

Applied Language Studies/Asian, Indigenous, Middle Eastern and Sign Language Unit (AIMESL) (ALSS)

School of Linguistics and Applied Language Studies
Faculty of Arts and Social Sciences

ALSS 1000 [0.5 credit] (formerly 23.100*)

Communication Skills for Engineering Students

Development of students' competence in written and oral communication in engineering. Focus on professional written documents (process descriptions, proposals, reports, engineering literature reviews and responses); written responses to engineering communications; related oral work.

Precludes additional credit and weight for ECOR 2000.

Open to students in the Faculty of Engineering and Design only.

Lectures and tutorials three hours a week.

ALSS 1100 [2.0 credits] (formerly 23.110)

Intensive Introductory Mandarin (2.0 credits)

For students with little or no knowledge of Mandarin. Oral skills; basic reading and writing skills. Placement test for non-literate speakers of other Chinese languages. Not open to students already literate in any Chinese language.

Eight hours a week.

ALSS 1205 [2.0 credits] (formerly 23.125)

Introductory Korean

For students with little or no knowledge of Korean. Introductory survival Korean; basic pronunciation, grammar, reading and writing.

Four hours a week.

ALSS 1900 [1.0 credit] (formerly 23.190)

Introductory Study of an Indigenous Language

An introduction to the study of an Indigenous language.

Four hours a week.

ALSS 1901 [1.0 credit] (formerly 23.191)

Introduction to American Sign Language

For students with little or no knowledge of the language or culture of deaf people. Basic communicative competence in American Sign Language. Anthropological, sociolinguistic, and sociocultural aspects of deaf culture.

Three hours a week.

ALSS 2000 [0.5 credit] (formerly 23.200*)

Communication Skills for Computer Science Students

Development of students' competence in written and oral communication in computer science. Focus on professional written documents (reports, technical descriptions, manuals, proposals, memos, letters) and related oral work (oral communication in university and workplace settings).

Open to students in the School of Computer Science only.

Lectures and tutorials three hours a week.

Architecture (ARCH, ARCC, ARCU, ARCN, ARCS)

School of Architecture

- Theory/History (ARCH)
- Technical (ARCC)
- Urban (ARCU)
- Techniques (ARCN)
- Design Studios/Design Thesis/Research (ARCS)

• Theory/History (ARCH)

ARCH 1000 [0.5 credit] (formerly 76.100*)

Intro. to Architecture

Architecture in the matrix of human conditions: linkages among architecture, fine arts, humanities, social sciences, physical sciences, mathematics and philosophy. Architectural ideas will be introduced through a discussion of cities, buildings and landscapes. (Core Course)

Lectures three hours a week.

First offered 1998-1999.

ARCH 1005 [0.5 credit] (formerly 76.105*)

Contemporary Society

The relationship of architecture, architectural thought and the architectural profession to the societies in which they exist (and which they must serve). Topics are selected to emphasize key issues. (Elective Course)

Lectures and seminars, three hours a week.

ARCH 2006 [0.5 credit] (formerly 76.206*)

Intro. to Industrial Design

Theoretical overview including: definitions and dimensions of design and industrial design, its nature and historical evolution; quality; quality aspects in synthetic objects; formal qualities as determinants for categories of design; design methods; design management in industry; professional industrial design and its promotion. Practicing industrial designers are invited to present case studies of their activities. (Elective Course) (Also listed as IDES 1000.)

Lectures three hours a week.

ARCH 2101 [0.5 credit] (formerly 76.211*)

Industrial Design Analysis

Analysis of various industrial design problems, including: relationship with principal techniques and mass-production technology; uniformity and variety; specialty and versatility in production; tolerances; ergonomics and anthropometrics; industrial design and environment; future industrial design approaches to pollution and resource conservation; adaptation of value-analyses to industrial design. (Elective Course) (Also listed as IDES 1001.)

Prerequisite: ARCH 2006 or IDES 1000.

Lectures three hours a week.

