

Architecture

This section presents the requirements for programs in:

- M. Architectural Studies
- M. Architecture 2-year Stream
- M. Architecture 3-year Stream
- M. Architecture 2-year stream with Collaborative Specialization in Climate Change
- M. Architecture 3-year stream with Collaborative Specialization in Climate Change
- Ph.D. Architecture
- Graduate Diploma in Architectural Conservation

Program Requirements

M. Architectural Studies (6.0 credits)

Note: consult the School regarding registration sequence.

Requirements:

1. 3.5 credits in core courses:	3.5
ARCH 5003 [0.5] Design and Culture Workshop	
ARCH 5101 [1.0] Colloquium I	
ARCH 5301 [0.5] Seminar: Vitruvian Exercises I	
ARCH 5302 [0.5] Seminar II: Vitruvian Exercises II	
ARCN 5301 [0.5] Workshop: Daedalic Exercises I	
ARCN 5302 [0.5] Workshop: Daedalic Exercises II	
2. 0.5 credit in elective from courses at the 5000-level or above, approved by the Associate Director (Graduate Programs)	0.5
3. 2.0 credits in:	2.0
ARCT 5909 [2.0] M.A.S. Thesis	
Total Credits	6.0

M. Architecture 2-year Stream (8.0 credits)

Note: consult the School regarding registration sequence.

Requirements:

1. 2.0 credits in core:	2.0
ARCC 5100 [0.5] Advanced Building Systems	
ARCC 5200 [0.5] Professional Practice	
ARCH 5200 [0.5] Graduate Seminar 1: Introduction to Critical Thought in Architecture	
ARCH 5201 [0.5] Graduate Seminar 2: Contemporary Theoretical Perspectives in Architecture	
2. 1.0 credit in free electives at the 4000 level or higher	1.0
3. 3.0 credits in studio:	3.0
ARCS 5105 [1.5] Graduate Studio 1	
ARCS 5106 [1.5] Graduate Studio 2	
4. 2.0 credits in:	2.0
ARCN 5909 [2.0] Thesis - Directed Research Studio (DRS) (must be defended at an oral examination)	
Total Credits	8.0

M. Architecture 3-year Stream (15.0 credits)

Note: consult the School regarding registration sequence.

Requirements:

1. 5.5 credits in core:	5.5
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ARCC 5096 [0.5] Building Technology I	
ARCC 5097 [0.5] Building Technology II	
ARCC 5098 [0.5] Building Technology III	
ARCC 5099 [0.5] Building Technology IV	
ARCC 5100 [0.5] Advanced Building Systems	
ARCC 5200 [0.5] Professional Practice	
ARCH 5010 [0.5] History and Theory of Modern Architecture	
ARCH 5020 [0.5] Theories of Modernity	
ARCH 5200 [0.5] Graduate Seminar 1: Introduction to Critical Thought in Architecture	
ARCH 5201 [0.5] Graduate Seminar 2: Contemporary Theoretical Perspectives in Architecture	
ARCN 5005 [0.5] Theory and Practice of Architectural Representation	

2. 0.5 credit in approved elective at the 5000-level or higher, approved by the Associate Director (Graduate Programs) **0.5**

3. 7.0 credits in studio: **7.0**

ARCS 5030 [1.5] M.Arch 1 - Studio 1	
ARCS 5032 [1.5] M.Arch. 1 - Studio II	
ARCS 5033 [1.0] M.Arch. 1 - Studio III	
ARCS 5105 [1.5] Graduate Studio 1	
ARCS 5106 [1.5] Graduate Studio 2	

4. 2.0 credits in: **2.0**

ARCN 5909 [2.0] Thesis - Directed Research Studio (DRS) (must be defended at an oral examination)	
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Total Credits **15.0**

M. Architecture 2-year stream with Collaborative Specialization in Climate Change (8.0 credits)

Note: consult the School regarding registration sequence.

