

ARCHITECTURE

Victor Valley College does not offer an Architecture program for transfer but does however offer preparatory courses for transfer into a School of Architecture. These courses are offered through our Architecture Drafting and Design Program. Students can obtain Architecture related certificates that will prepare them to enter into a School of Architecture at the university level with an Associate in Science degree or go directly into the workforce.

An architect develops concepts for design projects which range from single objects such as a piece of furniture, designing homes to complex high-rise office buildings. Our Architecture program is centered on learning the necessary software programs, such as AutoCAD and REVIT that are used in architectural studios across the country. You will also have a design laboratory experience with students progressing toward comprehensive architectural projects, model building and rendering. Architecture is an impacted major at some universities. As a result, students need to maintain a high GPA, complete as many course requirements as possible before applying for admission and research all additional program requirements for specific colleges to which they will be applying. A portfolio of each prospective student's work is usually required with the application. Therefore, students need to contact the college of choice early in their education to assure proper preparation and presentation of their work.

Career Opportunities

Architect, Architectural Drafter, CAD Management, CAD Operator, Cabinet Shop Detailer, Civil Drafter Computer Electrical Drafter, Electronics Drafter, Graphics Designer, Interior Designer, Landscape Architect, Landscape Designer, Mechanical Drafter, Public Works Technician, Steel Fabricator Drafter, Structural Drafter, Technical Illustrator

Note: Associate of Science Degree programs require completion of at least 60 units of credit, which normally will take 4 semesters. Certificate programs, many of which lead to an Associate of Science degree, vary in the number of units required. Most can be completed in 2 - 4 semesters. Each course required for a certificate must be completed with a "C" grade or better. All can be counted toward its related degree.

Transfer

- UC campuses offering Architecture include Berkeley and Los Angeles
- CSU campuses that offer Architecture include Pomona, San Luis Obispo and Chico
- Private schools offering Architecture include University of Southern California (USC); New School of Architecture and Design San Diego; California College of the Arts, San Francisco; Academy of Art University, San Francisco; and University of Nevada Las Vegas

For the most up-to-date information on these programs and others, visit assist.org (<https://www.assist.org/>), or, for private schools, aiccu.edu (<https://www.aiccu.edu/>). Please stop by the Transfer Center in Building 23 or make an appointment with a counselor if you have questions.

Architectural Drafting and Design, AS

State Control Number: 37152

Program Code: ARCHDD.AS

Approved for Federal Financial Aid: Yes

This curriculum leads to the Associate of Science Degree for employment in the AEC (Architectural/Engineering/Construction) and Design industries, and Public Works/Utilities. The program includes applications such as BIM (Building Information Modeling), CADD (Computer Assisted Design and Drafting), LEED (Leadership in

Energy & Environmental Design), 3D Printing, and traditional drafting methods and standards. This program is not designed to fulfill requirements for transfer to a university in Architecture. For baccalaureate or advanced degrees, see admission and transfer requirements for individual colleges and universities.

To earn this degree, complete the major coursework with "C" grades or better and all of the following graduation requirements: 60 minimum degree-applicable units (including a maximum 4 units of activity); 2.0 minimum overall GPA; 12 degree-applicable units through VVC; Information Competency; Global Citizenship; Kinesiology, and the VVC General Education pattern (<https://catalog.vvc.edu/degrees-certificates/vvcge/#vvcge>). Courses may count in one area only, either in the major or in a general education category. Courses counted in one AA/AS major may not be used in another AA/AS major.

