

## CE INTRO ENG DESIGN 1 PLTW

### **Course Description**

This **Project Lead the Way (PLTW)** course is the equivalent to *CAD Mechanical Design 2* in the USBE course catalog. This course series prepares individuals with an emphasis in developing technical knowledge and skills to develop 3D models in support of mechanical and industrial engineers, and related professionals. This includes instruction in the use of 3D Computer-Aided Design (CAD) Software, model creation, and technical communication.

### **Strands**

1. Students will understand and applying mathematics, measuring convention, and scale.
2. Students will be able to create a 3D part model with the correct dimensional and geometric sizes and constraints.
3. Students will be able to understand and demonstrate the use of correct line types.
4. Students will be able to develop and correctly place sectional views.
5. Students will be able to understand and demonstrate essential tolerancing techniques.
6. Students will be able to understand and use 3D computer software to create technical drawings.