ARCH 2300 [0.5 credit] (formerly 76.230*)

Intro. to Modern Architecture

Architectural and urban ideals of modernism with special 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. (Core Course)

Precludes additional credit for ARCH 3009.

Prerequisites: ARTH 1100 and ARTH 1101, or permission of the School.

Lectures three hours a week.

First offered 1999-2000.

ARCH 3208 [0.5 credit] (formerly 76.328*)

Urban Space Architecture

Design explorations that are directed towards the search for aesthetic form and meaning in urban space, with particular application to the Canadian context. Project-oriented. (Workshop)

Prerequisite: permission of the School.

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

ARCH 3902 [0.5 credit] (formerly 76.392*)

Theory of Architecture

Workshop focuses on one specific aspect of architecture in the area of theory and history. Workshop offerings change from year to year. (Workshop)

Prerequisite: permission of the School.

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

ARCH 4002 [0.5 credit] (formerly 76.402*)

Canadian Architecture

Canadian architecture from the seventeenth century to the present day, covering both stylistic and technological developments. Building styles, methods, and materials in the context of social and economic conditions and construction techniques. (Theory/History Elective) (Also listed as ARTH 3002.)

Precludes additional credit for ARCH 3002.

Prerequisite: ARCH 2300 or permission of the School.

Lectures, seminars three hours a week.

ARCH 4004 [0.5 credit] (formerly 76.404*)

Architectural Theory

An exploration of architectural intentions in the early period of Western history, with special emphasis on Renaissance treatises and ideas. Architectural intentions in relation to shifting world-views, as a basis of historical interpretation. (Theory/History Elective)

Precludes additional credit for ARCH 3007.

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4006 [0.5 credit] (formerly 76.406*)

Origins of Modernism

Exploration of architectural theories with special emphasis on the European context from the seventeenth century to the late nineteenth century. (Theory/History Elective)

Precludes additional credit for ARCH 3008.

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4008 [0.5 credit] (formerly 76.408*)

Foundations of Modernism

Major critical perspectives as applied to architecture as a fine art. The debate between classicism and romanticism with consideration of its cultural roots. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4009 [0.5 credit] (formerly 76.409*)

Theory of the Avant-Garde

Exploration of architectural theories with special emphasis on the development of the avant-garde in the early twentieth century, looking at the avant-garde within the larger framework of modernism. (Theory/History Elective)

Precludes additional credit for ARCH 3009.

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4100 [0.5 credit] (formerly 76.410*)

The Morphology of the City

Description and comparative analysis of the physical morphology of cities. Primary structural, spatial and formal organization and elements that characterize the morphology of cities studied in terms of their historical and contemporary significance for architecture and urban design. (Theory/History Course)

Precludes additional credit for ARCH 2004 and ARCH 3100.

Prerequisite: permission of the School of Architecture.

Lectures three hours a week.

ARCH 4105 [0.5 credit] (formerly 76.415*)

Theories of Landscape Design

Introduction to landscape architecture as the organization of outdoor space. Historical, cultural, economic and political factors as a basis for interpreting spatial organization in urban and rural areas of human settlement. Emphasis on the period from the fifteenth to the nineteenth century.

(Theory/History Elective)

Precludes additional credit for ARCH 3105.

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4203 [0.5 credit] (formerly 76.423*)

Society and Shelter

Buildings and shelter as human and social products. Topics such as the perception and cognition of the built environment and its impact on social processes; the design, construction and use of buildings as social processes; the design professions; shelter and social stratification. (Theory/History Elective) (Also listed as SOCI 3309.)

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours, seminars three hours a week.

ARCH 4204 [0.5 credit] (formerly 76.424*)

The Design Professions

Architecture and design professions in relation to traditional professions and to occupations in art and design. Professions in the development of culture and society; education, career and work; knowledge in the design professions; and the nature of design practice. (Elective Course) (Also listed as SOCI 4204.)