Code	Title	Units
Required Courses		
ARCH 108	Architectural Presentation	3.0
ARCH 250	Introduction to REVIT for Architectural CAD	3.0
ENGD 101	Introduction to Drafting	3.0
ENGD 103	Blueprint Reading for Construction	3.0
ENGD 110	Introduction to 2-D AutoCAD	3.0
ENGD 210	Advanced 2-D Autocad	3.0
Total Units		18

Architectural CADD Technician I Certificate of Achievement

State Control Number: 37137

Program Code: ACT1.CERT

Approved for Federal Financial Aid: Pending (<https://catalog.vvc.edu/student-resources/financing-education/#Pending-FedAid>)

The Architectural CADD (Computer-Aided-Drafting and Design) Technician I certificate prepares students to work in the field of Architecture as a CADD drafter. Students will be knowledgeable in REVIT and AutoCAD software and understand the basics of producing construction documents using both REVIT and AutoCAD. Students will have a conceptual knowledge of 3-D modeling and rendering. Students will also be able to perform print reading tasks as they relate to commercial and residential architecture.

Code	Title	Units
Required Courses		
ARCH 108	Architectural Presentation	3.0
ARCH 250	Introduction to REVIT for Architectural CAD	3.0
ENGD 101	Introduction to Drafting	3.0
ENGD 103	Blueprint Reading for Construction	3.0
ENGD 110	Introduction to 2-D AutoCAD	3.0
ENGD 210	Advanced 2-D Autocad	3.0
Total Units		18

Architecture & Engineering Drafting Courses

ARCH 108 Architectural Presentation (3.0 Units)

A study of two common architectural presentation techniques: model making and illustration. Students will develop skill in creating architectural models using paper, mat board, wood, plastic, and styrene foam. The illustration portion of this course will include work with perspectives in pencil, watercolor and airbrush (Formerly CIDG 108). Grade Option.

Lecture Hours: 36.0; Lab Hours: 54.0

Transfer: Transfers to CSU only

ARCH 138 Cooperative Education Architecture (1-8 Units)

Cooperative Education is a key element of Victor Valley College's comprehensive approach to career development. Cooperative Education is a 16-, 12-, or 8-week course that enables students to receive college credit for paid or unpaid work opportunities. This course helps students gain valuable on-the-job work experience while providing practical education, best practices in professional development, and academic guidance through the course of their work opportunity. The combination of practical experience and curricular development empowers students to be more competitive, efficient and valuable employees upon completion of this program and/or their academic program trajectory. The course is ideal for students who are cross-training at their current worksite for upward mobility or seeking career changes, as well as those looking for entry-level occupational training through work-based learning experiences such as through an internship. Cooperative Education transforms community businesses, industries, and public agencies into expanded educational training laboratories. Credit is awarded on the basis of learning objectives completed and the number of hours the student trains. Students must create/complete new learning objectives each semester they enroll. Students may utilize their present work sites. More details are available in the Cooperative Education Office, (760) 245-4271, ext. 2281. The office, located in the Academic Commons, is open Monday-Thursday, 8:00 a.m.-1:00 p.m., 2:00-6:00 p.m., and by appointment.

Transfer: Transfers to CSU only

ARCH 140 History of Architecture: Early Design Through Gothic (3.0 Units)

This course is a survey of Western architectural history from the early Egyptians through the Gothic period, including a comparative study of architecture and architects with emphasis on the people, locations, structures, materials, and methods of construction and additional influences on the built environment.

Lecture Hours: 54.0

Transfer: Transfers to CSU only

ARCH 142 History of Architecture: Renaissance Through Modern (3.0 Units)

This is a survey course of Western architectural history from Renaissance period to modern times, including a comparative study of architecture and architects with an emphasis on people, locations, structures, materials, and methods of construction.

Lecture Hours: 54.0

Transfer: Transfers to CSU only

ARCH 250 Introduction to REVIT for Architectural CAD (3.0 Units)

This course is designed to develop computer drafting skills necessary to produce residential working and presentation drawings using the REVIT software. Design principles will be explored through the use of the AutoDESK Revit Architecture software. Grade Option.

Lecture Hours: 36.0; Lab Hours: 54.0

Transfer: Transfers to CSU only

ENGD 101 Introduction to Drafting (3.0 Units)

This survey course will explore the basic techniques used in the drafting industry. The course will emphasize proper use of hand drafting instruments, lettering, and line quality. Course includes work in the fields of architectural, engineering and mechanical drafting.