Requirements:

1. 1.0 credit in:	1.0
CLIM 5000 [1.0] Climate Collaboration	
2. 0.0 credit in:	
CLIM 5800 [0.0] Climate Seminar Series	
3. 2.0 credits in core:	2.0
ARCC 5100 [0.5] Advanced Building Systems	
ARCC 5200 [0.5] Professional Practice	
ARCH 5200 [0.5] Graduate Seminar 1: Introduction to Critical Thought in Architecture	
ARCH 5201 [0.5] Graduate Seminar 2: Contemporary Theoretical Perspectives in Architecture	
4. 3.0 credits in studio:	3.0
ARCS 5105 [1.5] Graduate Studio 1	
ARCS 5106 [1.5] Graduate Studio 2	
5. 2.0 credits in:	2.0
ARCN 5909 [2.0] Thesis - Directed Research Studio (DRS) (in the area of climate change, must be defended at an oral examination)	

Total Credits **8.0**

M. Architecture 3-year stream with Collaborative Specialization in Climate Change (15.5 credits)

Note: consult the School regarding registration sequence.

Requirements:		
1. 1.0 credit in:		1.0
CLIM 5000 [1.0]	Climate Collaboration	
2. 0.0 credit in:		
CLIM 5800 [0.0]	Climate Seminar Series	
3. 5.5 credits in core:		5.5
ARCC 5096 [0.5]	Building Technology I	
ARCC 5097 [0.5]	Building Technology II	
ARCC 5098 [0.5]	Building Technology III	
ARCC 5099 [0.5]	Building Technology IV	
ARCC 5100 [0.5]	Advanced Building Systems	
ARCC 5200 [0.5]	Professional Practice	
ARCH 5010 [0.5]	History and Theory of Modern Architecture	
ARCH 5020 [0.5]	Theories of Modernity	
ARCH 5200 [0.5]	Graduate Seminar 1: Introduction to Critical Thought in Architecture	
ARCH 5201 [0.5]	Graduate Seminar 2: Contemporary Theoretical Perspectives in Architecture	
ARCN 5005 [0.5]	Theory and Practice of Architectural Representation	
4. 7.0 credits in studio:		7.0
ARCS 5030 [1.5]	M.Arch 1 - Studio 1	
ARCS 5032 [1.5]	M.Arch. 1 - Studio II	
ARCS 5033 [1.0]	M.Arch. 1 - Studio III	
ARCS 5105 [1.5]	Graduate Studio 1	
ARCS 5106 [1.5]	Graduate Studio 2	
5. 2.0 credits in:		2.0
ARCN 5909 [2.0]	Thesis - Directed Research Studio (DRS) (must be defended at an oral examination)	
Total Credits		15.5

Ph.D. Architecture (6.0 credits)

Note: consult the School regarding registration sequence.

Requirements:		
1. 1.0 credit in core workshop courses		1.0
ARCN 6001 [0.5]	Workshop: Daedalic Exercises I	
ARCN 6002 [0.5]	Workshop: Daedalic Exercises II	
2. 1.0 credit in core seminar courses		1.0
ARCH 6001 [0.5]	Seminar: Vitruvian Exercises I	
ARCH 6002 [0.5]	Seminar II: Vitruvian Exercises II	
3. 2.0 credits in:		2.0
ARCH 6101 [1.0]	Colloquium I	
4. 1.0 credit in:		1.0
ARCH 6907 [1.0]	Ph.D. Comprehensive Examination	
5. 1.0 credit in:		1.0
ARCH 6908 [1.0]	Ph.D. Proposal Examination	
6. 0.0 credit in:		
ARCH 6909 [0.0]	Ph.D. Dissertation (oral defence)	
Total Credits		6.0

Graduate Diploma in Architectural Conservation (4.0 credits)

Note: consult the School regarding registration sequence.

Requirements:		
1. 1.0 credit in:		1.0
CDNS 5401 [0.5]	Heritage Conservation: History, Principles, and Concepts	
CDNS 5402 [0.5]	Heritage Conservation: Theory in Practice	
2. 1.5 credits in:		1.5
ARCH 4002 [0.5]	Canadian Architecture	
ARCH 4200 [0.5]	Architectural Conservation Philosophy and Ethics	
ARCH 5402 [0.5]	Evaluation of Heritage Properties	
3. 1.0 credit in:		1.0
ARCC 5401 [0.5]	Workshop: Technical Studies in Heritage Conservation	
ARCU 5402 [0.5]	Workshop: Urban Studies in Heritage Conservation	
4. 0.5 credit in:		0.5
ARCN 5100 [0.5]	Representation and Documentation in Architectural Conservation	
Total Credits		4.0

Regulations

See the General Regulations section of this Calendar.

