

In-Class Activity 2 - Introduction to Solidworks

ME 3001-002- Mechanical Engineering Analysis - Fall 2021

Overview:

You will start brainstorming and begin to draw your initial design in CAD.

Learning Objectives:

- Practice and learn to produce solid models in CAD to represent a proposed design.

Required Materials:

- **Your Computer:** This activity requires a computer with Solidworks installed.

Activity:

1. Choose a device or machine to model for this project. It can be anything within reason, but it must meet the posted criteria (at least five parts or multiple versions). Write one or two sentences describing the system you have selected.
2. Create an initial concept sketch of the system. If you are still deciding on a design or topic, include several concept sketches. If you cannot think of something today, the instructor has several suggestions.
3. Select one of the main parts of the design and choose reasonable variable names for the primary dimensions of the part. Add these variables to at least one sketch of the system. Include the concept sketches from part 1 and part 2 in a file **<USERNAME>_part1.pdf**.
4. Create a 3D model using Solidworks of a single part or component of the system. The part must include at least two sketches (in-use) and two features. Save the part file as **<USERNAME>_part1.sldprt**.
5. *If time allows*, save the part and make revisions for improvement. Alternatively, begin in working on the design of the remaining

Submit:

Submit the most complete version of **<USERNAME>_part1.sldprt** and **<USERNAME>_part1.pdf** to the Activity 2 folder before the posted due date.