Lecture Hours: 36.0; Lab Hours: 54.0

Transfer: Transfers to CSU only

ENGD 103 Blueprint Reading for Construction (3.0 Units)

A course designed to develop the skills necessary to interpret both residential and commercial construction drawings and blueprints.

Lecture Hours: 54.0

Transfer: Transfers to CSU only

ENGD 110 Introduction to 2-D AutoCAD (3.0 Units)

An introduction to the AutoCAD program including all necessary basic commands required for computer aided drafting. Students will master drawing setup, common draw, edit and view commands, and plotting. Lectures and exercises are designed to provide a comprehensive knowledge of all basic computer drafting functions. Grade option.

Lecture Hours: 36.0; Lab Hours: 54.0

Transfer: Transfers to CSU only

ENGD 120 Introduction to Inventor (3.0 Units)

Solid Modeling and Three Dimensional CADD will introduce students to a new Autodesk software package entitled INVENTOR. Students will understand the concepts involved in Parametric Modeling. Students will begin by constructing basic shapes and proceed to building intelligent solid models and create multi-view drawings. Assembly drawings, section views, auxiliary views, sheet metal drawings, and details will also be produced. Students will develop their drafting and computer skills through drawings and projects that emphasize teamwork and the design process. Students will also learn various hardware, software and peripheral components related to operating a CADD station.

Lecture Hours: 36.0; Lab Hours: 54.0

Transfer: Transfers to CSU only

ENGD 130 Introduction to Solidworks (3.0 Units)

This course is designed to introduce the student to three-dimensional parametric solid modeling with SolidWorks. Students will begin with basic parametric solid modeling techniques and advance into complex assemblies requiring animation.

Lecture Hours: 36.0; Lab Hours: 54.0

Transfer: Transfers to both UC/CSU

ENGD 138 Cooperative Education Engineering (1-8 Units)

Cooperative Education is a key element of Victor Valley College's comprehensive approach to career development. Cooperative Education is a 16-, 12-, or 8-week course that enables students to receive college credit for paid or unpaid work opportunities. This course helps students gain valuable on-the-job work experience while providing practical education, best practices in professional development, and academic guidance through the course of their work opportunity. The combination of practical experience and curricular development empowers students to be more competitive, efficient and valuable employees upon completion of this program and/or their academic program trajectory. The course is ideal for students who are cross-training at their current worksite for upward mobility or seeking career changes, as well as those looking for entry-level occupational training through work-based learning experiences such as through an internship. Cooperative Education Transforms community businesses, industries, and public agencies into expanded educational training laboratories. Credit is awarded on the basis of learning objectives completed and the number of hours the student trains. Students must create/ complete new learning objectives each semester they enroll. Students may utilize their present work sites. More details are available in the Cooperative Education Office, (760) 245-4271, ext. 2281. The office, located in the Academic Commons, is open Monday-Thursday, 8:00 a.m.-1:00 p.m., 2:00-6:00 p. m., and by appointment. Transfer: Transfers to CSU only

ENGD 210 Advanced 2-D Autocad (3.0 Units)

A working knowledge of AutoCAD is necessary. This course will explore the more advanced two-dimensional features of the AutoCAD program including entity filters, attributes, external reference files, paper space and slide presentations. Projects include sectional description of compound shapes and developments.
 Recommended Preparation: ENGD 110
 Lecture Hours: 36.0; Lab Hours: 54.0
 Transfer: Transfers to CSU only

Program Learning Outcomes

Program Learning Outcomes (PLOs) are statements of the kind of learning a program hopes a student will achieve. The PLOs describe the knowledge, skills, problem-solving, communication and values that apply to all certificates and/or degrees within that program.

Upon completion of this program, students should be able to:

1. To create compelling two and three dimensional projects that meet current industry standards.
2. To discuss the key components of design, process, layout, and function as it relates to the real world.