Prerequisite: third-year standing in the B.A.S. program; fourth-year standing in Sociology; fourth-year standing in the B.A. Honours Architecture/Art History program; or permission of the School.

Seminar three hours a week.

ARCH 4205 [0.5 credit] (formerly 76.425*)

User-Building Synopsis

Projects to develop skills in the analysis of building performance. Examination of occupancy analysis, safety and risk assessment, post-occupancy evaluation, and social impact assessment. (Workshop)

Prerequisite: permission of the School.

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

ARCH 4300 [0.5 credit] (formerly 76.430*)

Neo-Classical Architecture

Eighteenth- and nineteenth-century architecture and urban form in Western Europe. Emphasis on the cultural and philosophical framework of rising modernity to illuminate architectural production and theory as well as the development of urban form. (Theory/History Elective)

Precludes additional credit for ARCH 1201 and ARCH 2200.

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4301 [0.5 credit]

Post-War Architecture

This course examines the theoretical, ideological and artistic debates that have influenced the development of world architecture since 1950. (Theory/History Elective) (Also listed as ARTH 4604.)

Prerequisite: ARCH 2300 or ARTH 3609 or permission of the instructor.

Lecture or seminar three hours per week.

ARCH 4302 [0.5 credit] (formerly 76.432*)

Pre-Columbian Architecture

Monumental temples of the ancient Mesoamericans are compared with other world traditions at similar levels of cultural development. Selected examples considered in terms of morphology, technology, iconography, social/political context, world view and general architectural theory. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4303 [0.5 credit] (formerly 76.433*)

Greek Architecture

Architecture of Greek antiquity and its relationship to its philosophical, artistic, and mythical contexts. The development of the idea of the city; the presence of architecture within its symbolic landscape. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.

Lectures three hours a week.

ARCH 4304 [0.5 credit] (formerly 76.434*)

The Architecture of Rome

Rome in its classical to late-antique periods. Its founding mythologies and landscape. In-depth analysis of Rome, with special attention to its public buildings. Early Christian architecture within the Roman context. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.
Lectures three hours a week.

ARCH 4305 [0.5 credit] (formerly 76.435*)

Medieval Architecture

Gothic architecture and its relation to its philosophic and artistic predecessors. Special attention to the coexistence of the monastic tradition, late Romanesque building, and new experiments in gothic during this period, marked by intellectual and political ferment. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.
Lectures three hours a week.

ARCH 4306 [0.5 credit] (formerly 76.436*)

Renaissance Theory

The rise of architectural theory within the context of the Italian Renaissance. Canonic texts explored and compared in the context of the architectural developments of the period. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.
Lectures three hours a week.

ARCH 4307 [0.5 credit] (formerly 76.437*)

Muslim Architecture

Historical and theoretical discussions about the architecture of Muslim cultures. Selected sites and monuments from eighth to eighteenth century, covering the vast geography from North Africa to Southeast Asia. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.
Lectures three hours a week.

ARCH 4308 [0.5 credit] (formerly 76.438*)

Asian Architecture

Anthropological history of the architecture of the Near and Far East. The architecture and urban form of Ancient Egypt, Anatolia, Sumer and Persia. The architecture and cities of Ancient China and India. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.
Lectures three hours a week.

ARCH 4309 [0.5 credit] (formerly 76.439*)

Mesoamerican Architecture

Selected works of Mesoamerican architecture in terms of iconography, morphology, technology, function, historical development, and concept. Mesoamerican architectural features compared with other world traditions. Emphasis on design. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.
Lectures three hours a week.

ARCH 4400 [0.5 credit] (formerly 76.440*)

Theory

A survey of the architectural and urban history of a specific culture. These discussions address the present reality of a country, region or city being visited by the fourth year of the program. (Elective Course)

Prerequisite: clear standing to fourth year and permission of the School.
Lectures three hours a week.

ARCH 4502 [0.5 credit] (formerly 76.452*)

Research and Criticism

Preparation for the independent research and design work. Work related to the nature of research and criticism in architecture, with an emphasis on issues of current concern. (Elective)

Lectures and seminars three hours a week.

ARCH 4505 [0.5 credit] (formerly 76.455*)

Seminar in Theory and History

History and theory of architecture. Topics will vary from year to year. Limited enrolment. (Elective Course)

Prerequisite: fourth-year standing in the B.A.S. or B.A. (Honours) Architecture/Art History programs, or permission of the School.

Lectures three hours a week.

ARCH 4801 [0.5 credit] (formerly 76.481*)

Theory of Architecture

An aspect of architecture in the area of theory and history. Topics vary from year to year. (Theory/History Elective)

Prerequisite: ARCH 2300 or permission of the School.
Lectures three hours a week.

ARCH 4808 [0.5 credit] (formerly 76.488*)

Independent Study

(Elective Course)

• **Technical (ARCC)**

ARCC 1305 [0.5 credit] (formerly 77.135*)

The Behaviour of Materials

An introduction to organizational patterns, forms and properties of materials such as cohesion, elasticity, strain energy, work of fracture, crack stopping, and the general theory of strength; a survey of the metallic and non-metallic traditions, plastics, composites, and materials of the future. (Elective Course)

Lectures three hours a week.

ARCC 2001 [0.5 credit] (formerly 77.201*)

Structures in Architecture

A survey of structural planning, including a historical survey of structural systems, details and the study of the factors involved in the synthesis of a suitable structural scheme. The course is intended as a survey of the science and the structural properties of materials. (Elective Course)

Precludes additional credit for ARCC 1103.

Lectures three hours a week, laboratory is block scheduled.

ARCC 2202 [0.5 credit] (formerly 77.222*)

Architectural Technology 1

Case studies of vernacular buildings from different climatic regions: issues of human comfort, construction, and materials. Site orientation, foundations, structure and envelope in terms of their response to local climate: sun (light and heat), wind, moisture. (Core Course)

Prerequisite: CIVE 1005 or permission of the School.

Lectures three hours a week.

First offered 1999-2000.

ARCC 2203 [0.5 credit] (formerly 77.223*)

Architectural Technology 2

Wood frame, post and beam and load bearing masonry construction. Implications of the structural system on building envelope, mechanical and electrical systems are explored. Emphasis on architectural detailing. (Core Course)

Prerequisite: ARCC 2202 [0.5 credit or permission of the School].

Lectures three hours a week.

First offered 1999-2000.

ARCC 3004 [0.5 credit] (formerly 77.304*)

Workshop: Energy and Form

Relationship between environmental factors, energy and architectural form. Explorations into ways in which buildings and building elements can be planned and designed to take advantage of natural cycles in order to minimize the need for supportive energy inputs. (Workshop)

Prerequisite: permission of the School.

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

ARCC 3202 [0.5 credit] (formerly 77.322*)

Architectural Technology 3

Small to medium-scale steel and concrete structured buildings as case studies to explore different approaches to building envelope (curtain wall, rain screen wall, etc.), HVAC and lighting systems (exposed, concealed), interior planning (room acoustics, acoustic isolation, fire protection, finish materials etc.). (Core Course)

Prerequisite: ARCC 2202 [0.5 credit] (formerly 77.222*) or

permission of the School.
Lectures three hours a week.
First offered 2000-2001.

ARCC 3305 [0.5 credit] (formerly 77.335*)

Materials Application

Application of building materials, including the forming of building parts and the design of joints for performance and assembly. Practical constructions using new technology are emphasized. (Workshop)

Prerequisite: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCC 3902 [0.5 credit] (formerly 77.392*)

Architectural Technology

A specific aspect of architecture in the area of architectural technology. Offerings vary from year to year. (Workshop)

Prerequisite: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCC 4100 [0.5 credit] (formerly 77.410*)

Lighting for Architecture

A study of daylighting and electric lighting design techniques. Emphasis will be placed on day-lighting models and computer light-modeling software as tools to explore lighting design. (Elective Course)

Precludes additional credit for ARCC 3000.
Prerequisite: ARCC 2203 or permission of the School.
Lectures three hours a week.

