

# **Division of Architecture**

# ***DIVISION OF ARCHITECTURE***

Architecture Building, Room 103  
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<http://www.arch.andrews.edu>

## **Faculty**

Llewellyn D. Seibold, *Director*  
Philip H. Bess, *Associate Director*  
Carey C. Carscallen  
William W. Davidson, *Professor Emeritus*  
Kathleen M. Demsky, *Library Director*  
Thomas B. Lowing  
Mark A. Moreno  
Michael Newman  
Arpad D. Ronaszegi  
Rhonda G. Root, *Assistant Director*

<b>Academic Programs</b>	<b>Credits</b>
Bachelor of Architecture	192
BS: Architectural Studies	61
Minor in Architectural Studies	28

**NOTE:** April 15, 2000—Deadline for application to the professional program.

## **MISSION**

The Division of Architecture seeks to identify, understand, and teach the nature and practice of architecture. Architecture commonly is understood to be the art of building. This art manifests specific architectural concerns (e.g., durability, convenience, beauty, and decorum) in ways that satisfy both the practical needs and the intellectual, aesthetic, and spiritual sensibilities of human

World Wide Web, and the Internet through various docking stations located in the architecture building.

**OTHER POLICIES**

Students are responsible for all policies outlined in the *Division of Architecture Student Handbook*.

**Professional Degree  
Bachelor of Architecture**

**PRE-ARCH YEAR ONE**

**General Education—29**

HIST 115, 116; ENGL111,112; COMM104; MATH165; BHSC100; Breadth: RELB100

**Architecture Core—14**

ARCH171, 172, 260

**Architecture Elective—3**

ARCH150

**PRE-ARCH YEAR TWO**

**General Education—4**

Religion elective

**Architecture Core—41**

ARCH110, 201, 202, 203, 210, 271, 272, 361, 362, 363

**Architecture Elective—3**

Choice - 3 credits

**THIRD THROUGH FIFTH YEARS**

**General Education—22**

ENGL306, PHYS131, 132, 3 credits-physical education, 8 credits-religion

**Architecture Core—93**

ARCH231, 232, 233, 310, 371, 372, 373, 370, 410, 434, 449, 459, 471, 472, 473, 545, 546, 571, 572, 573

**Architecture Electives—38**

**Total credits for BArch degree—247**

**Non-professional Degree  
BS: Architectural Studies**

**BS Core—53**

**General Education—81-84**

See general education requirements for Bachelor of Science degree.

**Major Requirements—26**

ARCH150, 171, 172, 260, 361, 362, 363.

**Major electives—27**

A minimum of 12 upper division credits from courses with ARCH acronyms.

**Cognate Requirements—8**

ART104, 207.

**Minor requirements—15-29**

**General Electives—29-19**

**Total credits for the BS degree 190**

**Minor in Architectural  
Studies**

**Minor 28**

ARCH150, 171, 172; plus 15 additional credits with a minimum of 8 upper division credits from courses with ARCH acronyms.

**Courses**

See inside back cover for symbol code.

**ARCH108 (4)**

**Introduction to Structural Mechanics**

Laws of static equilibrium, centroids, and moment

of inertia. Concepts of stress, strain, flexure, shear, and torsion. Basic design of simple structural members for steel, wood, and reinforced concrete. Open to all students except engineering, mathematics, or physics majors. Prerequisite: high-school algebra.

**ARCH110, 210, 310, 410 (3,3,3,3)**

**Structures I, II, III, IV**

Topics in statics, strength of materials, structural analysis, and design in reinforced concrete, steel, and wood. Wind and seismic loading. Prerequisite: MATH165 or approval of instructor.

**ARCH150 (3)**

**Introduction to Architecture**

Emphasis on design concepts, professional vocabulary, historical appreciation, contemporary issues, and values important to the mission of the Division of Architecture. Open to all students.

**ARCH171 (5)**

**Graphics**

Introduction to architectural graphics, media, documentation, and conventions. Exercises include freehand and drafted drawings of building plans, sections, and elevations, and an introduction to three-dimensional representations.

**ARCH172 (5)**

**Introduction to Design**

Introduction to formal composition and abstract architectural elements. Prerequisite: ARCH171.

**ARCH201 (4)**

**Construction I**

An overview of structural systems and a qualitative analysis of the flow of forces in buildings. Construction materials and assemblies, detailing, and material selection. Includes soil, concrete, masonry, metals, and wood.

**ARCH202 (4)**

**Construction II**

Weatherproofing, finish materials, and detailing in construction. System and component selection and introduction to cost estimating. Prerequisite: ARCH201.