M. Architecture

Architecture permits the C+ option in the 15.5-credit M.Arch. 1 curriculum only. (See Section 11.2 of the General Regulations).

Admission Requirements

Master of Architecture (M.Arch.)

Two-year M.Arch. (8.0 credits)

A four-year honours undergraduate degree or its equivalent in architecture, with significant studio experience in architectural design, and a minimum overall standing of B-.

Three-year M.Arch. (15.5 credits)

A four-year honours undergraduate degree from diverse backgrounds with a minimum overall B+ standing.

For the three-year M.Arch., all students will apply for the 15.5-credit program. Most will be admitted to the fall term of Year 1. Some applicants possessing a B.A.S. Conservation and Sustainability or an equivalent degree in an environmental design field may be eligible for second entry, to be determined by the Azrieli School of Architecture and Urbanism and the Faculty of Graduate and Postdoctoral Affairs. Students admitted into second entry will be accepted into the winter term of Year 1 and will complete 12.0 credits.

All applicants whose first language is not English must demonstrate proficiency in the English language. See Section 3.6 of the General Regulations section of this calendar for details.

For more information, please visit <https://carleton.ca/architecture/programs/>

M. Architectural Studies (M.A.S.)

The Master of Architectural Studies is a non-professional degree for students interested in pursuing in-depth architectural research.

The minimum requirement for admission to the M.A.S. is a four-year honours undergraduate degree in architecture or equivalent, with a minimum overall standing of B-.

All applicants whose first language is not English must demonstrate proficiency in the English language. See Section 3.6 of the General Regulations section of this calendar for details.

For more information visit <https://carleton.ca/architecture/programs/>

Ph.D. Architecture

The normal requirement for admission to the doctoral program in architecture is a master's degree (or equivalent) in architecture or a related field with a minimum overall standing of A-.

All applicants whose first language is not English must demonstrate proficiency in the English language. See Section 3.6 of the General Regulations section of this calendar for details.

Graduate Diploma in Architectural Conservation

There are two points of entry into the program:

Direct Entry

- The normal requirement is a bachelor degree with a minimum average of B+. The program can be taken part-time or full-time.

Admission from the M.Arch. or M.A.S.

- Students may apply to the Graduate Diploma in Architectural Conservation during the first year of study in the Master of Architecture professional program or the Master of Architectural Studies program.

All applicants whose first language is not English must demonstrate proficiency in the English language. See Section 3.6 of the General Regulations section of this calendar for details.

For more information visit <https://carleton.ca/architecture/programs/>

Architecture-MAS (ARCT) Courses

ARCT 5909 [2.0 credits]

M.A.S. Thesis

Scholarly written thesis supported by methods of two and three-dimensional representation. Research undertaken by the student is expected to engage a topic in the culture of practice in Architecture. Proposals must be approved by the graduate committee of the Azrieli School of Architecture and Urbanism.(ARCU). Includes: Experiential Learning Activity

Architecture - Studio (ARCS) Courses

ARCS 5030 [1.5 credit]

M.Arch 1 - Studio 1

Sensory components of architecture: use, effect, and symbolic potential. Light, lighting, sound, sensation of heat and cold, and related phenomena studied in modes of building proposals. Social considerations of architecture. Conventions of architectural drawing. Computer modeling as a medium of architectural analysis, documentation, and presentation.

ARCS 5032 [1.5 credit]

M.Arch. 1 - Studio II

Building materials and practices within the context of increasingly complex building programs. Social context of architecture in relation to material expression. Modeling is stressed.

Prerequisite(s): ARCS 5030.

ARCS 5033 [1.0 credit]

M.Arch. 1 - Studio III

A comprehensive studio dealing with issues of program and site as the culturally defining aspects of architectural practice within complex urban and social situations, using difficult sites and hybrid programs. Projects brought to a high degree of technical, formal, and graphic resolution.

