

CE CIVIL ENG/ARCH 2 PLTW

Course Description

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

Strands

1. Students will discover how Building Information Modeling (BIM) is changing how buildings, infrastructure, and utilities are planned, designed, built, and managed.
2. Students will identify the basic considerations in using International Building Code (IBC).
3. Students will be able to understand how accessibility codes and guidelines affect all new and some existing commercial construction projects.
4. Students will be able to understand demonstrate BIM techniques to create BIM architectural drawings to a professional standard.
5. Students will model and document the remodel of an existing commercial building using “as built” drawings.