ARCC 4102 [0.5 credit] (formerly 77.412*)

Acoustics in Architecture

Sound in enclosures, including interior design of auditoria and special applications. Sound reproduction and reinforcement systems. Acoustic privacy and protection, sound control in buildings, materials for noise control, community noise, industrial noise. Acoustic measurements and instrumentation. (Elective Course)

Precludes additional credit for ARCC 3002.
Lectures two hours, laboratory two hours a week.

ARCC 4103 [0.5 credit] (formerly 77.413*)

Energy and Form

Energy as a criterion in decision-making for architectural design. Conventional energy resources and state-of-the-art alternative energy resource systems with respect to building shape, size, materials, openings, orientation, siting, and use. (Elective Course)

Precludes additional credit for ARCC 3003.
Lectures three hours a week.

ARCC 4200 [0.5 credit] (formerly 77.420*)

Structural Morphology

Concepts and models bridging geometric morphology and architecture. Hierarchies of dimensional spaces. Planar and spatial orders. Form aggregation and space subdivision within the laws of geometric compatibility and formal rigidity. Size, similitude and isomorphism. (Elective Course)

Lectures three hours a week.

ARCC 4202 [0.5 credit] (formerly 77.422*)

Wood Engineering

Introduction to structural design in timber. Properties, anatomy of wood, wood products, factors affecting strength and behaviour, strength evaluation and testing. Design of columns, beams and beam-columns. Design of trusses, frames, glulam structures, plywood components, formwork, foundations, connections and connectors. Inspection, maintenance and repair. (Elective Course) (Also listed as CIVE 4202)

Prerequisite: fourth-year registration or permission of the School.

Lectures three hours a week, problem analysis three hours alternate weeks.

ARCC 4208 [0.5 credit] (formerly 77.428*)

Workshop: Structure and Form

Study of structural nature of non-conventional space enclosure systems like cable structures, membranes, shells, submerged structures, excavated structural forms and lunar

structures. (Workshop)

Prerequisite: ARCC 4200 or permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCC 4300 [0.5 credit] (formerly 77.430*)

Building Materials

Materials available for building, with emphasis on their structure, properties, application and sustained performance over the life of a building. (Elective Course)

Precludes additional credit for ARCC 3300.
Laboratories, lectures, field trips four hours a week.

ARCC 4400 [0.5 credit] (formerly 77.440*)

Design for Construction

Design in relation to materials and building construction including the effects of building codes, zoning bylaws, approvals, processes and legislation, the organization of the building industry, and cost estimating control. (Elective Course)

Prerequisite: ARCC 3300 or permission of the School.
Lectures, seminars, field work three hours a week.

ARCC 4500 [0.5 credit] (formerly 77.450*)

Design Economics

Principles of building economics. Determinants of building costs and their prediction. Uncertainty and investment economics. Systems and techniques of creative cost control for buildings during schematic design, design development, construction document preparation and construction. Economic evaluation during all phases of design process. (Core Course)

Precludes additional credit for ARCC 3500.
Prerequisite: fourth-year standing in the B.A.S. program or permission of the School.
Three hours a week.

ARCC 4801 [0.5 credit] (formerly 77.481*)

Architectural Technology

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

Prerequisite: permission of the School.

ARCC 4808 [0.5 credit] (formerly 77.488*)

Independent Study
(Elective Course)

• **Urban (ARCU)**

ARCU 3203 [0.5 credit] (formerly 78.323*)

Landscape Architecture

Practical significance of landscape elements as they relate to built-form by integrating structure and site. (Workshop)

Prerequisite: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCU 3405 [0.5 credit] (formerly 78.345*)

Urban Design

Project-based workshop investigating current design attitudes and solutions affecting the physical morphology of cities. Formally sophisticated urban design projects. Various procedures and basic urban design ideas. (Workshop)

Prerequisite: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCU 3409 [0.5 credit] (formerly 78.349*)

