# **ENGINEERING (ENR)**

#### ENR 105. Learning Strategies Seminar.

0-1 Credits.

The purpose of this course is to introduce students to evidence-based learning strategies and to help students become self-regulated learners who are capable of achieving their full academic potential. Students reflect upon the fundamental nature of learning and what types of learning activities best facilitate their learning process. In addition, students also explore topics related to achievement motivation and growth mindset. The ultimate goal of this course is to help students not only develop a deeper understanding of these topics, but learn ways that the strategies and tools discussed in class readings and discussions can inform their personal study habits.

Prerequisites: None Offered: Every year, Fall and Spring

### ENR 110. The World of an Engineer.

3 Credits.

This course introduces students to the study and practice of engineering, including overviews of specific disciplines. Participatory focus involves group design projects, hands-on learning, computer work, team building and engineering ethics discussions. In an inquiry-based learning framework, students are introduced to the Grand Challenges for Engineering, as defined by the National Academy of Engineering, to consider global issues from a multidisciplinary perspective. **Prerequisites:** None

**Offered:** Every year, Fall **UC:** Breadth Elective

ENR 210. Engineering Economics and Project Management. 3 Credits.

This course provides an introduction to the concepts of economics/ finance/costing and explains how these affect the functioning of engineering projects and contribute to decision making in engineering operations. A portion of the course covers the concepts of project management, team building and leading teams that are used throughout the program and in professional practice. **Prerequisites:** Take MA 141 or MA 151.

Offered: Every year, Spring

#### ENR 300. Special Topics in Engineering Project Management (CAPM) Designation. 1-3 Credits.

Prerequisites: None Offered: As needed

#### ENR 395. Professional Development Seminar.

1 Credit.

Through discussions, case studies and guest speakers, students are introduced to topics on engineering professionalism, ethics and licensure as well as relevant innovations in engineering to prepare them to enter the workplace as engineering professionals.

**Prerequisites:** Junior status in the major or permission of adviser. **Offered:** Every year, Fall

## ENR 410. School of Computing and Engineering Integrative Capstone.

#### 3 Credits.

This course provides students with a culminating and integrative learning experience grounded in their University Curriculum, their major classes, and co-curricular activities. Students explore and evaluate potential solutions to an aspect of one of the 14 Grand Challenges for Engineering, with a focus on the global dimension of the solution. The course may include a service learning or study abroad component. **Prerequisites:** Senior status in the major required. **Offered:** Every year, Fall and Spring

#### ENR 490. Engineering Professional Experience. 0-1 Credits.

Students gain experience by employing engineering skills in a professional setting under the guidance of practicing engineers. Students must obtain departmental approval and register prior to starting the experience.

Prerequisites: Take ENR 395 or permission of the adviser. Offered: As needed

#### ENR 490H. Engineering Professional Experience. 0-1 Credits.

Students gain experience by employing engineering skills in a professional setting under the guidance of practicing engineers. Students must obtain departmental approval and register prior to starting the experience.

Prerequisites: Take ENR 395 or permission of the adviser. Offered: As needed