Architecture

ARCH 100 Computer Aided Drafting and Design
3.0 units
Acceptable for credit: Transfer to UC, CSU
C-ID Course Number: N/A
An introduction to computer-aided drafting and design (CADD) which covers operation of a computer graphics terminal (specifically AutoCAD) to create, modify, delete, transfer, and plot graphic files used to produce complete engineering drawings. This course is not open to students who are enrolled in or have received credit for ET 100. (Fall, Spring) (Letter Grade or Pass/No Pass)

ARCH 101 Principles of Environmental Design
3.0 units
Acceptable for credit: Transfer CSU
C-ID Course Number: n/a
This course offers an introduction to the complex interplay between individuals, society, and the designed and built environment, with a focus on its implications for natural resource consumption, identity, behavior, community development, and human health, safety, and general well-being. The course also explores the role of design from various perspectives, including those of architects, engineers, governing bodies, and individual users. Focus on sustainability and social equity, promoting active participation in community planning and design from a social and environmental standpoint. (Letter Grade or Pass/No Pass)

ARCH 107 Sustainable Design Methods and Technology
3.0 units
Acceptable for credit: Transfer CSU
C-ID Course Number: N/A
Exploration of sustainable strategies to achieve thermal comfort and to reduce the energy consumed to heat, cool, and light buildings. Schematic design integration of program, envelope, structure, form, and space will be explored in connection with climate, site, and technology utilizing small-scale, envelope-load dominated buildings. (Spring) (Letter Grade or Pass/No Pass)

ARCH 111 Architectural Graphics and Design I
3.0 units
Acceptable for credit: Transfer to UC, CSU
Introduces the graphic tools, techniques, and conventions used to communicate architectural ideas. Tools, techniques, and conventions include freehand drawing, architectural drawing systems, paraline drawing, multi view drawing, perspective drawing, rendering of tonal values, model making, and architectural presentations. Covers the fundamental principles and application of two- and three-dimensional architectural design. (Fall) (Letter Grade or Pass/No Pass)

ARCH 112 Architectural Graphics and Design II
3.0 units
Acceptable for credit: Transfer to UC, CSU
Prerequisite: ARCH 111 - Architectural Graphics and Design I
Continuation of ARCH 111 plus the issues, concepts, processes and skills pertaining to research methods, building form analysis, color theory, and the design and visual communication of architectural space. Projects of increasing complexity are assigned and developed using various presentation techniques and media. (Spring) (Letter Grade or Pass/No Pass)

ARCH 121 Architectural Practice 1
4.0 units
Acceptable for credit: Transfer CSU
C-ID Course Number: N/A
A continuation of construction materials and methods with an emphasis on the selection of appropriate structural systems and the application of relevant codes and regulations including life-safety and accessibility standards. Covered also is the production of technically clear drawings utilizing Building Information Modeling (BIM) software; Revit Architecture, and drafting software;AutoCAD. (Letter Grade or Pass/No Pass)

ARCH 122 Architectural Drawing 2
4.0 units
Acceptable for credit: Transfer CSU
The second course in a two-semester sequence that prepares the student to enter the construction field as a drafter. Emphasizes the planning and development of a set of residential plans that may be submitted for plan check approval. The second semester covers structural details, energy, and mechanical requirements, and a study of fire resistive materials and finishes. (Fall) (Letter Grade or Pass/No Pass)

ARCH 131 Building Construction Materials and Methods
3.0 units
Acceptable for credit: Transfer CSU
Advisories: ARCH 121 - Architectural Practice 1 or concurrent enrollment.
An introduction to building construction materials and systems plus the basic principles utilized in the appropriate selection of materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse. (Letter Grade or Pass/No Pass)

ARCH 151 Architectural Design Studio I
5.0 units
Acceptable for credit: Transfer CSU
Advisories: ARCH 112 - Architectural Graphics and Design II
Prerequisite: ARCH 111 - Architectural Graphics and Design I
A continued and refined study of design principles and processes plus the exploration of integrated solutions responding to site, context, function, materials, and daylighting. (Fall) (Letter Grade or Pass/No Pass)

ARCH 152 Architectural Design Studio II
5.0 units
Acceptable for credit: Transfer CSU
Prerequisite: ARCH 151 - Architectural Design Studio I
A continuation of the study of design principles and processes. Projects of an advanced level are assigned in which students have the opportunity to design complex, multi-use, multi-story buildings. Case studies are performed of specific building types before the design process begins. (Letter Grade or Pass/No Pass)

ARCH 160 Digital Tools In Architecture
3.0 units
Acceptable for credit: Transfer CSU
Advisories: ARCH 111 - Architectural Graphics and Design I
Introduces computer design and presentation skills for architecture students. Topics include image editing, page layout and 3D modeling. This course is not open to students who are enrolled in or have received credit for ET 160. (Fall, Spring) (Letter Grade or Pass/No Pass)

ARCH 321 California Building Code
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Introduces the student to the purpose and use of the California Building Code (CBC), and prepares the student to make design and job site judgments based on the Code. (Fall) (Letter Grade or Pass/No Pass)

ARCH 370 SkillsUSA
3.0 units
Acceptable for credit: D - Credit - Degree Applicable
Repeatable: 3.00
SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. This SkillsUSA course prepares students for employment and inter-collegiate competition in Career Technical Education. Students will learn to plan projects, work in teams, solicit community support and develop a range of skills valued by employers. Students registered for this class may not register for AB 370, AT 370, EL 370, ET 370, MT 370 or WLDT 370 during the same semester. Participation in the SkillsUSA competition is required. This course may be repeated up to three times for credit with different competitions. (Fall, Spring) (Letter Grade or Pass/No Pass)