

Architecture (ARCH)

Contact the Design and Consumer Education Department for further information.

(760) 744-1150, ext. 2349

Office: P-8A

Associate in Science Degrees -

AS Degree requirements are listed in Section 6 (green pages).

- Architecture
- Architectural Drafting

Certificates of Achievement -

- Architecture
- Architectural Drafting
- Eco-Building Professional

PROGRAMS OF STUDY

Architecture

This coursework prepares students for transfer into a university architectural program. Emphasis is on current architectural and construction practices, fundamental design skills, sustainable building guidelines, and transfer preparation.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 105	Basic Architectural Drafting	3
ARCH 120	Architectural History	3
ARCH 121	Multicultural Architectural History	3
ARCH 135	Architectural Materials and Methods of Construction	3
ARCH 144	Architectural Drawing and Color	4
ARCH 145	Architectural Delineation and Pictorial Drawing	4
ARCH 215	Architectural Design Fundamentals I	5
ARCH 216	Architectural Design Fundamentals II	5

Electives (Select 3 units)

DT/ENGR 101	AutoCAD Introduction to Computer Aided Drafting	3
GCIP 140	Digital Imaging/Photoshop I	4

TOTAL UNITS 33

Students should review specific course requirements and transfer agreements with their architectural instructor and transfer counselor. General education course requirements such as mathematics, physics, etc. will vary depending upon the specific university program.

Architectural Drafting

Prepares students for employment as a design/production drafter in the field of architecture.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 105	Basic Architectural Drafting	3
ARCH 135	Architectural Materials and Methods of Construction	3
ARCH 144	Architectural Drawing and Color	4
ARCH 145	Architectural Delineation and Pictorial Drawing	4
ARCH 155	Architectural Theory	3
ARCH 160	Environmental Architecture and Design	4
ARCH 200	Advanced Computer Aided Architectural Drafting	4
ARCH 202	Introduction to Revit Architecture	3
DT/ENGR 101	AutoCAD Introduction to Computer Aided Drafting	3
DT/ARCH 202	Introduction to Revit Architecture	3

Electives (Select 9 units)

ARCH 120	Architectural History	3
ARCH 121	Multicultural Architectural History	3
CSIT 120	Computer Applications	3
CE 100	Cooperative Education	1 - 4
DT 126	AutoCAD Intermediate Computer Aided Drafting	3
MATH 115	Trigonometry	3

TOTAL UNITS 43

Eco-Building Professional

This program is designed to provide the knowledge and skills needed to promote energy and resource efficient building practices through current code changes and new tax cost payback. Graduates will be prepared for numerous jobs within the deconstruction and remodel industries and would have skills needed by builders, contractors, architects or designers seeking assessment of current construction methods for framing, water use and LEED environmental compliance.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 135	Architectural Materials and Methods of Construction	3
ARCH 160	Environmental Architecture and Design	4
ARCH 216	Architectural Design Fundamentals II	5
ID 105	Materials and Resources	3
ID 130	Light and Color	3

TOTAL UNITS 18

Recommended Electives: GEOG 120, MATH 60

COURSE OFFERINGS

ARCH 105 Basic Architectural Drafting (3)

1½ hours lecture - 4½ hours laboratory

Transfer acceptability: CSU

An introduction to architectural drafting including symbols, lettering, construction principles, details, and codes as related to the development of working drawings for simple residential design.

ARCH 106 Intermediate Architectural Drafting (3)

1½ hours lecture - 4½ hours laboratory

Prerequisite: A minimum grade of 'C' in ARCH 105

Transfer acceptability: CSU

A continued study in residential design including study in details, materials, elevations, specifications, electrical, and plumbing.

ARCH 120 Architectural History (3)

3 hours lecture

Transfer acceptability: CSU; UC

An overview of architectural history beginning with prehistoric cultures and continuing through Egyptian and Mesopotamia, Aegean and Greek, Roman and Byzantine, Romanesque and Gothic, and the Renaissance and Baroque periods. The second half of the course focuses on the development of modern western architecture.

ARCH 121 Multicultural Architectural History (3)

3 hours lecture

Transfer acceptability: CSU; UC

A comparative study of the architecture of cultures outside the Western mainstream including: Pre-Columbian America; India and Southeast Asia, China and Japan, Russia and Eastern Europe; and the Moslem Empires. Special emphasis on the cultural forces and conditions which shaped and evolved the architecture.

ARCH 129 Basic Architectural Drafting with Auto CAD (3)

1½ hours lecture - 4½ hours laboratory

Transfer acceptability: CSU

Basic fundamentals of architectural drafting using AutoCAD software to include the following drawings: plot plans, floor plans, foundation plans, framing plans, sections, elevations, and basic construction details.

ARCH 135 Architectural Materials and Methods of Construction (3)
 1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
 An introduction to the use and application of building construction materials and processes.

