# EGR - ENGINEERING: SPECIAL TOPICS

## EGR 3995 College-to-Career Seminar Cr. 1

This seminar course introduces engineering students to a diverse spectrum of engineering careers through interactive discussions with industry professionals, academic experts, and accomplished alumni. The course aims to enhance student engagement and foster a strong sense of belonging in their chosen engineering majors by providing indepth insights into various career paths, current industry demands, and future trends. Through a combination of guest lectures, panel discussions, and networking opportunities, students will gain valuable perspectives on the practical applications of their studies, potential career trajectories, and the skills necessary for success in the rapidly evolving field of engineering. This course is designed to help students align their academic focus with their career aspirations and develop a broader understanding of the engineering profession's impact on society. Offered Fall, Winter.

## EGR 5655 Innovation & Entrepreneurship I Cr. 3

Provides education and hands-on experience in innovation and entrepreneurship applied to enterprise, product and service design and delivery. The first of a 2-semester sequence, this course teaches methods and tools to find, formulate, and develop engineering innovation and entrepreneurship, leading to practical, relevant, and productive new commercial and social enterprises. Offered Fall.

**Restriction(s)**: Enrollment limited to students in the College of Engineering.

## EGR 5656 Innovation & Entrepreneurship II Cr. 3

Provides education and hands-on experience in innovation and entrepreneurship applied to enterprise, product and service design and delivery. This course is the second of a 2-semester sequence. This course teaches methods and tools to find, formulate and develop engineering innovation and entrepreneurship, leading to practical, relevant, and productive new commercial and social enterprises. Offered Winter. **Restriction(s):** Enrollment limited to students in the College of Engineering.

## EGR 5657 Innovation & Entrepreneurship Lab Cr. 1

Provides hands-on application of Lean LaunchPad principles in innovation and entrepreneurship applied to enterprise, product and service and delivery. Offered Every Term.

**Restriction(s):** Enrollment limited to students in the College of Engineering.

## Repeatable for 2 Credits

## EGR 5658 Global Collaborative Projects Involving Sustainability, Innovation and Cultural Diversity Cr. 3

Participate in an authentic, global project experience that replicates how you will work in your career. This course, is designed for senior and graduate engineering students from diverse backgrounds. It aims to foster global collaboration, emphasizing sustainability, innovation, and building cross-cultural awareness and diversity. Students will engage in collaborative engineering projects, case studies, presentations, and discussions while gaining insights into different cultures, sustainable engineering practices, innovation, and global sustainability challenges. Offered Spring/Summer.

## EGR 5990 Competition Team Cr. 2

This course is based on the students' contribution to a team participating in reputed regional/national/international competitions. Participation in the competition gives students a unique, multifaceted learning opportunity entirely led and run by students under the supervision of faculty member. Project teams collaboratively solve the complex engineering problems while gaining real-world experience. Participation in the competition provides students with hands-on laboratory learning experience and gives opportunities to hone leadership and professional skills. The faculty advisor is expected to provide technical and administrative support to the team and the overall program. Offered Every Term.

#### **Repeatable for 4 Credits**

#### EGR 5995 Special Topics in Engineering Cr. 1-4

State of the art research, development and practice topics from across the fields of engineering; emphasis on interdisciplinary topics. Offered Every Term.

**Restriction(s):** Enrollment limited to students in the College of Engineering.

**Repeatable for 4 Credits** 

## EGR 7995 Special Topics in Engineering Cr. 1-4

State of the art research, development and practice topics from across the fields of engineering; emphasis on interdisciplinary topics. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate level students; enrollment limited to students in the College of Engineering. **Repeatable for 4 Credits** 

## EGR 7999 Elements of Graduate Research Cr. 2

Key elements of graduate research. Topics covered include developing research ideas and library search skills, constructing a research proposal/ prospectus, identifying research funding and fellowship opportunities, interdisciplinary research, and research ethics. Offered Winter. **Restriction(s):** Enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.