# **ARCHITECTURE**

The Architecture program provides a balance of architectural, technical design, and lower division courses to provide students with a diverse foundation of knowledge in the fields of architecture, landscape architecture, and urban planning which prepares students for careers in a wide range of design fields. The program is designed to prepare students to work as architectural technicians or designers in an architectural, engineering or development office. The curriculum visualizes architecture as a cultural, creative, technical practice, and discipline with direct social impact. The program provides preparation for baccalaureate degrees and/or the training for professional careers while providing a technical associate degree or certificate of achievement.

## ARCH V10 Introduction to Architectural Design 2 Units

Formerly: ARCH 10 In-Class Hours: 35 lecture

This course is the study of architectural design, including concepts of size, shape, material, context, number, variety and relationship (pattern, hierarchy, contrast, and balance). Students will design and execute two-dimensional presentations composed of drawings, images, and/or text that support intended communication and provide solutions to defined design problems.

**Grade Modes:** Letter Graded **Field Trips:** May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU, UC
UC Credit Limitations: None
CSU GE-Breadth: None

IGETC: None

ARCH V11 Blueprint Reading: Architectural/Construction 3 Units

Formerly: CT 20

Same-As: CT V20, DRFT V02B In-Class Hours: 52.5 lecture

This course provides experience in construction blueprint reading and plan review. Experiences will include the study of lines, symbols, notations and dimensions used on architectural drawings. Code

interpretation and design compliance will be stressed. **Grade Modes:** Letter Graded, Credit by exam, license etc. **Degree Applicability:** Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU
UC Credit Limitations: None
CSU GE-Breadth: None

IGETC: None

## ARCH V12 Advanced Blueprint Reading: Commercial/Industrial 3 Units

Same-As: CT V12 In-Class Hours: 52.5 lecture

Advisories/Rec Prep: ARCH V11 or CT V20 or DRFT V02B or equivalent This is an advanced blueprint reading course for inspectors, contractors, and designers interested in commercial and industrial construction. This course will provide training in blueprint reading comprehension, system assemblies, and material specifications. Subjects to be covered will include soils, foundations, site work, concrete, masonry, structural steel, welding, and mechanical and electrical systems.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No

Pass Grading

Credit Limitations: see counselor.

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V15 Design and Model Construction 2 Units

In-Class Hours: 17.5 lecture, 52.5 laboratory

This course provides beginning students with a hands-on design and construction experience in coordination with their first design and visual communication studios. Focus will be on the safe operation of wood and metal tools and equipment, and the design and construction of a small scale project.

Grade Modes: Letter Graded, Student Option-Letter/Credit, Pass/No

**Pass Grading** 

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V21 Architectural Graphics I 3 Units

Formerly: ARCH 21

In-Class Hours: 35 lecture, 52.5 laboratory

Advisories/Rec Prep: DRFT V03 or 1 year of drafting experience This course is the study and practice of basic techniques used for graphic communication. Techniques will include orthographic and isometric projection, mechanical perspective, shades and shadows.

**Grade Modes:** Letter Graded **Field Trips:** May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

## ARCH V22 Architectural Graphics II 3 Units

In-Class Hours: 35.0 lecture, 52.5 laboratory

Prerequisites: ARCH V21

This course includes further development of freehand and mechanical graphic communication skills for representation of conceptual ideas,

analysis and design concepts. **Grade Modes:** Letter Graded **Field Trips:** May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V23 Introduction to AutoCAD 2 Units

Same-As: DRFT V05A

In-Class Hours: 17.5 lecture, 52.5 laboratory

Advisories/Rec Prep: DRFT V03 or 1 year of drafting experience This course is an introduction to the use of AutoCAD including commands, editing, printing and plotting with emphasis on two-dimensional, and introduction to three-dimensional drawings. Industry trends, practices, and employee/employer expectations will be

addressed.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No

Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V24 Advanced Operations of AutoCAD 2 Units

Same-As: DRFT V05B

*In-Class Hours:* 17.5 lecture, 52.5 laboratory *Prerequisites:* ARCH V23 or DRFT V05A

This course emphasizes AutoCAD instruction including three-dimensional drafting, customization of AutoCAD, advanced computer assisted drafting (CAD) methods, and an introduction to computer assisted machining (CAM). The course will address industry trends, practices, and employee/

employer expectations.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No

Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

## ARCH V25 Digital Tools for Architecture 3 Units

*In-Class Hours:* 35.0 lecture, 52.5 laboratory *Advisories/Rec Prep:* ARCH V23/DRFT V05A