ARCH 144 Architectural Drawing and Color (4)
 3 hours lecture - 3 hours laboratory
Transfer acceptability: CSU; UC
 An introduction to basic architectural drawing and design that explores the theory and application of perspective, shades and shadows, and color to architectural sketching, drawing, and model building. Includes a basic architectural design problem exploring the concept of architectural complexity.

ARCH 145 Architectural Delineation and Pictorial Drawing (4)
 3 hours lecture - 3 hours laboratory
Recommended preparation: ID/ARCH 150
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU; UC
 Principles and techniques of pictorial drawing in architecture including isometric, oblique, and perspective projection; shades and shadows; and presentation graphics. The three dimensional and shading capabilities of AutoCAD will be utilized in coordination with the use of Photoshop and SketchUP software as a color rendering tool. Abstract architectural design concepts will also be explored.

ARCH 150 Computer Aided Drafting for Designers (CADD) (3)
 1½ hour lecture - 4½ hours laboratory
Note: Cross listed as ID 150
Transfer acceptability: CSU
 Introduction to computer aided drafting for architects and interior designers, to include two and some three-dimensional drawing, blocks, draw and modify design tools, rendering, barrier free design, and architectural floor plan layouts.

ARCH 155 Architectural Theory (3)
 3 hours lecture
Transfer acceptability: CSU
 A study and analysis of the concepts and philosophies that have influenced or been the basis of architectural form from the Classical period to the present. The analysis will include the use of drawing and model-building tools to gain an understanding of these principles applied to specific structures throughout history.

ARCH 160 Environmental Architecture and Design (4)
 3 hours lecture - 3 hours laboratory
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU; UC
 An introduction to the theory and application of bio-climate adaptive architectural design in small scale buildings including effective energy use, solar geometry, environmental measurements, heat flow, heat transfer, and thermal masses. Emphasis is on design and construction principles for lighting, passive shading, heating, cooling and ventilating envelope load-dominated buildings. This is a service learning course. Students must be involved in relevant community service as a part of this course work. Students will conduct research and work collaboratively towards a solution for community development.

ARCH 196 Special Problems in Architecture (1, 2, 3)
 ½, 1, or 1½ hours lecture - 1½, 3, or 4½ hours laboratory
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU; UC - credit determined by UC upon review of course syllabus
 Designed to enrich the student's experience within the Architecture program and is of a research or special project nature. Content to be determined by the need of the student under signed contract with the instructor.

ARCH 200 Advanced Computer Aided Architectural Drafting (4)
 2 hours lecture - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in ARCH/ID 150, or ARCH/IDT 125, and a minimum grade of 'C' in ARCH 105, or concurrent enrollment in ARCH 105

Transfer acceptability: CSU
 Advanced techniques in the operation of AutoCAD software for architectural applications. Preparation of various architectural working drawings from a preliminary residential design.

ARCH 202 Introduction to Revit Architecture (3)
 1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
 Preparation of basic 3D architectural information models and (BIM). Manipulation for preparation of individual architectural working drawings, including: dimensioned floor plans, building sections, elevations, etc. using Revit software.

ARCH 215 Architectural Design Fundamentals I (5)
 2½ hours lecture - 7½ hours laboratory
Recommended preparation: ARCH 144 and 145
Transfer acceptability: CSU; UC
 Development of problem solving and analytical skills in architectural design involving consideration of factors of architectural form in two- and three-dimensional compositions, and design concepts and applications.

ARCH 216 Architectural Design Fundamentals II (5)
 2½ hours lecture - 7½ hours laboratory
Recommended preparation: ARCH 145 and 215
Transfer acceptability: CSU; UC
 Complex architectural problems involving consideration of factors of structure, site, and climate.

Art (ART)

Contact the Art Department for further information.
 (760) 744-1150, ext. 2302
 Office: D-14

Associate in Science Degrees -

AS Degree requirements are listed in Section 6 (green pages).

- Graphic Design
- Illustration
- Interactive Media Design - Emphasis in 3D Modeling and Animation
- Interactive Media Design - Emphasis in Multimedia Design

Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).

- Pictorial Arts - Emphasis in Painting
- Pictorial Arts - Emphasis in Printmaking
- Three-Dimensional Arts - Emphasis in Ceramics
- Three-Dimensional Arts - Emphasis in Crafts
- Three-Dimensional Arts - Emphasis in Glass
- Three-Dimensional Arts - Emphasis in Jewelry and Metalsmithing
- Three-Dimensional Arts - Emphasis in Sculpture

Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).

- Interactive Media Design - Emphasis in 3D Modeling and Animation
- Interactive Media Design - Emphasis in Multimedia Design

Certificates of Proficiency -

Certificate of Proficiency requirements are listed in Section 6 (green pages).

- Digital Animation, Compositing, and Music

PROGRAMS OF STUDY

Digital Animation, Compositing, and Music

This program is directed at the digital design and implementation of 3D animations, graphic compositing and music.