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 Accessibility**
- **M. Architecture 3-year stream with Collaborative Specialization in Accessibility**
- **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**
- **Ph.D. Architecture with Collaborative Specialization in African Studies**
- **Graduate Diploma in Architectural Conservation**

Program Requirements

M. Architectural Studies (6.0 credits)

Note: Please consult the School regarding registration sequence.

Requirements:

1. 2.5 credits in core courses:		**2.5**
ARCH 5003 [0.5]	Design and Culture Workshop	
ARCH 5103 [0.5]	Colloquium I: Architectural Research Methods	
ARCH 5104 [0.5]	Colloquium II: Architectural Research Presentation	
ARCH 5301 [0.5]	Texts, Precedents and Writings in Architecture I	
ARCN 5301 [0.5]	Workshop: Design as Research I	
2. 1.5 credits in elective courses at the 5000-level or above.		**1.5**
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: Please consult the School regarding registration sequence.

Requirements:

1. 2.5 credits in core:		**2.5**
ARCH 5224 [0.5]	Advanced Building Systems	
ARCH 5333 [0.5]	Selected Topics in Architectural Theory	
ARCH 5444 [0.5]	Comprehensive Studio Workshop	
ARCH 5551 [0.5]	Professional Practice	
ARCH 5552 [0.5]	Design Thesis Preparation	
2. 2.0 credits in studio:		**2.0**
ARCH 5114 [1.0]	Comprehensive Studio: Climate + Integration	
ARCH 5115 [1.0]	Graduate Studio Abroad: Agency + Justice	
3. 2.0 credits in:		**2.0**
ARCH 5555 [2.0]	Architecture Thesis	
4. 1.5 credits in free electives at the 4000-level or higher		**1.5**
Total Credits		**8.0**

M. Architecture 3-year Stream (15.0 credits)

Note: Please consult the School regarding registration sequence.

Requirements:

1. 6.0 credits in core:		**6.0**
ARCH 5221 [0.5]	Ecological & Regulatory Systems	
ARCH 5222 [0.5]	Structures	
ARCH 5223 [1.0]	Assemblies and Environmental Systems	
ARCH 5224 [0.5]	Advanced Building Systems	
ARCH 5331 [0.5]	Modernism and Global Urbanism	
ARCH 5332 [0.5]	Contemporary Theories in Architecture	
ARCH 5333 [0.5]	Selected Topics in Architectural Theory	
ARCH 5441 [0.5]	Studio 1: Workshop	
ARCH 5444 [0.5]	Comprehensive Studio Workshop	
ARCH 5551 [0.5]	Professional Practice	
ARCH 5552 [0.5]	Design Thesis Preparation	
2. 5.0 credits in studio:		**5.0**
ARCH 5111 [1.0]	Studio I: Land & Environment	
ARCH 5112 [1.0]	Studio II: Materiality + Adaptation	
ARCH 5113 [1.0]	Studio III: Urbanism + Society	
ARCH 5114 [1.0]	Comprehensive Studio: Climate + Integration	
ARCH 5115 [1.0]	Graduate Studio Abroad: Agency + Justice	
3. 2.0 credits in:		**2.0**
ARCH 5555 [2.0]	Architecture Thesis	
4. 2.0 credits in free electives at the 4000-level or higher		**2.0**
Total Credits		**15.0**

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

Note: Please consult the School regarding registration sequence.

Requirements:

1. 1.0 credits in:		**1.0**
ACCS 5001 [0.5]	Critical Disability Studies	
ACCS 5002 [0.5]	Accessibility and Inclusive Design Seminar	
2. 2.5 credits in core:		**2.5**
ARCH 5224 [0.5]	Advanced Building Systems	
ARCH 5333 [0.5]	Selected Topics in Architectural Theory	
ARCH 5444 [0.5]	Comprehensive Studio Workshop	
ARCH 5551 [0.5]	Professional Practice	
ARCH 5552 [0.5]	Design Thesis Preparation	
3. 2.0 credits in studio:		**2.0**
ARCH 5114 [1.0]	Comprehensive Studio: Climate + Integration	

ARCH 5115 [1.0]	Graduate Studio Abroad: Agency + Justice	
4. 2.0 credits in:		**2.0**
ARCH 5555 [2.0]	Architecture Thesis (in the Specialization)	
5. 0.5 credits in free electives at the 4000-level or higher		**0.5**
Total credits		**8.0**

M. Architecture 3-year stream with Collaborative Specialization in Accessibility (15.0 credits)

Note: Please consult the School regarding registration sequence.

Requirements:

1. 1.0 credit in:		**1.0**
ACCS 5001 [0.5]	Critical Disability Studies	
ACCS 5002 [0.5]	Accessibility and Inclusive Design Seminar	
2. 6.0 credits in core:		**6.0**
ARCH 5221 [0.5]	Ecological & Regulatory Systems	
ARCH 5222 [0.5]	Structures	
ARCH 5223 [1.0]	Assemblies and Environmental Systems	
ARCH 5224 [0.5]	Advanced Building Systems	
ARCH 5331 [0.5]	Modernism and Global Urbanism	
ARCH 5332 [0.5]	Contemporary Theories in Architecture	
ARCH 5333 [0.5]	Selected Topics in Architectural Theory	
ARCH 5441 [0.5]	Studio 1: Workshop	
ARCH 5444 [0.5]	Comprehensive Studio Workshop	
ARCH 5551 [0.5]	Professional Practice	
ARCH 5552 [0.5]	Design Thesis Preparation	
3. 5.0 credits in studio:		**5.0**
ARCH 5111 [1.0]	Studio I: Land & Environment	
ARCH 5112 [1.0]	Studio II: Materiality + Adaptation	
ARCH 5113 [1.0]	Studio III: Urbanism + Society	
ARCH 5114 [1.0]	Comprehensive Studio: Climate + Integration	
ARCH 5115 [1.0]	Graduate Studio Abroad: Agency + Justice	
4. 2.0 credits in:		**2.0**
ARCH 5555 [2.0]	Architecture Thesis (in the Specialization)	
5. 1.0 credits in free electives at the 4000-level or higher		**1.0**
Total Credits		**15.0**

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

Note: Please 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. 2.5 credits in core:		**2.5**
ARCH 5224 [0.5]	Advanced Building Systems	
ARCH 5333 [0.5]	Selected Topics in Architectural Theory	
ARCH 5444 [0.5]	Comprehensive Studio Workshop	
ARCH 5551 [0.5]	Professional Practice	
ARCH 5552 [0.5]	Design Thesis Preparation	
4. 2.0 credits in studio:		**2.0**
ARCH 5114 [1.0]	Comprehensive Studio: Climate + Integration	
ARCH 5115 [1.0]	Graduate Studio Abroad: Agency + Justice	
5. 2.0 credits in:		**2.0**
ARCH 5555 [2.0]	Architecture Thesis	
Thesis topic must be related to climate change.		
6. 0.5 credits in free electives at the 4000-level or higher		**0.5**
Total Credits		**8.0**

M. Architecture 3-year stream with Collaborative Specialization in Climate Change (15.0 credits)

Note: Please 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. 6.0 credits in core:		**6.0**
ARCH 5221 [0.5]	Ecological & Regulatory Systems	
ARCH 5222 [0.5]	Structures	
ARCH 5223 [1.0]	Assemblies and Environmental Systems	
ARCH 5224 [0.5]	Advanced Building Systems	
ARCH 5331 [0.5]	Modernism and Global Urbanism	
ARCH 5332 [0.5]	Contemporary Theories in Architecture	
ARCH 5333 [0.5]	Selected Topics in Architectural Theory	
ARCH 5441 [0.5]	Studio 1: Workshop	
ARCH 5444 [0.5]	Comprehensive Studio Workshop	
ARCH 5551 [0.5]	Professional Practice	
ARCH 5552 [0.5]	Design Thesis Preparation	
4. 5.0 credits in studio:		**5.0**
ARCH 5111 [1.0]	Studio I: Land & Environment	
ARCH 5112 [1.0]	Studio II: Materiality + Adaptation	
ARCH 5113 [1.0]	Studio III: Urbanism + Society	
ARCH 5114 [1.0]	Comprehensive Studio: Climate + Integration	
ARCH 5115 [1.0]	Graduate Studio Abroad: Agency + Justice	
5. 2.0 credits in:		**2.0**
ARCH 5555 [2.0]	Architecture Thesis (in the Specialization)	
6. 1.0 credits in free electives at the 4000-level or higher		**1.0**
Total Credits		**15.0**

Ph.D. Architecture (6.0 credits)

Note: Please consult the School regarding registration sequence.

Requirements:

1. **2.5 credits in** core courses		2.5
ARCN 6001 [0.5]	Workshop: Design as Research I	
ARCH 6001 [0.5]	Texts, Precedents and Writings in Architecture I	
ARCH 6103 [0.5]	Colloquium I: Architectural Research Methods	
ARCH 6104 [0.5]	Colloquium II: Architectural Research Presentation	
ARCH 6105 [0.5]	Colloquium III: Architectural Research Dissemination	
2. **2.0 credits in:**		2.0
ARCH 6907 [1.0]	Ph.D. Comprehensive Examination	
ARCH 6908 [1.0]	Ph.D. Proposal Examination	
3. **0.0 credits in:**		
ARCH 6909 [0.0]	Ph.D. Dissertation (Oral Defence)	
4. **1.5 credits in** free electives		1.5
Students can take any course in any discipline at the 5000-level or above to fulfill their free electives. ARCH 6002 and ARCN 6002 are recommended.		
Total Credits		**6.0**

Ph.D. Architecture
with Collaborative Specialization in African Studies (6.0 credits)

Note: Please consult the School regarding registration sequence.

Requirements:

1. **2.5 credits in** core courses		2.5
ARCN 6001 [0.5]	Workshop: Design as Research I	
ARCH 6001 [0.5]	Texts, Precedents and Writings in Architecture I	
ARCH 6103 [0.5]	Colloquium I: Architectural Research Methods	
ARCH 6104 [0.5]	Colloquium II: Architectural Research Presentation	
ARCH 6105 [0.5]	Colloquium III: Architectural Research Dissemination	
2. **2.0 credits in:**		2.0
ARCH 6907 [1.0]	Ph.D. Comprehensive Examination	
ARCH 6908 [1.0]	Ph.D. Proposal Examination	
3. **0.0 credit in:**		
ARCH 6909 [0.0]	Ph.D. Dissertation (Includes oral defence. Thesis must be related to African Studies and will be supervised by a faculty member with expertise in Africa and Africa related research in the primary unit. It may also be co-supervised by an IAS faculty member.)	
4. **1.0 credits in:**		1.0
AFRI 5000 [0.5]	African Studies as a Discipline: Historical and Current Perspectives	
AFRI 6000 [0.5]	Thinking from Africa: Historical Perspectives, Contemporary Dimensions	

5. **0.0 credit in:**		0.0
AFRI 5800 [0.0]	Scholarly Preparation in African Studies	
6. **0.5 credit in** free elective at the 5000-level in any discipline.		0.5
Total Credits		**6.0**

Graduate Diploma in Architectural Conservation (4.0 credits)

Note: Please consult the School regarding registration sequence.

Requirements:

1. **1.5 credits in:**		1.5
CDNS 5401 [0.5]	Heritage Conservation: History, Principles, and Concepts	
CDNS 5402 [0.5]	Heritage Conservation: Theory in Practice	
CDNS 5403 [0.5]	Heritage Conservation and Sustainability	
2. **1.0 credits in:**		1.0
ARCH 4002 [0.5]	Canadian Architecture	
ARCH 4200 [0.5]	Architectural Conservation Philosophy and Ethics	
3. **1.5 credits in:**		1.5
ARCC 5401 [0.5]	Workshop: Technical Studies in Heritage Conservation	
ARCH 5402 [0.5]	Evaluation of Existing Properties	
ARCH 5404 [0.5]	Advanced Building Assessment	
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 Graduate Studies. 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
Precludes additional credit for ARCH 2221.

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
Precludes additional credit for ARCH 2222.

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: Design as Research I
Exploration of architectural modes of research through making such as experimental mediation, prototyping, material exploration, digital crafting, drawing, modelling, or mapping.
Includes: Experiential Learning Activity
Also offered at the undergraduate level, with different requirements, as ARCN 6001, for which additional credit is precluded.

ARCN 5302 [0.5 credit]
Workshop: Design as Research II
Exploration of architectural modes of research through making such as experimental mediation, prototyping, material exploration, digital crafting, drawing, modelling, or mapping.
Includes: Experiential Learning Activity
Also offered, with different requirements, as ARCN 6002, for which additional credit is precluded.

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: Design as Research I
Exploration of architectural modes of research through making such as experimental mediation, prototyping, material exploration, digital crafting, drawing, modelling, or mapping.
Includes: Experiential Learning Activity
Also offered at the undergraduate level, with different requirements, as ARCN 5301, for which additional credit is precluded.

ARCN 6002 [0.5 credit]
Workshop: Design as Research II
Exploration of architectural modes of research through making such as experimental mediation, prototyping, material exploration, digital crafting, drawing, modelling, or mapping. This course is offered as an elective to graduate students in architecture.
Includes: Experiential Learning Activity
Also offered at the undergraduate level, with different requirements, as ARCN 5302, for which additional credit is precluded.

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.
Precludes additional credit for ARCH 4332.

ARCH 5100 [0.5 credit]
Directed Studies in Architecture and Society
Reading and research tutorials.
Prerequisite(s): permission of the School.

ARCH 5103 [0.5 credit]
Colloquium I: Architectural Research Methods
This seminar brings together graduate students with architectural faculty to discuss in-progress work and ideas. Immersion in conventions of theoretical and methodological approaches to advanced architectural research, including research ethics, proposal writing and research funding.
Includes: Experiential Learning Activity
Precludes additional credit for ARCH 5101 (no longer offered).
Also offered at the undergraduate level, with different requirements, as ARCH 6103, for which additional credit is precluded.

ARCH 5104 [0.5 credit]
Colloquium II: Architectural Research Presentation
This seminar brings together graduate students with architectural faculty to discuss in-progress work and ideas. Immersion in conventions of theoretical and methodological approaches to advanced architectural research, including research ethics, proposal writing and research funding.
Includes: Experiential Learning Activity
Precludes additional credit for ARCH 5101 (no longer offered).
Also offered at the undergraduate level, with different requirements, as ARCH 6104, for which additional credit is precluded.

ARCH 5111 [1.0 credit]
Studio I: Land & Environment
Design studio exploring relationship of buildings to land and environment in a peri-urban or rural context. Students gain skills in context analysis, siting, fieldwork, and design development with particular focus on spatial sequencing and tectonic development of a small-scale building with community-focused program.
Includes: Experiential Learning Activity
Precludes additional credit for ARCS 5030.

ARCH 5112 [1.0 credit]
Studio II: Materiality + Adaptation
Design studio exploring adaptive reuse of a medium-sized cultural building in an urban context. Students gain skills in program analysis, detailing and material assembly, and consider environmental impacts of material selection.
Includes: Experiential Learning Activity
Precludes additional credit for ARCS 5032.
Prerequisite(s): ARCS 5030 or ARCH 5111.

ARCH 5113 [1.0 credit]
Studio III: Urbanism + Society
Design studio applying urban design principles to the design of a medium scale building and its adjacent public realm. Students analyze historical and current urban development patterns and regulations to design a housing or mixed-use project with social significance in the public domain.
Includes: Experiential Learning Activity
Precludes additional credit for ARCS 5033.
Prerequisite(s): ARCH 5112 or ARCS 5032.

ARCH 5114 [1.0 credit]
Comprehensive Studio: Climate + Integration
Design studio exploring comprehensive design of a mid-size low-carbon building to a high degree of resolution with regards to structural and environmental systems integration and envelope design. Includes review of building energy systems and considers environmental stewardship across scales in light of climate change.
Includes: Experiential Learning Activity
Precludes additional credit for ARCS 5105.