City Organization and Planning Processes

Interdisciplinary investigation, analysis and synthesis of the institutions, processes, environments and demography of Canadian cities. Guest lecturers. (Workshop)

Prerequisite: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCU 3902 [0.5 credit] (formerly 78.392*)

Urban Studies

A specific aspect of architecture in the area of urban studies. Topics vary from year to year. (Workshop)

Prerequisite: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCU 4400 [0.5 credit] (formerly 78.440*)

City Organization and Planning

Structure, form and functioning of cities. Infra-structure, facilities and networks, ecosystems, demographic and social organization, government, quality of life, goals and perceptions, urban management, development, regulation and codes, design, planning and policy-making. (Elective Course)

Precludes additional credit for ARCU 3400.
Three hours a week.

ARCU 4500 [0.5 credit] (formerly 78.450*)

Human Shelter

Background factors pertaining to housing in both industrial and Third-World countries; traditional and contemporary housing approaches; social housing; and people's right to adequate housing. Guest lecturers. (Elective Course)

Precludes additional credit for ARCU 3500.
Three hours a week.

ARCU 4808 [0.5 credit] (formerly 78.488*)

Independent Study

(Elective Course)

• **Techniques (ARCN)**

ARCN 1001 [0.5 credit] (formerly 79.101*)

Work Term 1

Prerequisites: registration in the Co-op Option of the Bachelor of Architectural Studies Program

ARCN 2001 [0.5 credit] (formerly 79.201*)

Work Term 2

Prerequisites: registration in the Co-op Option of the Bachelor of Architectural Studies Program

ARCN 2105 [0.5 credit] (formerly 79.215*)

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: second-year B.A.S. standing or permission of the School.

Lectures three hours a week.

First offered 1999-2000.

ARCN 3001 [0.5 credit] (formerly 79.301*)

Work Term 3

Prerequisites: registration in the Co-op Option of the Bachelor of Architectural Studies Program.

ARCN 3003 [0.5 credit] (formerly 79.303*)

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: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCN 3206 [0.5 credit] (formerly 79.326*)

Computer Applications

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

Prerequisite: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCN 3302 [0.5 credit] (formerly 79.332*)

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: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCN 3303 [0.5 credit] (formerly 79.333*)

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: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCN 3400 [0.5 credit] (formerly 79.340*)

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: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCN 3401 [0.5 credit] (formerly 79.341*)

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: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCN 3901 [0.5 credit] (formerly 79.391*)

Architectural Techniques

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

Prerequisite: permission of the School.

ARCN 3902 [0.5 credit] (formerly 79.392*)

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: permission of the School.
Lecture, seminar, lab or field work six hours a week.

ARCN 4001 [0.5 credit] (formerly 79.401*)

Work Term 4

Prerequisites: Registration in the Co-op Option of the Bachelor of Architectural Studies Program.

ARCN 4102 [0.5 credit] (formerly 79.412*)

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: permission of the School.
Lectures two hours a week, laboratory two hours a week.

ARCN 4808 [0.5 credit] (formerly 79.488*)

Independent Study

(Elective Course)

ARCN 4901 [0.5 credit] (formerly 79.491*)

Work Term 5

Prerequisites: Registration in the Co-op Option of the Bachelor of Architectural Studies Program.

• **Design Studios/Design Thesis/Research (ARCS)**

ARCS 1005 [0.5 credit] (formerly 80.105*)

Drawing

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. (Core Course)

Prerequisite: registration in the B.A.S. program.
Six hours a week.
First offered 1998-99.

ARCS 1105 [1.0 credit] (formerly 80.115)

Studio 1

Spatial and temporal experience of architecture through various drawings and modeling exercises. Observation of existing and imagination of possible architectural

environments. On location at selected sites. (Core Course)

Prerequisite: registration in the B.A.S. program.
Studio eight hours a week.
First offered 1998-99.

