I E-INDUSTRIAL ENGINEERING (I E)

I E 151. Computational Methods in Industrial Engineering
3 Credits (3)
History, social implications, and application of computers and an introduction to computer programming, word processing, and database management systems. Satisfies General Education computer science requirement. May be repeated up to 3 credits.
Prerequisite: MATH 1220G.
Learning Outcomes
1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

I E 200. Special Problems-Sophomore
1-3 Credits
Directed individual projects. May be repeated up to 3 credits.
Learning Outcomes
1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to communicate effectively with a range of audiences.

I E 217. Manufacturing Processes
3 Credits (2+3P)
Introduction to manufacturing and processing, including: casting, forming, and machining. Emphasis on creating products with the appropriate techniques. Crosslisted with: E T 217.
Prerequisite(s): A grade of C- or better in either E T 110 or ENGR 110 and C- or better in MATH 1220G.
Learning Outcomes
1. Identify the different manufacturing processes and their applications.
2. Use, set up, and calibrate measuring tools.
3. Apply geometric tolerances to engineering drawings.
4. Demonstrate basic knowledge of materials and material properties.
5. Demonstrate basic knowledge of GM codes and their application.
6. Proficiently use CAM packages such as SolidWorks CAM.
7. Identify different tooling, their use, and manufacturing application.