Master of Architecture Course Sequence and Course Descriptions

Course Sequence

- Year 1: Fall
 - ARCH 691 Design Studio Comprehensive Building Design
 - ARCH 671 Technical Report
 - ARCH 673 The Science of the Building Envelope

• Year 1: Winter

- ARCH 690 Design Studio
- ARCH 642 Modernism To The 21st Century
- ARCH 662 Steel & Concrete: Design, Structure and Construction

• Year 2 - Thesis Year: Fall

- ARCH 692 Thesis Research and Design Studio I
- ARCH 610 Architectural Research and Analysis
- ARCH 6XX Open graduate elective
- Only for students in two year stream: ARCH 640 Contemporary Theory, Culture and Criticism

• Year 2 – Thesis Year: Winter

- ARCH 693 Thesis Research and Design Studio II
- ARCH 655 Architectural Professional Practice: Ethics, Business, Legal Issues, and Contract Administration
- ARCH 6XX Open graduate elective

• Year 2 – Thesis Year: Spring

• ARCH 6XX Open graduate elective

Students are encouraged to use elective courses to explore areas of specialization in support of their thesis research. Up to 1 half credit (0.50) elective may be taken in other departments. 1 half credit (0.50) course may be an independent Reading Course.

Course Descriptions

Architecture (ARCH) 610 Architectural Research and Analysis (0.50) LEC

This course exposes students to research methodologies and diagrammatic strategies used for the analysis of works of architecture, approaches to design and key texts. These will act as case studies to learn about the conceptual ideas, formal/spatial principles, material systems and operative design strategies employed in the making of architecture while introducing students to analytical methods and processes considered integral to advanced research and design. The rigorous consideration of precedent and design research methods fosters a deeper connection of students' work with the discipline, better enabling them to position their ideas within a larger conceptual discourse while giving them the methodological tools to prepare them for the undertaking of a research and design thesis.

Architecture (ARCH) 640 Contemporary Theory, Culture and Criticism(0.50) LEC

Against the backdrop of the larger interdisciplinary field known as cultural studies, this course will trace and examine critical bodies of theory that have influenced the development of contemporary architectural thought and practice. This course will emphasize and study important writings and theoretical systems that have emerged in various fields including philosophy, art theory/criticism, literary theory, psychoanalysis, the natural and social sciences, and cultural studies, to investigate the ways in which these have generated conceptual tools within architectural theory, criticism and analysis while contributing to the evolution of architectural practice. Pedagogical Objectives: To present a thematically and chronologically organized survey of contemporary architectural theory that focuses on the relationship between seminal theoretical texts drawn from outside of the architectural discipline and critical developments in contemporary architectural theory and practice. The course is intended to provide students with an advanced knowledge base in contemporary architectural theory to ground more specialized graduate elective coursework while acting as a support for thesis and other forms of advanced architectural research.

Architecture (ARCH) 642 Modernism to the 21st Century (1) LEC

This course examines the cultural, architectural and urban history of that complex period known as modernism. It is an overview of the individual works, movements and critical texts associated with the evolution of modern architecture and urbanism from the beginning of the 20th century to the early years of the second millennium. The social, technological and aesthetic ambitions of the modern project are critically reviewed and its development and dissemination in Europe, the Americas and Asia is traced. Selected works are examined in depth as examples of the canonic and vibrant forms of modernism.

Architecture (ARCH) 655 <u>Architectural Professional Practice: Ethics, Business, Legal Issues, and Contract</u> <u>Administration (1) LEC</u>

This course is a comprehensive overview of Architectural Professional Practice. It is an introduction to the nature of the self-governing profession in Ontario, the legal and legislative context in which architects practice in Canada including its Acts and Codes (The Architecture's Act, the Planning Act, and the Ontario and National Building Codes), and the essential fiduciary relationships between professionals and others. Forms of partnerships, rules of professional conduct, the constituents of an enforceable contract,

professional liability, client-architect relations and the typical challenges encountered in practice are among the essential elements to be studies. Factors affecting both the cost of construction and the ability of an architect to conduct a viable business will be presented. Students will also study the role of the architect in relation to contract administration, architectural working drawings and specifications, bidding requirements; general conditions; general requirements trade divisions; reference and source material; assembly and production; and structural, mechanical and electrical consultants.

Architecture (ARCH) 662 Steel & Concrete: Design, Structure and Construction (0.50) LEC, TUT

Architectural case studies are used to examine conceptual development, structural design, building process and the selection of structural steel and concrete systems. Topics such as tension, flexural and compression members; and connections are studies using calculations, design aids, rules of thumb and the latest CSA design standards. Heldwith ARCH 362- graduate students will be required to complete additional coursework for graduate level course credit.

Architecture (ARCH) 671 Technical Report (0.50) SEM

Students will investigate and report on technical issues as they relate to the development of the Comprehensive Building Project in the Parallel Design Studio. Innovation and integration in architectural design will be stressed with respect to structure, building envelope, environmental systems, sustainable assessment system, health and life safety, movement systems, site planning and the integration of information technology.

Architecture (ARCH) 673 The Science of the Building Envelope (0.50) LEC

The building envelope has become the single most significant and element within the contemporary economy of building. It bears much of the identity and amenity of buildings, is the site of significant expenditure, the occasion of environmental concern and attention, the object of much technological innovation, and the locus of entropy. This course provides an advanced study of the building envelope as the place where design, technology, building science, and environmental concerns converge. It discusses matters such as natural light and ventilation or the short- and long-term behaviours of building materials, and assesses the use of new generations of "smart" mechanical environmental devices. Consent of instructor required for those outside of the M.Arch program.

Architecture (ARCH) 684 Special Topics in Architecture (0.50) LEC

This course allows for additions in the program on a short term basis, and for the development of future permanent courses.

Architecture (ARCH) 685 Readings and Seminars in Architecture (0.50) RDG

Issues to be negotiated on an individual basis with faculty members. An outline of this course, approved by the professor in charge, must be submitted to the Graduate Officer within three weeks of registration.

Architecture (ARCH) 690 Design Studio (1.5) STU

The Design Studio is subdivided into various sections, providing students the opportunity to select an Architectural studio of their interest and undertake a detailed exploration of design project within this theme.

Architecture (ARCH) 691 Design Studio - Comprehensive Building Design (1.5) STU

Through the integration and application of skills and knowledge to a complex building project, students will develop designs to a high level of detail. A concern for technical material, environmental and legal aspects of Architecture will support open speculation and innovative design.

Architecture (ARCH) 692 Thesis Research and Design Studio I (1.5) STU

The Graduate Thesis is designed to develop competence in design research and critical analysis while providing students with the opportunity to examine in depth current topics in architectural theory and practice, and to position these within a broader cultural context. Graduate Thesis Research and Design is a two-semester sequence of courses that guide students in the development of an individualized topic that is related to broader thematic areas within architecture, urbanism and landscape. ARCH 692 requires each student to formulate a focused research agenda, the premise of which will be developed throughout the preparation of a written research document and/or tested through a specific design proposal in ARCH 693.

Architecture (ARCH) 693 Thesis Research & Design Studio II (1.5) STU

Graduate Thesis Research & Design Studio II guides students through the development of their thesis projects. Students may draw from a wide range of sources both within and beyond the conventional boundaries of the architectural discipline, using methods of exploration that mat employ the tools of architectural production and critique, and that culminate in a written research document and/or design proposal. The goal of the Graduate Thesis is to make an active contribution to the field by opening up new ways of understanding an existing architectural topic.