Prerequisite(s): ARCS 5032.

ARCS 5105 [1.5 credit]

Graduate Studio 1

An architectural investigation within a contemporary urban setting, usually dealing with central-city sites and complex programs. Projects address the question of urban architecture both from practical and theoretical perspectives. Architecturally relevant building technology and systems will be introduced in the Studio as required. Includes: Experiential Learning Activity

ARCS 5106 [1.5 credit]

Graduate Studio 2

Architectural design interventions within culturally-significant contexts. Investigate and integrate contextual and theoretical research into a critical position on architecture and its relationship to a wider cultural context. Develop this position using creative and critical methods into a design proposition at architectural, landscape, and/or urban scales.

Includes: Experiential Learning Activity

Prerequisite(s): ARCS 5105.

ARCS 5909 [2.0 credits]

Thesis - Independent Study

Student-initiated design investigation, developed with a thesis supervisor, supported by text and appropriate methods of two and three-dimensional representation. Proposals must be approved by the Graduate Committee of the Azrieli School of Architecture and Urbanism. Includes: Experiential Learning Activity

Architecture - Technical (ARCC) Courses

ARCC 5000 [0.5 credit]

Directed Studies in Architecture and Technology

Reading and research tutorials.

Prerequisite(s): permission of the School.

ARCC 5096 [0.5 credit]

Building Technology I

General introduction to materials and methods of construction with particular focus on wood and timber frame construction. Site conditions, foundations, structure and envelope in terms of their response to local climate: sun (light and heat), wind, moisture.

Includes: Experiential Learning Activity

ARCC 5097 [0.5 credit]

Building Technology II

Technical issues involved in architectural design of buildings from ancient times to the present. Technological innovation and materials related to structural developments, and the organization and design of structures. Basic concepts of equilibrium, and mechanics of materials. Final projects developed in conjunction with design studio.

Includes: Experiential Learning Activity

ARCC 5098 [0.5 credit]

Building Technology III

Wood frame, post and beam, steel and concrete systems and construction techniques. Structural systems and building envelope principles and practice are explored in conjunction with mechanical and electrical systems in small buildings. Final projects developed in conjunction with design studio.

Includes: Experiential Learning Activity

ARCC 5099 [0.5 credit]

Building Technology IV

Medium scale steel, concrete, and wood frame buildings as case studies to explore approaches to building science principles, building envelope design, advanced construction methods and materials, acoustics and sound control, and fire protection, with a focus on sustainable design strategies and environmental impact.

Includes: Experiential Learning Activity

ARCC 5100 [0.5 credit]

Advanced Building Systems

Introduction to advanced design in building technology and systems integration. Leading edge building materials, technologies and philosophies will be explored through intensive case study research and analysis, comparing, and critically evaluating, traditional methods with current computer modeling and analysis techniques.

Includes: Experiential Learning Activity

ARCC 5200 [0.5 credit]

Professional Practice

The practice of architecture. Professional organization and conduct, the architect's services, business law, office organization and management, contract documents, building codes, contract management, cost control, accounting and site supervision. Guest speakers and case studies.

Includes: Experiential Learning Activity

Precludes additional credit for ARCU 4200.

ARCC 5401 [0.5 credit]

Workshop: Technical Studies in Heritage Conservation

Materials used in conservation of built heritage; conservation philosophy used to preserve those materials. Material, technical, project management, construction sequencing, standards, and code dimensions of Heritage Conservation.

Includes: Experiential Learning Activity

Prerequisite(s): permission of the School.

ARCC 5500 [0.5 credit]

Advanced Design Economics

Principles of building economics. Determinants and prediction of building costs. Uncertainty and investment economics. Creative cost control for buildings during schematic design, design development, construction document preparation and construction. Economic evaluation during all phases of design process; emphasis on sustainable strategies.

Includes: Experiential Learning Activity

ARCC 5909 [2.0 credits]

M.Arch. Post-Professional Thesis (Design and Technology)

Basic or applied research in architectural, industrial, and digital design. Areas include interactive education/training, product/interface design, programming/scripting, culture/technology, or research as defined by the student. Final thesis documentation must satisfy the requirements established by the Faculty of Graduate Studies.