**ARCH203 (6)**

**Construction Drawings**

Introduction to contract document conventions and production of construction drawings. Computer-based applications are used as the primary drawing tool. Prerequisite: ARCH202.

**ARCH230 \$ (4)**

**Surveying**

Introduction to measurement and error theory. Plane and topographic surveys, horizontal and vertical control, earthwork computations. Basic principles of photo-grammetry. Prerequisite: secondary-school trigonometry. May not be offered each year.

**ARCH231 (4)**

**Environmental Technology I**

Introduction to environmentally, energy-conscious design concepts with the primary focus on climate and site analysis. An overview of standard evaluation methods for thermal performance in both design development and qualitative building evaluations covers Heat Loss/Gain, Thermal and Solar Envelope, HVAC System Selection, and Layout.

**ARCH232 (4)**

**Environmental Technology II**

Principles of water conservation, collection and

- ARCH345** (2) ARCH371.  
*Safety and Accessibility*  
Lectures, seminars, and exercises on safety systems and barrier-free requirements. Includes principles for the accommodation of human disabilities and present code requirements within the practice of architecture. Prerequisite: ARCH201. May not be offered each year.
- ARCH350** (4)  
*Architectural Design*  
Studio with topics and projects appropriate to the major or minor in architectural studies. Repeatable to 12 credits. Prerequisite: ARCH172. May not be offered each year.
- ARCH361** (3)  
*History of Architecture I*  
Chronological overview of Western architecture from Egypt to the Middle Ages. Emphasis on the vocabulary and arrangements of buildings and their symbolic relationships to a cultural and human context. Prerequisites: ARCH260, ENGL112, HIST115,116.
- ARCH362** (3)  
*History of Architecture II*  
Chronological overview of architects and buildings from medieval times to nineteenth-century revival styles. Readings in architectural theory and history. Prerequisites: ARCH260, ENGL112, HIST115,116.
- ARCH363** (3)  
*History of Architecture III*  
Studies in the history of modern architecture from nineteenth-century experiments in iron to the development and culmination of the International style. Readings in architectural theory and history. Prerequisites: ARCH260, ENGL112, HIST115,116.
- ARCH365** (4)  
*Issues in Contemporary Architecture*  
Lectures, readings, visits with architects and to architectural sites. Topics include current architectural developments in North America, Europe, Scandinavia, and Australia. May be offered as part of European Architecture tour or off-campus summer quarter. Prerequisite: ARCH363. May not be offered each year.
- ARCH370** (3)  
*Person-Environment Theory*  
Studies in the relationship between people and the environment, including a consideration of artifacts, buildings, gardens, towns, and cities, as well as the cultural and natural landscape. Prerequisite: ARCH271.
- ARCH371** (6)  
*Construction/Sustainable Design Studio*  
Design projects based on the concept of sustainability, using building materials and construction methods to achieve resource-efficient buildings. Prerequisites: ARCH272 and acceptance to Professional Program.
- ARCH372** (6)  
*Background Building Studio*  
Design of commercial and/or residential building(s) of increased programmatic complexity, in the physical and cultural setting of a traditional small town or urban neighborhood. Prerequisite:
- ARCH373** (6)  
*Foreground Building Studio*  
Design of a public and/or civic building in the physical and cultural setting of a traditional small town or urban neighborhood. Prerequisite: ARCH372.
- ARCH390** (1-6)  
*Special Topics in \_\_\_\_\_*  
Based on selected topics of current interest in architecture offered by the Division of Architecture. Repeatable in different topic areas. May not be offered each year.
- ARCH395** (2-6)  
*Community Project in Architecture*  
“Hands-on” involvement in humanitarian and/or

ARCH557. Grade is recorded as DG until completion of ARCH557. Prerequisite: ARCH555.

**ARCH557 (8)**

***Thesis Project***

Student must demonstrate ability to apply and integrate skills in design and presentation of a building. In addition to the written thesis, presentation may include drawings, renderings, models, films, video, computer programs, and other documentation. Final presentation is announced and open to the university. Prerequisite: ARCH556.

**ARCH558 (6 max)**

***Thesis Project Development***

Continuation of design project. Emphasis on completion and presentation of thesis or final design project. Prerequisite: ARCH557.

**ARCH571 (6)**

***Urban Design Studio***

Urban design proposal for a small town, urban neighborhood, or college campus. Prerequisite: ARCH473.

**ARCH572 (6)**

***Topic Studio in \_\_\_\_\_***

Topic of studio varies. Prerequisite: ARCH571.

**ARCH573 (6)**

***Visiting Critic Studio***

Design project(s) to be determined by visiting critic. Prerequisite: ARCH572.