The course is designed to introduce digital tool components to architecture students. Course assignments develop the student's understanding and skills associated with 3D modeling (Sketchup, Rhino), image editing (Photoshop) and page layout (In-Design), or similar

program applications. **Grade Modes:** Letter Graded **Field Trips:** May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V31 Revit Practice I 3 Units

In-Class Hours: 35.0 lecture, 52.5 laboratory

Advisories/Rec Prep: DRFT V03 or 1 year of drafting experience This course is designed to train students in preparing architectural construction drawings. Drawings include site plan, foundation plan, floor plan, elevation and detail drawings. Emphasis is on concepts, methods, processes, detailing and documentation of wood frame construction.

**Grade Modes:** Letter Graded **Field Trips:** May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU
UC Credit Limitations: None
CSU GE-Breadth: None

IGETC: None

#### ARCH V32 Revit Practice II 3 Units

In-Class Hours: 35.0 lecture, 52.5 laboratory

Advisories/Rec Prep: DRFT V03 or 1 year of drafting experience This course is designed to train students in preparing construction drawings. Emphasis will be placed on the techniques and methods for major building material use, such as wood, masonry, concrete, and steel.

Design principles will be discussed.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU
UC Credit Limitations: None
CSU GE-Breadth: None

## ARCH V33 Computer Applications in Architecture 3 Units

In-Class Hours: 35.0 lecture, 52.5 laboratory

Advisories/Rec Prep: ARCH V31, and ARCH V23/DRFT V05A

This course provides an opportunity for students to apply computer applications in architecture through the assignment of architectural projects. Students may select individual projects focusing on graphic techniques, design or construction drawings. All work will be performed using computer assisted drafting (CAD).

Grade Modes: Letter Graded, Student Option-Letter/Credit, Pass/No

Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V40 Architectural Design I 3 Units

In-Class Hours: 26.25 lecture, 78.75 laboratory

Advisories/Rec Prep: DRFT V03 or 1 year of drafting experience This course includes theories, principles, methods and means pertaining to the creation of architectural form, space and organizations, and the incorporation of function and light as issues that shape the built environment and support the communication of intended concepts and meanings.

**Grade Modes**: Letter Graded **Field Trips**: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

## ARCH V41 Architectural Design II 3 Units

Formerly: ARCH 41

In-Class Hours: 26.25 lecture, 78.75 laboratory

Advisories/Rec Prep: ARCH V40

This course includes theories, principles, methods and means pertaining to the incorporation of context, structure and climate as issues that shape the built environment and support the communication of intended concepts and meanings.

Grade Modes: Letter Graded Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU, UC UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### **ARCH V58 International Residential Code 3 Units**

Same-As: CT V58

In-Class Hours: 52.5 lecture

This course is an introduction to the International Residential Code (IRC). Students will learn interpretation and use of the residential building code as it applies to current construction. Design criteria and inspection processes will be emphasized. Course content will include information related to residential code certification for inspectors and designers. Topics of instruction will follow the content of the most recent IRC as

published by the International Code Council (ICC).

**Catalog Notes:** If you need to repeat this course for licensing or certification requirements, go to the Admissions and Records office or its website for the petition form to repeat this course.

Grade Modes: Letter Graded, Student Option-Letter/Credit, Pass/No

Pass Grading

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V59 International Building Code 3 Units

Same-As: CT V59

In-Class Hours: 52.5 lecture

This is an introduction to the International Building Code (IBC), as published by the International Code Council (ICC). The IBC is the building code used for commercial and industrial structures. Subjects to be covered will include structural design requirements, inspection procedures, code comprehension and ICC inspector certification.

Catalog Notes: If you need to repeat this course for licensing or certification requirements, go to the Admissions and Records office or

website for the petition form to repeat this course.

Grade Modes: Letter Graded, Student Option-Letter/Credit, Pass/No

Pass Grading

Degree Applicability: Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU
UC Credit Limitations: None
CSU GE-Breadth: None

IGETC: None

## ARCH V60 Simplified Engineering for Building Construction 3 Units

Formerly: ARCH 60 Same-As: CT V60

In-Class Hours: 52.5 lecture

This is an introductory course designed to give the student an overview of basic construction engineering principles. This course will study subjects such as live and dead loads, uniform and concentrated loads, footing and foundation design, post and beam sizing, shear transfer, load path transfer, building material selection, connection methods, safety

codes, and other aspects of structural design.

