

**Table 1: Engineering Requirements**

<b>Engineering requirements</b>
1. Three assignment based on 3D Drawing on paper
2. Eight assignments based on advanced features in SolidWorks
3. Three exams
4. Twelve pre lecture quizzes
5. Twelve lectures in the semester
6. Twelve class activity
7. Two themes for projects will be chosen by instructor and students
8. One extra credit will be chosen by instructor
9. Five outside class video tutorials

**Table 2: Customer Requirements**

<b>Customer Requirement</b>
1. Ability to identify, formulate, and solve engineering problems
2. Ability to design and conduct experiments, as well as to analyze and interpret data
3. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
4. Use the solid modeling capabilities of a computer-aided design (CAD) package to generate three-dimensional solid model.
5. Have a thorough understanding and be able to create engineering drawings
6. Sketch free-hand pictorials of three-dimensional objects.
7. Read engineering scales and take driving dimensions from manufactured parts.