

## CE CIVIL ENG/ARCH 1 PLTW

### **Course Description**

This **Project Lead the Way (PLTW)** course is the equivalent to *CAD Architectural Design 2* in the USBE. This is the first course in the PLTW sequence of courses that prepare individuals for careers in the Architecture, Engineering, and Construction (AEC) industry. This course includes instruction in 3D Computer-Aided Design (CAD) software to design and model a small residential home with an emphasis on residential methods and materials of construction, codes, and Building Information Modeling (BIM).

### **Strands**

1. Students will be able to understand architectural design fundamentals.
2. Students will be able to understand room and space planning.
3. Students will identify the basic considerations in using the International Residential Code (IRC).
4. Modeling (BIM) techniques to create BIM architectural drawings to a professional standard.
5. Students will create a complete set of plans for a rambler style residence, with a basement, while maintaining less than 1000 square feet on the main floor.

