Engineering Interdisciplinary (ENGR)

Courses

ENGR 2963. Topics. (1,2 Hours)
Offers undergraduate students an opportunity to learn about timely issues, develop new skills, or explore areas of broad interest in an immersive, short-course format. Content and instructors vary by offering. May be repeated three times.

ENGR 4956. Community-Based Integration Experience. (4 Hours)
Offers students an opportunity to engage in one or more projects or other structured experience in a community-based setting under faculty supervision and assessment.

Attribute(s): NUpath Integration Experience

ENGR 4957. Student Activity-Based Integrated Experience. (4 Hours)
Offers students an opportunity to engage in one or more projects or other structured aspect of a university-recognized student club or activity under faculty supervision and assessment.

ENGR 5963. Topics. (1,2 Hours)
Offers students an opportunity to learn about timely issues, develop new skills, or explore areas of broad interest in an immersive, short-course format. Content and instructors vary by offering. May be repeated up to three times.

ENGR 5964. Projects for Professionals. (0 Hours)
Offers students an applied project setting in which to apply their curricular learning. Working with a sponsor, students refine an applied research topic, perform research, develop recommendations that are shared with a partner sponsor, and create a plan for implementing their recommendations. Seeks to benefit students with a curriculum that supports the development of key business communication skills, project and client management skills, and frameworks for business analysis. Offers students an opportunity to learn from sponsor feedback, review 'lessons learned,' and incorporate suggestions from this review to improve and further develop their career development and professional plan. May be repeated up to two times.

ENGR 5965. Engaging with Industry Partners for Rising Professionals. (0 Hours)
Offers students an enhanced applied project setting in which to apply their curricular learning. Working with a partner sponsor, students refine an applied research topic, perform research, develop recommendations that are shared with the partner sponsor, and create a plan for implementing their recommendations. Curriculum supports students as they develop key business communication skills, project and client management skills, and frameworks for business analysis. Offers students an opportunity to learn from sponsor feedback, review lessons learned, and incorporate suggestions to improve and further hone their career development and professional plan. Career development opportunities through skill-building workshops, panels, and interview preparation are available. Partner-student interactions, including a culminating project presentation, allow partners to assess student potential for co-op, internship, or other employment opportunities with the partner. May be repeated up to two times.

ENGR 6010. Fundamentals of the Platform Economy. (4 Hours)
Provides an overview of the platform economy, focusing on the impact of digitalization across various industries and the emergence of new business models enabled by computing technologies. Covers the foundational aspects of computing that facilitate access to resources through platforms, the economic principles underpinning digital transformations, and the ethical considerations inherent in digital platform use. Examines the construction and implications of multi-sided platforms, including issues of bias and discrimination, and discusses regulatory frameworks aimed at addressing these challenges. Aims to provide a comprehensive understanding of the platform economy's dynamics, prepare students for interdisciplinary collaboration, and guide them in conceptualizing a digital platform business plan, with an emphasis on ethical and practical considerations.

ENGR 6962. Elective. (1-4 Hours)
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ENGR 7976. Directed Study. (1-4 Hours)
Offers theoretical or experimental work under individual faculty supervision. May be repeated seven times for a maximum of 8 total semester hours.

ENGR 9700. Dissertation Fieldwork. (0 Hours)
Offers students an opportunity to pursue experiential research outside the classroom and outside the university. Engineering PhD students only. May be repeated up to two times.

ENGR 9701. Engineering Teaching Practicum. (0 Hours)
Offers intermediate or terminal-level doctoral candidates a teaching assignment under the guidance of a faculty member. Typical activities include preparing and teaching recitations; preparing and teaching laboratory sessions; holding office hours; preparing and grading quizzes, problem sets, and other assignments; and assisting the instructor with other activities associated with teaching a course. All nonnative English speakers should conform to the university language requirements for teaching assistants. May be repeated up to five times.

ENGR 9702. Dissertation Fieldwork - Half-Time. (0 Hours)
Offers students an opportunity to pursue experiential research outside the classroom and outside the university. May be repeated up to eleven times.