

# Technical (ARCC)

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## Architecture - Technical (ARCC) Courses

### ARCC 2100 [0.5 credit]

#### Design and the Environment

Examines varied methods and techniques to understand the people, places, and potentials of landscapes with a focus on equity and an ethics of care for social and physical environments.

Precludes additional credit for ARCH 1222.

Prerequisite(s): Second-year standing or permission of the School.

Lecture three hours per week

### ARCC 2202 [0.5 credit]

#### Architectural Technology 1

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

Precludes additional credit for ARCH 2221.

Prerequisite(s): permission of the School.

Lectures three hours a week.

### ARCC 2203 [0.5 credit]

#### Architectural Technology 3

Wood frame, post and beam, steel and concrete systems and construction techniques. Structural systems and building envelope principles and practise are explored in conjunction with mechanical and electrical systems in smaller buildings. Emphasis on precedent, tradition and methodology of architectural detailing for construction.

Includes: Experiential Learning Activity

Precludes additional credit for ARCH 3221.

Prerequisite(s): ARCC 2202 and third-year standing for B.A.S. students and third-year standing for students in B.Eng. Architectural Conservation and Sustainability.

Lectures three hours a week.

### ARCC 3202 [0.5 credit]

#### Architectural Technology 4

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. Focus on sustainable design strategies and environment impact. (Core course).

Precludes additional credit for ARCH 4221.

Prerequisite(s): ARCC 2203 and third-year standing for B.A.S. students or ARCC 2203 and third-year standing for students in B.Eng. Architectural Conservation.

Lectures three hours a week.

### ARCC 4200 [0.5 credit]

#### Structural Morphology

Interdisciplinary study of structural and developmental morphology focusing on dynamic generative design processes, integrative systems, spatial modulations and fundamental generative principles of spatial form and structure as it relates to architecture. (Workshop).

Includes: Experiential Learning Activity

Lectures, seminar, workshop or field work six hours a week.

### ARCC 4207 [0.5 credit]

#### Advanced Building Assessment

In-depth study of the conventions, methods, and tools used in the assessment of buildings and their sties including traditional field survey, photogrammetry, laser scanning technologies, and hybrid representations.

Includes: Experiential Learning Activity

Precludes additional credit for ARCC 4900 (no longer offered).

Prerequisite(s): enrolment in the BAS Conservation and Sustainability program and fourth-year standing.

Laboratories, lectures, field trips, six hours a week.

### ARCC 4500 [0.5 credit]

#### 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.

Precludes additional credit for ARCC 3500, ARCH 4772.

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

Three hours a week.

### ARCC 4801 [0.5 credit]

#### Architectural Technology

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

Prerequisite(s): permission of the School.