

Architecture - Techniques (ARCN)

**Azrieli School of Architecture and Urbanism
Faculty of Engineering and Design**

**ARCN 2105 [0.5 credit]
Computer Modeling of Form**

Computer modeling as a medium of architectural analysis, documentation, and presentation. Principles and techniques of 2D drawing and 3D modeling. Extensive practical work using appropriate applications. (Core Course).

Precludes additional credit for ARCN 1101.

Prerequisite(s): second-year B.A.S. standing or permission of the School.

Lectures three hours a week.

**ARCN 2106 [0.5 credit]
Introduction to Multimedia**

Analogue and digital systems and graphic processes used in the making of images. Fundamentals of still photography and videography combined with current computer technologies in the application of visual communication techniques.

Precludes additional credit for IDES 2106.

Lectures three hours a week, laboratory three hours a week.

**ARCN 3003 [0.5 credit]
Theatre Production**

Design and fabrication of theatre productions, one of which is staged on campus. Visiting directors, designers, technical consultants and others. Visits to theatres and production facilities. (Workshop).

Prerequisite(s): permission of the School.

Lecture, seminar, lab or field work six hours a week.

**ARCN 3206 [0.5 credit]
Computer Applications**

Application of existing software and programming techniques to various architectural problems. (Workshop).

Prerequisite(s): permission of the School.

Lecture, seminar, lab or field work six hours a week.

**ARCN 3302 [0.5 credit]
The Anatomy of Architecture**

The architectural anatomy of selected contemporary buildings. Use of graphic techniques of analysis to develop an understanding of their basic compositional principles and language. (Workshop).

Prerequisite(s): permission of the School.

Lecture, seminar, lab or field work six hours a week.

ARCN 3303 [0.5 credit]

Architecture as Painting

Analysis of architecture for its elemental, formal and narrative properties. These relationships "re-represented" through the medium of painting.

Architecture as analogy to painting. (Workshop).

Prerequisite(s): permission of the School.

Lecture, seminar, lab or field work six hours a week.

ARCN 3400 [0.5 credit]

Visual Design

Development of the capacity to visualize and communicate in several graphic media. Development of sensitivity to form, structure, space, texture and colour. May involve historical investigation. (Workshop).

Prerequisite(s): permission of the School.

Lecture, seminar, lab or field work six hours a week.

ARCN 3401 [0.5 credit]

Photography

Traditional and alternative techniques for image making and manipulation. Basic image formation techniques, advanced darkroom manipulations, past-darkroom imaging, and digital imaging within a theoretical overview of current photographic processes and techniques. (Workshop).

Prerequisite(s): permission of the School.

Lecture, seminar, lab or field work six hours a week.

ARCN 3901 [0.5 credit]

Architectural Techniques

A specific aspect of architecture in the area of architectural techniques. Topics vary from year to year. (Elective Course).

Prerequisite(s): permission of the School.

ARCN 3902 [0.5 credit]

Architectural Techniques

A specific aspect of architecture in the area of architectural techniques and cooperative problem solving. Topics vary from year to year. (Workshop).

Prerequisite(s): permission of the School.

Lecture, seminar, lab or field work six hours a week.

ARCN 3999 [0.0 credit]

Co-operative Work Term

ARCN 4100 [0.5 credit]**Historic Site Recording and Assessment**

Methods of heritage building documentation including hand recording, photography, rectified photography, total station, gps, photogrammetry, and laser scanning. Non-destructive testing techniques; environmental assessment tools for determining air quality and energy efficiency. Multidisciplinary teams for all project work.

Also listed as CIVE 3207.

Precludes additional credit for ARCN 3100 (no longer offered).

Prerequisite(s): third-year standing in B.A.S. Conservation and Sustainability or third-year standing in B.Eng. in Architectural Conservation and Sustainability.

Lectures three hours a week, lab or field work two hours a week.

ARCN 4102 [0.5 credit]**Problems in Computing**

Various types of non-numeric data, their representation within primary and secondary storage, and the manipulation of various representations. Comparative evaluation of languages for non-numeric problems. (Elective Course).

Precludes additional credit for ARCN 3102.

Prerequisite(s): permission of the School.

Lectures two hours a week, laboratory two hours a week.

ARCN 4103 [0.5 credit]**Digital Fabrication and Theory**

The changing relationship of architectural design and digital technology with a focus on 1:1 constructions using emerging computational software and fabrication techniques. (Workshop/Elective Course).

Prerequisite(s): permission of the School.

Lectures two hours a week, laboratory two hours a week.

ARCN 4200 [0.5 credit]**Building Pathology and Rehabilitation**

Deterioration mechanisms for concrete, timber, steel and masonry structures. Identification of design deficiencies; criteria for selection and design of rehabilitation systems. Design techniques to reduce deterioration in new construction and historical structures.

Also listed as CIVE 4601.

Prerequisite(s): fourth-year standing in B.A.S.

Conservation and Sustainability or fourth-year status in B.Eng. Architectural Conservation and Sustainability program.

Lectures three hours a week, lab/field work two hours a week.

ARCN 4808 [0.5 credit]**Independent Study**

(Elective Course).

Summer session: some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for

summer session classes, consult the class schedule at central.carleton.ca

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at central.carleton.ca