MECH 100: Graphics I

Catalog description: 2.0 units
An introduction to graphical design and problem solving using both traditional and computer-aided drawing methods. 1.0 hour discussion, 3.0 hours laboratory. Special fee required; see The Class Schedule.

Prerequisites: none

Course objective
For students to develop visualization and graphical communication skills through sketching and computer-aided-drawing techniques.

Course outcomes: Students shall be able to
1. Hand-sketch orthographic projections and isometric views of simple objects
2. Interpret and visualize objects shown in standard engineering drawings
3. Use SolidWorks® (a feature based parametric computer-aided drawing program)
   to create solid models of parts and assemblies
4. Use SolidWorks® to create detail and assembly drawings

Class/Laboratory schedule
Fifty minutes of lecture and one hundred fifty minutes of laboratory per week

Contribution of course to meet the professional component: none

Relationship of course to Mechatronic Engineering Program Outcomes
This course contributes principally to Program Outcomes D and E. Students must achieve a grade of C or better in the portion of the class devoted to using AutoCAD® to pass the course and satisfy Program Outcome D. Students must achieve a grade of C or better in selected coursework to pass the course and satisfy Program Outcome E.