronto architects Carmen Comeil and Jeff Stinson. The Architecture Building was planned for a total of 250 students. The building is highly regarded by the architectural community. It continues to provide a supportive, appropriate environment and to constructively influence the School's programs.

In 1993-94, a proposal for a Post-Professional M.Arch. degree program was approved by the University Senate and the Ontario Council of Graduate Studies. The program began accepting students in the fall of 1995 and graduated its first graduates in 1997.

In 1997, the School also developed a proposal to restructure its 5-year Bachelor of Architecture to a 4-year, pre-professional Bachelor of Architectural Studies followed by a 2-year professional Masters of Architecture degree. The undergraduate component was approved by the University Senate in 1997 and began accepting students in the fall of 1998. The Ontario Council of Graduate Studies approved the graduate component in 1998 as a variation on the previously approved post-professional M.Arch. The first class accepted into the professional M.Arch. entered in September of

In 2003 our M.Arch graduate program relocated to the Azrieli Pavilion (4th floor) made possible by a generous gift by David J. Azrieli. Since this time, it has allowed the M.Arch program to flourish as a vibrant intellectual centre for graduate studies in architecture. Currently our graduate program admits 45 M.Arch students into the first year of the program and approaches a hundred students in total.

The 4+2 program at Carleton is now in its twelfth year and has undergone only minor changes since its inception. The last and most significant shift is presently underway as the school implements 4 new Majors at the undergraduate level. Beginning in 2009, students have access to undergraduate BAS programs with Majors in Design, Conservation & Sustainability, Urbanism, and Philosophy & Criticism.