ENGINEERING (ENGR)

100 Level Courses
ENGR 107: Introduction to Engineering. 2 credits.
Introduces engineering profession fundamentals and problem-solving. Topics include description of engineering disciplines, functions of the engineer, professionalism, ethics and registration, problem solving and representation of technical information, estimation and approximations, and analysis and design. Offered by Electrical & Comp. Engineering. Limited to two attempts.

Registration Restrictions:
Students with the terminated from VSE major attribute may not enroll.

Schedule Type: Lecture

Grading:
This course is graded on the Undergraduate Regular scale.

300 Level Courses
ENGR 395: Engineering Internship. 0-3 credits.
Students will participate in experiential learning in an industrial setting. Students must identify work opportunity and seek advisor approval prior to registering. Course credit will not satisfy degree requirements. Offered by Electrical & Comp. Engineering. May be repeated within the degree for a maximum 6 credits.

Recommended Prerequisite: Completion of at least 30 credit hours.

Schedule Type: Internship

Grading:
This course is graded on the Satisfactory/No Credit scale.

ENGR 396: Engineering Co-Op I. 0-3 credits.
1st Semester of a multi-semester co-operative education experience. Students will apply concepts and theories from the classroom to an industrial setting. Students must identify work opportunity and seek advisor approval prior to registering. Course credit will not satisfy degree requirements. Offered by Electrical & Comp. Engineering. May not be repeated for credit.

Recommended Prerequisite: Completion of at least 30 credit hours.

Schedule Type: Lecture

Grading:
This course is graded on the Satisfactory/No Credit scale.

ENGR 397: Engineering Co-Op II. 0-3 credits.
Second Semester of a multi-semester co-operative education experience. Students will apply concepts and theories from the classroom to an industrial setting. Students must continue employment from ME 396 and seek advisor approval prior to registering. Course credit will not satisfy degree requirements. Offered by Electrical & Comp. Engineering. May not be repeated for credit.

Recommended Prerequisite: ME 396.

Schedule Type: Internship

Grading:
This course is graded on the Satisfactory/No Credit scale.

ENGR 398: Applied Engineering Abroad. 3 credits.
Introduces students to applications of engineering processes outside USA. The students will gain hands-on project management, critical thinking, intercultural and career skills by exploring engineering aspects such as auto assembly, airliner manufacturing, metropolitan infrastructure, and bridge designs. By visiting technology museums, students will learn to appreciate the rich history of the country’s technology and manufacturing. Offered by Electrical & Comp. Engineering. Limited to two attempts.

Mason Core: Global Understanding

Registration Restrictions:
Enrollment limited to students with a class of Junior, Senior Plus or Senior.

Schedule Type: Internship

Grading:
This course is graded on the Undergraduate Regular scale.

400 Level Courses
ENGR 498: Independent Study in Engineering. 1-3 credits.
Directed self-study of special topics of current interest in ENGR. Notes: May be repeated if topics substantially different. Offered by Electrical & Comp. Engineering. May be repeated within the term for a maximum 6 credits.

Recommended Prerequisite: Completion of at least 30 credit hours.

Schedule Type: Independent Study

Grading:
This course is graded on the Undergraduate Regular scale.

ENGR 499: Special Topics in Engineering. 0-4 credits.
Topics of special interest to undergraduates. Notes: May be repeated if topics substantially different. Offered by Electrical & Comp. Engineering. May be repeated within the term for a maximum 11 credits.

Recommended Prerequisite: ME 396.

Schedule Type: Lecture

Grading:
This course is graded on the Undergraduate Regular scale.

Additional Course Details: Title varies by section and/or semester