Includes: Experiential Learning Activity

Prerequisite(s): Proposals must be approved by the Graduate Committee of the Azrieli School of Architecture and Urbanism.

Architecture - Techniques (ARCN) Courses

ARCN 5000 [0.5 credit]

Directed Studies in Computer-Aided Design

Reading and research tutorials.

Includes: Experiential Learning Activity

Prerequisite(s): permission of the School.

ARCN 5001 [0.5 credit]

Directed Studies in Architecture

Reading and research tutorials.

Includes: Experiential Learning Activity

Prerequisite(s): permission of the School.

ARCN 5005 [0.5 credit]**Theory and Practice of Architectural Representation**

Free-hand drawing as a way of observing and understanding the world. Various media and techniques introduced through a wide range of studio and outdoor exercises.

Includes: Experiential Learning Activity

ARCN 5100 [0.5 credit]**Representation and Documentation in Architectural Conservation**

An in-depth study of the conventions and history of heritage recording including traditional field survey, photogrammetry, laser scanning technologies, and hybrid representations.

Workshop, six hours a week (including field trips and on-site work).

ARCN 5301 [0.5 credit]**Workshop: Daedalic Exercises I**

Experimental mediation, materiality and making.

Includes: Experiential Learning Activity

ARCN 5302 [0.5 credit]**Workshop: Daedalic Exercises II**

Innovative mediation, materiality and making.

Includes: Experiential Learning Activity

ARCN 5909 [2.0 credits]**Thesis - Directed Research Studio (DRS)**

An intensive research-based design project. The unit is initiated and guided by a faculty member engaged in organized research. Proposals must be approved by the Graduate Committee of the Azrieli School of Architecture and Urbanism.

Includes: Experiential Learning Activity

ARCN 6001 [0.5 credit]**Workshop: Daedalic Exercises I**

Experimental mediation, materiality and making. This course is required of all first year doctoral students in architecture.

Includes: Experiential Learning Activity

ARCN 6002 [0.5 credit]**Workshop: Daedalic Exercises II**

Experimental mediation, materiality and making. This course is required of all first year doctoral students in architecture.

Includes: Experiential Learning Activity

ARCN 6901 [0.5 credit]**Placement in Architecture**

An opportunity to earn academic credit by engaging in research activities under the supervision of a professional architect or researcher in architectural, government, non-governmental or other professional settings. Placement research must be related to the preparation of the doctoral research. Design Studios/Design Thesis/Research (ARCS).

Includes: Experiential Learning Activity

Architecture - Theory/History (ARCH) Courses**ARCH 5000 [0.5 credit]****Directed Studies in History and Theory of Architecture**

Reading and research tutorials.

Prerequisite(s): permission of the School.

ARCH 5001 [0.5 credit]**Topics in Architecture**

An introduction to the intellectual frameworks connecting design and culture as manifest in theories of culture and architecture. The seminar builds on previous undergraduate studies, and is not an introduction to these fields. The field of inquiry is both historical and contemporary.

ARCH 5002 [0.5 credit]**Architecture Seminar II**

A continuation of ARCH 5001, this seminar follows the same general description, but concentrates more on architectural design, on the contemporary condition, and on the ways of thinking that characterize embodiment of cultural content in architecture and other artifacts.

Prerequisite(s): ARCH 5001.

ARCH 5003 [0.5 credit]**Design and Culture Workshop**

The prime objective of the workshop is to investigate cultural issues in architectural design. The workshop operates as a directed study with specific content, objectives, and scheduling arranged between student and academic advisor.

Includes: Experiential Learning Activity

ARCH 5010 [0.5 credit]**History and Theory of Modern Architecture**

Architectural and urban ideals of modernism with emphasis upon the development of the avant-garde in the early twentieth century. The phenomenon of modern architecture within the broader framework of the development of western thought.

ARCH 5020 [0.5 credit]**Theories of Modernity**

Theories of modernity (including recent developments in cultural theory, theorizing from the Global South and more, recent technological and socio-political transformations) and how they help shape contemporary architectural discourse.

