

**ARCH 215**  
**Architectural Perspective and Rendering**

*Prerequisite:* ARCH 115

*Advisory:* ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement; ENGT 105

*Transfers to:* CSU

In this course, students are introduced to the theory and practical application of perspective drawing and rendering as used in architecture. Topics include one and two-point perspectives, entourage, and an introduction to rendering techniques such as markers, pastels, pencil, pen, and ink. Presentation techniques also are discussed.

**4 Units**

**54 Lecture hours**

**54 Lab hours**

**ARCH 225**  
**Commercial Architecture: Design and Construction**

*Prerequisite:* ARCH 115

*Advisory:* ENGL 030 or ENLA 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement; ENGT 150 or ENGT 170 or industry experience in CADD applications

*Transfers to:* CSU

This advanced level course is for students pursuing an A.S. Degree or Certificate in Architecture and Architectural Design and Drawing. The course includes the study of common planning concerns as well as the most significant building ordinances and codes which influence the design of commercial spaces. As a component of the course, students will prepare select architectural plans for a commercial building project. Emphasis is placed on effective space utilization, technical plans, elevations, aesthetics, accessible requirements, site utilization and development, traffic flow, and landscaping.

**4 Units**

**54 Lecture hours**

**54 Lab hours**

**ARCH 235**  
**Architectural Design Studio**

*Prerequisite:* ARCH 215

*Advisory:* ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement; ENGT 150

*Transfers to:* UC, CSU

This course is for students pursuing an Associate in Science Degree in Architecture with the intent of transferring and continuing their study of architecture. Topics include multiple design principles, concept applications, spatial and form definition, preliminary studies, interior and exterior space planning, site orientation, styles, and materials. Student design concepts are expressed verbally and graphically using presentation drawings, isometrics and perspectives,

conceptual models, renderings, and photographs. Students develop skills in a studio atmosphere dealing with existing conditions, problem solving using design criteria, codes, and environmental relationships for abstract, residential, and small commercial structures.

**4 Units**

**54 Lecture hours**

**54 Lab hours**

**ARCH 236**  
**Architectural Design Studio II**

*Prerequisite:* ARCH 235

*Advisory:* ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement

*Transfers to:* UC, CSU

This second-level course builds upon the foundation of the Architectural Design Studio course (ARCH 235). The course presents additional design approaches to the spatial and form definition of an architectural program; urban and site planning; and topographic, civil, and environmental issues. Architectural design proposals and projects are expressed verbally and graphically using presentation drawings, conceptual models, renderings, and photographs. Students enhance their design skills in a studio atmosphere, working to justify their design solutions.

**4 Units**

**54 Lecture hours**

**54 Lab hours**

**ARCH 260**  
**Residential Architecture Using Revit and 3D Software**

*Prerequisite:* ARCH 115; ENGT 150

*Advisory:* ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement

*Transfers to:* CSU

This course is for students pursuing an Associate of Science Degree in Architecture or Architectural Design and Drawing with the intent of transferring and continuing their study of architecture. It presents an intensive study of building information modeling (BIM) applications as they relate to architecture. Utilizing the latest releases of Revit BIM software and technical and architectural drafting conventions learned in previous courses, students will produce two- and three-dimensional (2D and 3D) BIM-generated residential architectural drawings and 3D virtual models. High technology skills necessary to function as a designer or computer-aided design and drafting (CADD) drafter are emphasized.

**4 Units**

**54 Lecture hours**

**54 Lab hours**

**ARCH 261**  
**Revit for Advanced BIM Architectural, Structural and MEP Applications**

*Prerequisite:* ARCH 115, ENGT 150

*Advisory:* ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement

*Transfers to:* CSU

This course is for students pursuing an Associate of Science Degree in Architecture or Architectural Design and Drawing with the intent of transferring and continuing their study of architecture. It presents an intensive study of building information modeling (BIM) applications as they relate to architecture. Utilizing the latest releases of Revit software and technical and architectural drafting conventions learned previously in other courses, students will produce two- and three-dimensional (2D and 3D) BIM generated commercial architectural drawings and 3D virtual models. Advanced BIM applications extend the fundamentals learned in the Residential Architecture Using Revit and 3D Software course (ARCH 260) to include structural, mechanical, electrical, and plumbing extensions of the Revit software. High technology skills necessary to function as a designer or computer-aided design and drafting (CADD) drafter are emphasized.

**4 Units**

**54 Lecture hours**

**54 Lab hours**

**ARCH 280**  
**Advanced MicroStation for CADD & BIM Applications (Same as ENGT 280)**

*Prerequisite:* ENGT 170 or verifiable work experience and proficiency in MicroStation XM or V8i

*Advisory:* ENGL 030 or ENLA 034 or appropriate placement; READ 043 or appropriate placement; ENGT 101 or two years of high school drafting

*Transfers to:* CSU

This course is for students pursuing an advanced study in MicroStation 3D parametric CADD (Computer Assisted Design and Drafting) and the BIM (Building Information Modeling) approach to building design using Bentley Architecture. Students will apply previously learned drafting conventions to produce two and three dimensional CADD and BIM generated mechanical and architectural drawings and virtual design models. This course benefits all students studying Architecture, Civil Engineering, Drafting, Design and Computer Graphics. High technology skills which are necessary to function as a designer or CADD Drafter are emphasized.

**4 Units**

**54 Lecture hours**

**54 Lab hours**