

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 & Computer Engineer. Limited to two attempts.

Mason Core: Information Technology: Ethics Only

Registration Restrictions:

Students with the terminated from VSE major attribute may **not** enroll.

Schedule Type: Lecture

200 Level Courses

ENGR 202: *Thermodynamics*. 3 credits.

Offered by Electrical & Computer Engineer. May not be repeated for credit.

Schedule Type: Lecture

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 & Computer Engineer. May be repeated within the degree for a maximum 6 credits.

Recommended Prerequisite: Completion of at least 30 credit hours.

Schedule Type: Internship

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 & Computer Engineer. May not be repeated for credit.

Recommended Prerequisite: Completion of at least 30 credit hours.

Schedule Type: Lecture

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 & Computer Engineer. May not be repeated for credit.

Recommended Prerequisite: ME 396.

Schedule Type: Internship

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 & Computer Engineer. May be repeated within the term for a maximum 6 credits.

Registration Restrictions:

Students with the terminated from VSE major attribute may **not** enroll.

Schedule Type: Independent Study

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 & Computer Engineer. May be repeated within the term for a maximum 11 credits.

Registration Restrictions:

Students with the terminated from VSE major attribute may **not** enroll.

Schedule Type: Lecture

700 Level Courses

ENGR 794: *Graduate Internship*. 0-3 credits.

Students with an Internship/Externship/Co-Op opportunity will gain practical experience while engaging in an experiential learning opportunity. Offered by Volgenau School of Engineering. May be repeated within the degree for a maximum 6 credits.

Recommended Prerequisite: Completion of at least 18 credit hours.

Registration Restrictions:

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

Enrollment limited to students in the Volgenau School of Engineering college.

Schedule Type: Internship