



The University of Georgia

College of Engineering

September 14, 2015

Provost Pamela Whitten
Office of the Senior Vice President for Academic Affairs and Provost
University of Georgia
203 Administration Building
Athens, Georgia 30602-1561

Dear Provost Whitten,

On behalf of the faculty and the curriculum of the College of Engineering, I am pleased to forward the college's Experiential Learning Implementation Plan.

This plan has been developed and approved by our curriculum committee along with program coordinators and their program faculty input after few meetings.

Sincerely,

Donald J. Leo, Ph.D.
Dean
UGA Foundation Professor in Engineering

Cc: Curriculum committee chair – Dr. Tom Lawrence
Experiential learning certification officer – Dr. Ramana Pidaparti
William Vencill, Chair, University Curriculum Committee
Linda P. Bachman, Director, Office of University Experiential Learning

College of Engineering

Experiential Learning Implementation Plan

Certification Officer: Ramana Pidaparti, Associate Dean for Academic Programs

The College of Engineering emphasizes design/project experience within the curriculum. Students take a sequence of courses related to design experience to be knowledgeable about their profession and the challenges they will confront. Engineering students also have experiential learning opportunities through cooperative learning experiences, undergraduate research through CURO, and student abroad programs.

Engineering students are encouraged to meet with the Director of Experiential Programs within the college during their first year to determine which experiences (design, co-op or internship, CURO, or study abroad) they would like to take part in during their academic career.

The courses that fulfill the requirement within the majors are as follows:

All majors

ENGR 3900 Cooperative Work Experience

ENGR 3910 Cooperative Work Experience

ENGR 4960/4960H Undergraduate Research in Engineering

ENGR 4990 Undergraduate Thesis in Engineering

B.S. Agricultural Engineering

ENGR 4911 Engineering Design Project II

Supervised engineering design experience, FE review, and career counseling. Students will meet with assigned faculty to discuss their individual project execution and progress and attend a common lecture hour each week.

ENGR 4920 Engineering Design Project

Engineering design experience including completion of a design project under the supervision of a project director.

B.S. Biochemical Engineering

B.S. Biological Engineering

ENGR 4920 Engineering Design Project

Supervised engineering design experience, FE review, and career counseling. Students will meet with assigned faculty to discuss their individual project execution and progress and attend a common lecture hour each week.

B.S. Civil Engineering

CVLE 4920 Capstone Design Project II

Supervised engineering design experience. Lecture component will focus on professional and ethical responsibilities, awareness of contemporary engineering issues, importance of lifelong learning, and various career paths.

B.S. Computer Systems and Electrical Engineering

CSEE 4920 Capstone Engineering Design Project

Engineering design experience including completion of a design project under the supervision of a project director. Students will meet with a faculty mentor every two weeks and then present an oral presentation at mid-term. A final presentation, report, and poster will be due at the end of the semester.

B.S. Environmental Engineering

ENVE 4920 Environmental Engineering Senior Design II

Second course in a two-semester sequence designed to provide environmental engineering students with extensive design experience. Projects will require synthesis of knowledge and skills learned through the Environmental Engineering program of study into a cogent design solution. Students will continue working with teams organized from Environmental Engineering Design III and will engage in developing mature design solutions, project reporting, and oral communication of solutions.

B.S. Mechanical Engineering

MCHE 1940 Mechanical Engineering Design Studio and Professional Practice

This design studio will be an introduction to mechanical engineering and the engineering design process that will involve two mechanical engineering design projects. Students will be introduced to the engineering design, technical report writing, creative thinking strategies, entrepreneurship, and professional practice

MCHE 3920 Manufacturing and Design Studio

This design studio is project-based and focuses on manufacturing and design of new products. Students will learn and apply systematic methodologies within projects; design and construct a working device that meets performance requirements; learn how to use contemporary tools for engineering analysis, fabrication, and testing; understand product design and manufacturing.

MCHE 4910 Mechanical Engineering Capstone Design I

This capstone design course is the first in a two-semester sequence that is project-based and focused on problem framing, stakeholder analysis, concept generation, and project management skills. The projects are designed to provide students with a major design experience in mechanical engineering prior to graduation.

MCHE 4920 Mechanical Engineering Capstone Design II

This capstone design course is the second in a two-semester sequence that is project-based and focused on concept selection, development, prototyping, and

testing. The projects are designed to provide students with a major design experience in mechanical engineering prior to graduation.