ARCH 5100 [0.5 credit]**Directed Studies in Architecture and Society**

Reading and research tutorials.

Prerequisite(s): permission of the School.

ARCH 5101 [1.0 credit]**Colloquium I**

This seminar brings together graduate students with architectural faculty to present their work-in-progress. It focuses on an immersion in conventions of theoretical and methodological approaches to advanced architectural research, including research ethics, proposal writing and research funding.

ARCH 5200 [0.5 credit]**Graduate Seminar 1: Introduction to Critical Thought in Architecture**

Critical theories and research approaches relevant to the field of architecture. Identification of issues through a coordinated series of lectures and readings. Development of analytical and interpretative skills through seminar discussions and writing culminating in a scholarly position paper by the student.

ARCH 5201 [0.5 credit]**Graduate Seminar 2: Contemporary Theoretical Perspectives in Architecture**

Lectures, readings, and case studies on contemporary issues in architecture and allied fields of study. Critical analysis of trends and possibilities set against traditional modes of architectural thought and practice. This course serves as a forum for a preliminary articulation of the thesis proposal.

Includes: Experiential Learning Activity

Prerequisite(s): ARCH 5200.

ARCH 5301 [0.5 credit]**Seminar: Vitruvian Exercises I**

Investigation of the cunning and graphic intelligence of architects: i.e. architectural modes of research.

ARCH 5302 [0.5 credit]**Seminar II: Vitruvian Exercises II**

Seminar II builds upon the fall term with a focus on the study of the fabric of architectural theory stretched within the marble loom of construction. This course is required of all first year M.A.S. students.

ARCH 5402 [0.5 credit]**Evaluation of Heritage Properties**

The cultural, political, economic and legal factors that shape our definition of heritage architecture. Processes for and implications of heritage designation, cultural value and costs associated with restoration and ongoing preservation. (Theory/History Elective).

Includes: Experiential Learning Activity

Lectures, three hours a week.

ARCH 6001 [0.5 credit]**Seminar: Vitruvian Exercises I**

Investigation of the cunning and graphic intelligence of architects: i.e. architectural modes of research. This course is required of all first year doctoral students in architecture.

ARCH 6002 [0.5 credit]**Seminar II: Vitruvian Exercises II**

Seminar II builds upon the fall term with a focus on the study of the fabric of architectural theory stretched within the marble loom of construction. This course is required of all first year doctoral students in architecture.

ARCH 6101 [1.0 credit]**Colloquium I**

This seminar brings together doctoral students with architectural faculty to present their work-in-progress. Immersion in conventions of theoretical and methodological approaches to advanced architectural research, including research ethics, proposal writing and research funding. This course is required of all first year doctoral students in architecture.

Includes: Experiential Learning Activity

ARCH 6102 [1.0 credit]**Colloquium II**

This seminar continues to bring together doctoral students with architectural faculty and guest lecturers to present their work-in-progress. This course is required of all students enrolled in the Ph.D. program from the second year through until completion of the dissertation.

Includes: Experiential Learning Activity

ARCH 6907 [1.0 credit]**Ph.D. Comprehensive Examination**

Students must demonstrate to their thesis advisory committees a sufficiently broad background in the theoretical and topical area literatures and constructions relevant to their individual projects.

ARCH 6908 [1.0 credit]**Ph.D. Proposal Examination**

Students must demonstrate to thesis advisory committees their ability to link theory to a work or practice of architecture. This examination requires the preparation of a drawing or a model, to then be discussed within a theoretical framework during the oral part of the exam.

ARCH 6909 [0.0 credit]**Ph.D. Dissertation**

The dissertation will be comprised of two critical modes of investigation of equal importance: a speculative project and a research text. The speculative project is realized using specific traditional and non-traditional media as deemed appropriate.

Includes: Experiential Learning Activity

Architecture - Urban (ARCU) Courses**ARCU 5000 [0.5 credit]****Directed Studies in Architecture and the City**

Reading and research tutorials.

Includes: Experiential Learning Activity

ARCU 5402 [0.5 credit]**Workshop: Urban Studies in Heritage Conservation**

Includes: Experiential Learning Activity

Prerequisite(s): permission of the School.