ARCH 5115 [1.0 credit]
Graduate Studio Abroad: Agency + Justice
Design studio exploring diverse cultural contexts through integrated travel and visiting guest critics. Students develop a critical position on architecture and its agency in addressing social and environmental injustices in the wider world through design of a landscape, urban, or building-scale intervention.
Includes: Experiential Learning Activity
Precludes additional credit for ARCS 5106.
Prerequisite(s): ARCS 5105 or ARCH 5114.

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 5221 [0.5 credit]
Ecological & Regulatory Systems
Lecture-based course considering buildings' ecological and climate change impacts. Course covers how regulations, material choices, siting, and assembly methods of small-scale buildings impact energy consumption, carbon footprints, and GHG emissions. Regulatory content includes applicable codes, regulations, best practices, universal design standards and life-safety systems principles.
Precludes additional credit for ARCC 5096, ARCC 2202.
Also offered at the undergraduate level, with different requirements, as ARCH 2221, for which additional credit is precluded.

ARCH 5222 [0.5 credit]
Structures
Fundamental structural principles and their building design applications. Concepts of equilibrium and mechanics of materials, including stress and strain. Structural calculations and qualitative understanding of static and dynamic loads, including gravitational and lateral forces. Includes consideration of wood, masonry, concrete, and steel structures.
Includes: Experiential Learning Activity
Precludes additional credit for ARCC 5097, CIVE 2005.
Prerequisite(s): ARCH 5221.
Also offered at the undergraduate level, with different requirements, as ARCH 2222, for which additional credit is precluded.

ARCH 5223 [1.0 credit]
Assemblies and Environmental Systems
Lecture and workshop course introducing principles of environmental mediation through building assemblies, MEP, daylight and acoustic design in new and existing commercial and multi-story residential buildings. Emphasis on climate adaptation and mitigation through life cycle analysis and energy and performance assessment.
Includes: Experiential Learning Activity
Precludes additional credit for ARCC 5098, ARCH 3221.

ARCH 5224 [0.5 credit]
Advanced Building Systems
Lecture-based technology course focusing on skillful application of building systems, including envelope, material and structural selection, and active and passive environmental systems. Emphasis on design integration and on alternatives to conventional construction including healthy material systems, designing for decommissioning, and speculative adaptation.
Includes: Experiential Learning Activity
Precludes additional credit for ARCC 5100.
Prerequisite(s): ARCH 5221 or equivalent experience.

ARCH 5301 [0.5 credit]
Texts, Precedents and Writings in Architecture I
Exploration of significant texts, precedents, and theories in architecture, situating key ideas as they emerge at the intersection of history, theory, and society.

ARCH 5302 [0.5 credit]
Texts, Precedents and Writings in Architecture II
Exploration of significant texts, precedents, and theories in architecture, situating key ideas as they emerge at the intersection of history, theory, and society.

ARCH 5331 [0.5 credit]
Modernism and Global Urbanism
Thematic survey of cities, modernist ideas, projects, and movements, considering their theoretical, historical, and practical expressions in urban morphology and housing typologies, and their relation to larger societal and environmental questions, locally and globally. Acquisition of critical reading, writing, and representation skills through case-study.
Precludes additional credit for ARCH 5010, ARCH 2300.
Also offered at the undergraduate level, with different requirements, as ARCH 2331, for which additional credit is precluded.

ARCH 5332 [0.5 credit]
Contemporary Theories in Architecture
Survey of cultural theories from the beginning of colonialism to this day. Considerations of how technological, socio-political, material, and ecological transformations inform architectural discourse. Students acquire research skills, considering topics such as race, gender, disability, environmental justice, Indigenous worldviews, climate, decolonisation, or artificial intelligence.
Precludes additional credit for ARCH 5020.
Also offered at the undergraduate level, with different requirements, as ARCH 4332, for which additional credit is precluded.