**Grade Modes:** Letter Graded, Student Option- Letter/Credit, Pass/No

**Pass Grading** 

Degree Applicability: Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU
UC Credit Limitations: None
CSU GE-Breadth: None

#### ARCH V64 Building Construction: Materials and Methods 3 Units

Formerly: ARCH 64 Same-As: CT V64

In-Class Hours: 52.5 lecture

This course is an introduction to residential and light commercial building construction, including materials, foundations, framing, roof and stair cutting, drywall, finish work and building codes. The course is intended to serve as an overview of the construction process.

Grade Modes: Letter Graded, Student Option-Letter/Credit, Pass/No

**Pass Grading** 

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V67 Building Accessibility Regulations 2 Units

Same-As: CT V67 In-Class Hours: 35 lecture

This course is a study of California and federal regulations, such as the Americans with Disabilities Act (ADA) and California Title 24 Regulations, which cover building accessibility for disabled persons. Both public and private buildings will be studied as well as parking, exterior routes of travel, entrances, exits and other accommodations. This course is intended for building designers as well as contractors and inspectors. This course will also help prepare students for industry certification.

Grade Modes: Letter Graded, Student Option-Letter/Credit, Pass/No

Pass Grading

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: None

## ARCH V75 Introduction to Electrical, Plumbing, and Mechanical

Systems 3 Units Same-As: CT V75

In-Class Hours: 52.5 lecture

This course is an introduction to residential and light commercial electrical, plumbing, heating, air conditioning, and ventilation systems. Subjects to be studied will include vocabulary, equipment, materials, construction methods, system design, and basic inspection requirements.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No

Pass Grading

Degree Applicability: Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU
UC Credit Limitations: None
CSU GE-Breadth: None

IGETC: None

#### ARCH V90 Directed Studies in Architecture 1-6 Units

In-Class Hours: 52.5-315.0 laboratory

This course offers specialized study opportunities for students who wish to pursue projects not included in the regular curriculum. Students are accepted only by a written project proposal approved by the discipline prior to enrollment.

Grade Modes: Letter Graded, Student Option-Letter/Credit, Pass/No

Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None
Transfer Credit: CSU
UC Credit Limitations: None
CSU GE-Breadth: None

IGETC: None

## ARCH V95 Architecture Internship I 1-4 Units

In-Class Hours: 60-240 unpaid cooperative

Prerequisites: Completion or concurrent enrollment in one course in the

discipline

Corequisites: Enrolled in a minimum of 7 units to include internship

Enrollment Limitations: Department Chair approval.

This course offers students who are volunteers (unpaid) an opportunity to obtain work experience related to their field of study. Students are accepted as a result of consultation with a designated faculty member in the discipline and the acceptance of an approved work proposal. This is an unpaid occupational work experience course, where 1 unit of credit is earned for each 60 hours of unpaid internship. A maximum of 4 units can be completed in a semester, and no more than 16 units can be earned in total

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Course may be taken up to 3 times for credit.

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU UC Credit Limitations: None CSU GE-Breadth: None

IGETC: None

#### ARCH V96 Architecture Internship II 1-4 Units

In-Class Hours: 75-300 paid cooperative

Prerequisites: Completion of or concurrent enrollment in one course in

the discipline

Corequisites: Enrolled in a minimum of 7 units to include internship

Enrollment Limitations: Department Chair approval.

This course offers students who are employed in the field an opportunity to expand their work experience related to their field of study. Students are accepted as a result of consultation with a designated faculty member in the discipline and the acceptance of an approved work proposal. This is a paid occupational work experience course, where 1 unit of credit is earned for each 75 hours of paid internship. A maximum of 4 units can be completed in a semester, and no more than 16 units can be earned in total.

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Course may be taken up to 3 times for credit.

Degree Applicability: Applies to Associate Degree

AA/AS GE: None Transfer Credit: CSU UC Credit Limitations: None CSU GE-Breadth: None

- Architectural Design, Associate in Science (http://catalog.vcccd.edu/ ventura/programs-courses/architecture/architectural-design-as/)
- Architectural Science, Associate in Science (http:// catalog.vcccd.edu/ventura/programs-courses/architecture/ architectural-science-as/)
- Architectural Design, Certificate of Achievement (http://catalog.vcccd.edu/ventura/programs-courses/architecture/architectural-design-coa/)
- Architectural Science, Certificate of Achievement (http://catalog.vcccd.edu/ventura/programs-courses/architecture/architectural-science-coa/)
- Architectural Technology, Certificate of Achievement (http://catalog.vcccd.edu/ventura/programs-courses/architecture/architectural-technology-coa/)