ARCS 2105 [1.5 credits] (formerly 80.215)

Studio 2

Development of cultural imagination within the field of architecture. Inhabitation and spatial definition are explored through analysis and design of small-scale environments. Representational skills developed, including the conventions of architectural drawing and modeling. (Core Course)

Prerequisite: ARCS 1105.
Twelve hours studio, plus one hour lecture per week.
First offered 1999-2000.

ARCS 2106 [1.5 credits] (formerly 80.216)

Studio 3

Small-scale building projects explore architectural design as a form of cultural expression. Consideration of site, program, and the materials of building as the means for shaping architecture. (Core Course)

Prerequisite: ARCS 2105.
Twelve hours studio, plus one hour lecture per week.
First offered 1999-2000.

ARCS 3105 [1.5 credits] (formerly 80.315)

Studio 4

Sensory components of architecture: their use, effect, and symbolic potential. Light and lighting, sound, the sensation of heat and cold, and related phenomena studied in modest building proposals. Social considerations of architecture. The conventions of architectural drawing. (Core Course)

Prerequisite: ARCS 2106.
Twelve hours studio, plus one hour lecture per week.
First offered 2000-2001.

ARCS 3106 [1.5 credits] (formerly 80.316)

Studio 5

Building materials and practices within the context of increasingly complex building programs. Social context of architecture in relation to material expression. Modeling is stressed. (Core Course)

Prerequisite: ARCS 3105.
Twelve hours studio, plus one hour lecture per week.
First offered 2000-2001.

ARCS 4105 [1.5 credits] (formerly 80.415)

Studio 6

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 formal and graphic resolution. (Core Course)

Prerequisite: ARCS 3106.
Twelve hours studio, plus one hour lecture per week.
First offered 2001-2002.

ARCS 4106 [1.5 credits] (formerly 80.416)

Studio 7

The role of architecture in culture, stressing site and program with respect to their historic, social, and ecological implications. Synthesis of issues, methods and techniques of the undergraduate studio program. (Core Course)

Prerequisite: ARCS 4105.
Twelve hours studio, plus one hour lecture per week.
First offered 2001-2002.

ARCS 4600 [2.5 credits] (formerly 80.460)

Research Thesis 5.1

Opportunity for scholarly research in topics related to architecture. Thesis proposal requires approval by the Thesis Committee. The final submission must be within a prescribed format. (Core Course for B.Arch. students)

Prerequisites: fifth-year standing and approved thesis proposal.
Last offered 2002-2003.

ARCS 4601 [2.5 credits] (formerly 80.461)

Research Thesis 5.2

Opportunity for scholarly research in topics related to architecture. Thesis proposal requires approval by the Thesis Committee. The final submission must be within a prescribed format. In exceptional cases the Thesis Committee may allow this to be a continuation of ARCS 4600. (Core Course for B.Arch. students)

Prerequisites: fifth-year standing and approved thesis proposal.
Last offered 2002-2003.

ARCS 4606 [2.5 credits] (formerly 80.466)

Design Thesis 5.1

Opportunity for in-depth exploration of an architectural idea or issue. The thesis proposal requires approval by the Thesis Committee. (Core Course for B.Arch. students)

Prerequisites: fifth-year standing and approved thesis proposal.
Last offered 2002-2003.

ARCS 4607 [2.5 credits] (formerly 80.467)

Design Thesis 5.2

Opportunity for in-depth exploration of an architectural idea or issue. The thesis proposal requires approval by the Thesis Committee. In exceptional cases the Thesis Committee may allow this to be a continuation of ARCS 4606. (Core Course for B.Arch. students)

Prerequisites: fifth-year standing and approved thesis proposal.
Last offered 2002-2003.

ARCS 4700 [2.5 credits] (formerly 80.470)

Selected Topics Studio

In-depth exploration of an architectural idea or issue, including a directed studies component, given by the studio professor, that reinforces the explorations in the studio. (Core Course for B.Arch. students.)

Prerequisites: fifth-year standing and permission of the School.
Last offered 2002-2003.