ARCH 5333 [0.5 credit]
Selected Topics in Architectural Theory
Lectures, readings, and case studies on contemporary issues in architecture and allied fields of study. Critical analysis of trends and possibilities beyond traditional modes of architectural thought and practice. Themes vary, drawing on faculty and student research, and engaging various modes of architectural research.
Precludes additional credit for ARCH 5201.

ARCH 5402 [0.5 credit]
Evaluation of Existing Properties
The cultural, political, economic, and legal factors that shape our definition of and approaches to existing architecture. Processes for and implications of heritage designation, cultural value, and costs associated with restoration and ongoing preservation of heritage and other existing properties. (Theory/History Elective).
Includes: Experiential Learning Activity
Also offered at the undergraduate level, with different requirements, as ARCH 4883, for which additional credit is precluded.

ARCH 5404 [0.5 credit]
Advanced Building Assessment
In-depth study of the conventions, methods, and tools used in the assessment of buildings and their sites including traditional field survey, photogrammetry, laser scanning technologies, and hybrid representations.
Includes: Experiential Learning Activity
Precludes additional credit for ARCN 5100.
Also offered at the undergraduate level, with different requirements, as ARCH 4881, for which additional credit is precluded.

ARCH 5441 [0.5 credit]
Studio 1: Workshop
Workshop supporting Studio 1 project development. Lectures, tutorials, and/or workshops foreground fundamental skills and expose students to broad range of analog and digital modes of drawing, modelling and mapping, as well as to theories of architectural representation.
Includes: Experiential Learning Activity
Precludes additional credit for ARCN 5005.

ARCH 5444 [0.5 credit]
Comprehensive Studio Workshop
Workshop supporting Comprehensive Studio project development. Lectures, tutorials, and/or workshops enable students to test, develop, and assess their studio project with regards to select material, energetic, regulatory, and/or ecological parameters of the project.
Includes: Experiential Learning Activity
Precludes additional credit for ARCS 5105.

ARCH 5551 [0.5 credit]
Professional Practice
The architectural profession, its rules, regulations, internship and licensure's paths. Ethical and legal responsibilities, including professional contracts, codes, and intellectual property rights. Types of practice organization, financial management, procurement, and risk mitigation. Project management and delivery, including building economics, cost control, work plans, and schedules.
Precludes additional credit for ARCC 5200.

ARCH 5552 [0.5 credit]
Design Thesis Preparation
Lectures and workshops introducing methods, resources, and approaches to completing a design research architecture thesis. Course introduces students to topics such as writing support, library resources, conducting fieldwork, physical prototyping, community engagement, use of AI, and ethics approval processes. Course culminates in thesis proposal.
Includes: Experiential Learning Activity
Precludes additional credit for ARCH 5200.

ARCH 5555 [2.0 credits]
Architecture Thesis
Intensive design-research thesis supported by a faculty supervisor. Students will synthesize academic writing with a design exploration of a topic of architectural significance using a range of appropriate and inventive design and research methods.
Includes: Experiential Learning Activity
Precludes additional credit for ARCN 5909.
Prerequisite(s): ARCH 5115 or ARCS 5106.

ARCH 6001 [0.5 credit]
Texts, Precedents and Writings in Architecture I
Exploration of significant texts, precedents, and theories in architecture, situating key ideas as they emerge at the intersection of history, theory, and society.

ARCH 6002 [0.5 credit]
Texts, Precedents and Writings in Architecture II
Exploration of significant texts, precedents, and theories in architecture, situating key ideas as they emerge at the intersection of history, theory, and society.

ARCH 6103 [0.5 credit]
Colloquium I: Architectural Research Methods
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
Precludes additional credit for ARCH 6101 (no longer offered).
Also offered at the undergraduate level, with different requirements, as ARCH 5103, for which additional credit is precluded.

ARCH 6104 [0.5 credit]
Colloquium II: Architectural Research Presentation
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
Also offered at the undergraduate level, with different requirements, as ARCH 5104, for which additional credit is precluded.

ARCH 6105 [0.5 credit]
Colloquium III: Architectural Research Dissemination
This seminar continues to bring together doctoral students with architectural faculty and guest lecturers to present work-in-progress, discussing applications to different forms, modes, and venues for research dissemination.
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.