

# Architecture - Technical (ARCC)

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## 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.