ENGINEERING (ENR)

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.
Offered: Every year, Fall
UC: Breadth Elective

ENR 199. Learning Strategies Seminar. 0 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 will reflect upon the fundamental nature of learning and what types of learning activities best facilitate their learning process. In addition, students will 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.
Offered: As needed

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 engineering functioning 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 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 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. Senior status in the major required.
Prerequisites: Take EN 102; CSC 110 or CSC 159; MA 107 or higher; and CHE 110 or BIO 101 or BIO 105 or BIO 150 or PHY 101 or PHY 121. - Must be completed prior to taking this course.
Offered: Every year, Spring

ENR 490. Engineering Professional Experience. 1 Credit.
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 advisor.
Offered: As needed