Mechanical Engineering Student Outcomes

Outcome 1 (abet a): Apply scientific and fundamental engineering knowledge based upon a strong foundation in advanced math, chemistry, physics, and the engineering sciences.

Outcome 2 (abet b): Design and conduct hands-on experiments, use mechanical/electrical hardware, and analyze and interpret data.

Outcome 3 (abet c): Design a component, system or process in the mechanical engineering field that meets performance, cost, time, safety, quality, materials, and manufacturing requirements.

Outcome 4 (abet d): Function as a member of a multidisciplinary team and be able to assume leadership roles on the team.

Outcome 5 (abet e): Identify, formulate, critically analyze, and solve engineering problems in energy conversion and transfer, materials and manufacturing, and mechanical systems design.

Outcome 6 (abet f): Recognize and achieve a high level of professional and ethical conduct in all aspects of engineering work.

Outcome 7 (abet g): Formulate and deliver effective written and verbal communications of laboratory, analytical, and design project work to a variety of audiences.

Outcome 8 (abet h): Understand and incorporate non-technical considerations into an engineering solution including safety, environmental, social, economic, and global issues.

Outcome 9 (abet i): Recognize the need for mechanical engineers to engage in lifelong learning and begin the process by taking the FE exam.

Outcome 10 (abet j): Be knowledgeable of contemporary issues in mechanical engineering and related fields.

Outcome 11 (abet k): Utilize techniques, skills and modern engineering tools (including CAD/CAM) necessary for mechanical engineering practice.

Outcome 12 (+1): Develop broad based technical skills and knowledge, strong work ethic, integrity, and leadership skills that will lead to successful careers in a wide variety of engineering and non-engineering positions in industrial, military, government, and academic settings.

3/2014