

Engineering and Architecture: Architecture Pathway



CHICO HIGH SCHOOL

2019—2020

CTE Architecture Pathway Course Sequence



Course Descriptions

Architectural Design 1

Basic elements of **Architectural Design**, introduction to **Uniform Building Code standards**, introduction to elements of **fine arts** as they pertain to Architectural Design, individual room and **space planning**, and the completion of a **student portfolio** which contains a partial set of working drawings for a two bedroom, one bath house. Plans will be completed on computer using **AutoCAD software**. **Floor plans, electrical plans and elevations** will be completed in this class with AutoCAD software. A **full scale 3D model** will be created with **Sketch Up software**.

**Optional Butte College credit
* A-G "F" Area*

Architectural Design 2

Year-long course for students who have successfully completed Arch Design 1. Class starts by creating a foundation plan with details, section plan with details and a site plan in **Auto CAD**. A **framing unit** will be completed in **Sketch Up** that will cover **floor framing, wall framing and roof framing**. Finally, **Revit software** will be used to recreate a more complete set of plans and details in **2D and 3D formats**. **3D printers** will be used to model all **Revit projects**.

Architectural Design 3&4

Year-long courses for students who have successfully completed Arch Design 1 & 2. Students must demonstrate the ability to create **residential designs utilizing technical sketching, modeling and CAD presentations**. **Revit** is the primary software used in these classes. All projects will be **client-based or part of the architecture internship program**. **3D printers** will be used to create models of all **Revit projects**

LOCAL POST-SECONDARY

OPTIONS:

Butte College
AS Degree in Engineering
Architecture Certification

CSU, Chico

Engineering—Civil, Mech, Elec
Construction Management
Computer Engineering
Computer Information Systems

HIGHLIGHTED CAREERS:

Engineer
Civil
Mechanical
Electrical
Architect
Construction Management
Project Engineer

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More information about this pathway...

Students will work closely with business partners in the community. Local Architects have students engage in client-based projects and internships in advanced courses. Students use state-of-the-art technology and industry-standard software.

Note: These templates are designed to help guide students. The order of some classes may vary and individual variation can be applied.

Career and Technical
Student Organization:

