RICE CENTER FOR ENGINEERING LEADERSHIP (RCEL)

RCEL 100 - SELF-AWARENESS AND THE ENGINEERING LEADER
Short Title: SELF-AWARENESS & THE ENGINEER
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 2
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: The purpose of this course is to prepare students to become future leaders. Engineering leadership is an emerging innovation in both education and practice and our course will prepare students to being their development journey toward this goal. Mutually Exclusive: Cannot register for RCEL 100 if student has credit for ENGI 140/ENGI 218.

RCEL 200 - PERSONAL DEVELOPMENT FOR THE ENGINEERING LEADER
Short Title: PERSONAL DEVELOPMENT ENG LEADR
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 2
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: The purpose of this course is to prepare students to become future leaders. Engineering leadership is an emerging innovation in both education and practice and our course will prepare students to being their development journey toward this end. This is the second half of the initial RCEL leadership course. Recommended Prerequisite(s): RCEL 100 is recommended for Leadership Certificate candidates Mutually Exclusive: Cannot register for RCEL 200 if student has credit for ENGI 140/ENGI 218.

RCEL 238 - SPECIAL TOPICS
Short Title: SPECIAL TOPICS
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Internship/Practicum, Laboratory, Lecture, Seminar, Independent Study
Credit Hours: 1-4
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: Topics and credit hours may vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.

RCEL 241 - INTERNSHIP PRACTICUM FOR ENGINEERING LEADERSHIP
Short Title: INTERNSHIP PRACTICUM FOR ENGI
Department: Center Engineering Leadership
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Internship/Practicum
Credit Hours: 0-1
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: RCEL 241 is an applied practicum and internship course that provides guided career and professional development for engineering students in a real-world industrial, academic, research, or other professional context. It prepares students to assimilate quickly and to exceed employer expectations during their internships. This course offers variable credit (0 or 1 credit). If you choose to take the course for 1 credit, you must indicate your intent with the instructor upon registration. Mutually Exclusive: Cannot register for RCEL 241 if student has credit for ENGI 241. Repeatable for Credit.

RCEL 242 - PROFESSIONAL COMMUNICATION FOR ENGINEERING LEADERS
Short Title: PROFESSIONAL COMMUNICATION
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Lower-Level
Description: To be truly influential in their fields, engineers need to be able to communicate their thoughts and opinions to management, peers, clients, and the public. They need to communicate clearly and confidently in a variety of professional situations. This course gives you the opportunity to learn, practice, and improve essential communication skills with emphasis on oral presentations, professional writing, and interpersonal communication. Graduate/Undergraduate Equivalency: RCEL 542.
Course URL: rcelconnect.org (http://rcelconnect.org)

RCEL 300 - DEVELOPMENT OF HIGH PERFORMING ENGINEERING TEAMS
Short Title: DEVELOPMENT OF HIGH PERFORMING
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 2
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: The purpose of this course is to prepare students for engineering leadership and followership roles in engineering contexts. This course is required for our school's certificate engineering leadership and includes a focus on practical skills and how these skills can be learned, developed, and applied in team situations. Recommended Prerequisite(s): For Leadership Certificate candidates, RCEL 241 is an applied practicum and internship course that provides guided career and professional development for engineering students in a real-world industrial, academic, research, or other professional context. It prepares students to assimilate quickly and to exceed employer expectations during their internships. This course offers variable credit (0 or 1 credit). If you choose to take the course for 1 credit, you must indicate your intent with the instructor upon registration. Mutually Exclusive: Cannot register for RCEL 300 if student has credit for ENGI 219/ENGI 315.
RCEL 400 - LEADING HIGH PERFORMING ENGINEERING TEAMS
Short Title: LEADING HIGH PERFORMING ENGINE
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 2
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: This course develops skills that are required for enterprise wide leadership positions. Topics include: managing and leveraging diversity, creative problem solving through intersectional thinking, ethical issues of innovation and resolution, risk management, performance management, development and communication of an enterprise wide vision, and development of a change management plan. Recommended Prerequisite(s): For Leadership Certificate candidates, RCEL 300 recommended. Mutual Exclusive: Cannot register for RCEL 400 if student has credit for ENGI 219/ENGI 315.

RCEL 410 - ENGINEERING LAUNCH PAD-RESEARCH
Short Title: ENG LAUNCH PAD-RESEARCH
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hour: 1
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): ENGI 100
Description: RCEL 410 is one of four RCEL courses intended to jump-start the next steps for aspiring engineering leaders. The other courses deal with industry, Alternative Pathways, and Entrepreneurship, while RCEL 410 is focused on developing an understanding of leadership principles applicable in a Research environment. Students will gain insights into managing ethical dilemmas, developing communication strategies, creating a vision and goals, and project management in either an undergraduate or graduate student level engineering discipline. Research in academia, government labs, and industry will be compared and contrasted.

RCEL 420 - ENGINEERING LAUNCH PAD-INDUSTRY
Short Title: ENGINEERING LAUNCH PAD-INDUST
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hour: 1
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Prerequisite(s): RCEL 300
Description: The purpose of this course is to prepare students for engineering leadership and followership roles in an industry context. This course is required for our school's certificate in engineering leadership and includes a focus on the practical skills needed to thrive in an industry environment.

RCEL 430 - ENGINEERING LAUNCH PAD-NON-ENGINEERING PATHWAYS
Short Title: ENGINEERING LAUNCH PAD-PATHWAY
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hour: 1
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: Engineering students explore alternative professional paths, including policy, law, medicine, industry consulting, and other viable career options beyond industry and research. Students will identify a focus career track and complete a series of assignments designed to increase familiarity and competency in that discipline. Graduate/Undergraduate Equivalency: RCEL 530.

RCEL 436 - INTRODUCTION TO PATENTS AND INTELLECTUAL PROPERTY FOR FUTURE ENGINEERING LEADERS
Short Title: INTRO TO PATENTS & INTELL PROP
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hour: 1
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Course Level: Undergraduate Upper-Level
Description: RCEL 436 introduces undergraduate students to the fundamentals of intellectual property. Through class discussion, assignments, and guest speakers, the course provides a foundation for recognizing, evaluating, and leveraging IP opportunities and limitations in both research and industry, and thus equips students for the many encounters with IP that are likely to occur in their careers. Graduate/Undergraduate Equivalency: RCEL 536.
RCEL 450 - ENGINEERING PROJECT MANAGEMENT AND LEADERSHIP ACTION LEARNING
Short Title: PROJECT MANAGEMENT AND LEADERSHIP ACTION LEARNING
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 2
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Description: RCEL 450 combines project management and a practicum experience allowing students to practice leadership skills in an applied context utilizing a project. During the semester, each student will serve in a primary leadership capacity for a project. In addition to facilitating the project management of the project, each student will participate in an individualized action learning based model of leadership. Recommended Prerequisite(s): For Leadership Certificate candidates, RCEL 200 recommended Mutually Exclusive: Cannot register for RCEL 450 if student has credit for ENGI 317.

RCEL 477 - SPECIAL TOPICS
Short Title: SPECIAL TOPICS
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Internship/Practicum, Seminar, Lecture, Laboratory
Credit Hours: 1-4
Restrictions: Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.
Description: Topics and credit hours may vary each semester. Contact department for current semester’s topic(s). Repeatable for Credit.

RCEL 501 - ENGINEERING MANAGEMENT & LEADERSHIP THEORY AND APPLICATION
Short Title: ENGINEERING MGMT & LEADERSHIP THEORY AND APPLICATION
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: Technology-based innovation is the grand driver of economic progress, which hinges on strong technical leadership guiding engineering teams in mid-to-large corporate organizations and startup to small companies. By surveying and learning about the different type of EML approaches, this course outlines a framework for engineering professionals to progress from engineering manager to engineering executive (e.g., Vice President of Engineering, Chief Technology Officer). Practical methods from the engineering management literature that addresses technology-based innovation issues that have engineering management implications will be introduced. Seminal technology management principles, such as disruptive innovation, leaderless technology development, and digital platform strategy, found in companies ranging in size from start-up to large, will be examined. In order to enroll in an online section of this course, you are expected to have a working camera and microphone. During class sessions, you must be able to participate using your microphone and you are expected to have your camera on for the duration of the class so that you are visible to the instructor and other students in the class, just as you would be in an in person class.

RCEL 502 - ENGINEERING PROJECT MANAGEMENT
Short Title: ENGINEERING PROJECT MANAGEMENT
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: Engineering Project Management is targeted for professionals with 0 to 5 years experience. Content will provide instruction on the tools, techniques, and leadership characteristics required to successfully execute Agile and predictive projects. The course will address the project from business case, through all phases of project execution, and value delivery. The course is designed to use a combination of case studies, project related exercises and simulations. In order to enroll in an online section of this course, you are expected to have a working camera and microphone. During class sessions, you must be able to participate using your microphone and you are expected to have your camera on for the duration of the class so that you are visible to the instructor and other students in the class, just as you would be in an in person class.
RCEL 503 - ENGINEERING PRODUCT MANAGEMENT IN INDUSTRY 4.0
Short Title: ENGINEERING PRODUCT MANAGEMENT
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: The fourth and latest industrial revolution, Industry 4.0, is comprised of intelligent automated machines and devices being developed by un constrained manufacturing technologies (e.g., 3D printing), which can give them unprecedented sensing and communication capabilities. The internet of things (machines and sensors and the ‘big data’ they output) is creating new avenues for the remote collection of data from these new products. Engineering leaders will have a unique opportunity to guide engineering teams to create products that can leverage and evolve based on data from the supply chain to customer usage. In order to enroll in an online section of this course, you are expected to have a working camera and microphone. During class sessions, you must be able to participate using your microphone and you are expected to have your camera on for the duration of the class so that you are visible to the instructor and other students in the class, just as you would be in an in person class.

RCEL 504 - ETHICAL-TECHNICAL LEADERSHIP
Short Title: ETHICAL-TECHNICAL LEADERSHIP
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: The fourth and latest industrial revolution, Industry 4.0, is comprised of intelligent automated machines and devices being developed by un constrained manufacturing technologies (e.g., 3D printing), which can give them unprecedented sensing and communication capabilities. The internet of things (machines and sensors and the ‘big data’ they output) is creating new avenues for the remote collection of data from these new products. Engineering leaders will have a unique opportunity to guide engineering teams to create products that can leverage and evolve based on data from the supply chain to customer usage. In order to enroll in an online section of this course, you are expected to have a working camera and microphone. During class sessions, you must be able to participate using your microphone and you are expected to have your camera on for the duration of the class so that you are visible to the instructor and other students in the class, just as you would be in an in person class. Mutually Exclusive: Cannot register for RCEL 504 if student has credit for COMP 604.

RCEL 505 - ENGINEERING ECONOMICS FOR ENGINEERING LEADERS
Short Title: LEADING ENGINEERING ECONOMICS
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: The fourth and latest industrial revolution, Industry 4.0, is comprised of intelligent automated machines and devices being developed by un constrained manufacturing technologies (e.g., 3D printing), which can give them unprecedented sensing and communication capabilities. The internet of things (machines and sensors and the ‘big data’ they output) is creating new avenues for the remote collection of data from these new products. Engineering leaders will have a unique opportunity to guide engineering teams to create products that can leverage and evolve based on data from the supply chain to customer usage. In order to enroll in an online section of this course, you are expected to have a working camera and microphone. During class sessions, you must be able to participate using your microphone and you are expected to have your camera on for the duration of the class so that you are visible to the instructor and other students in the class, just as you would be in an in person class.

RCEL 506 - APPLIED STATISTICS AND DATA SCIENCE FOR ENGINEERING LEADERS
Short Title: STATS & DATA FOR ENGINEERS
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: Data Science has taken the world by storm. Examples of great success can be seen everywhere. This has opened the way for myriad industries and sectors to try to develop their own best practices. Especially since the COVID pandemic, data science, machine learning, artificial intelligence, and other computational technologies have grown rapidly during the past couple of years. However, not everyone knows which, how, when, or why to implement these techniques. Many engineers, for example, oversee or work with daily streams of data and want to use them in the most efficient way possible. The main objective of this course is to provide a comprehensive introduction to statistical and computational methods for modern data problems faced by engineers and engineering managers. By using statistical frameworks and data science as main drivers, the student will survey and compare algorithms for various data applications, learning how to select the most suitable according to real life scenarios. In order to enroll in an online section of this course, you are expected to have a working camera and microphone. During class sessions, you must be able to participate using your microphone and you are expected to have your camera on for the duration of the class so that you are visible to the instructor and other students in the class, just as you would be in an in person class.
RCEL 507 - MASTER’S IN ENGINEERING MANAGEMENT AND LEADERSHIP CAPSTONE
Short Title: MEML CAPSTONE
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: This course represents the capstone of the MEML program. It is a project-based and discussion-based course where students develop economically sustainable, technological solutions to society’s most complex grand challenges using the methods and competencies taught in the MEML program. Students are expected to devise Industry 4.0 relevant solutions, with mechanisms for continuous learning and improving the solution from end-user data, while bounding all approaches with a demonstrable ethical-technical framework. In order to enroll in an online section of this course, you are expected to have a working camera and microphone. During class sessions, you must be able to participate using your microphone and you are expected to have your camera on for the duration of the class so that you are visible to the instructor and other students in the class, just as you would be in an in person class.

RCEL 530 - ENGINEERING LAUNCH PAD-NON-ENGINEERING PATHWAYS
Short Title: ENGINEERING LAUNCH PAD-PATHWAY
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hour: 1
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: Engineering students explore alternative professional paths, including policy, law, medicine, industry consulting, and other viable career options beyond industry and research. Students will identify a focus career track and complete a series of assignments designed to increase familiarity and competency in that discipline. Graduate/Undergraduate Equivalency: RCEL 430.

RCEL 536 - INTRODUCTION TO PATENTS AND INTELLECTUAL PROPERTY FOR FUTURE ENGINEERING LEADERS
Short Title: INTRO TO PATENTS & INTELL PROP
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hour: 1
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: RCEL 536 introduces graduate (non-law) students to the fundamentals of intellectual property. Through class discussion, assignments, and guest speakers, the course provides a foundation for recognizing, evaluating, and leveraging IP opportunities and limitations in both research and industry, and thus equips students for the many encounters with IP that are likely to occur in their careers. Graduate/Undergraduate Equivalency: RCEL 436.

RCEL 541 - INTERNSHIP PRACTICUM FOR ENGINEERING LEADERS
Short Title: MEML INTERNSHIP PRACTICUM
Department: Center Engineering Leadership
Grade Mode: Satisfactory/Unsatisfactory
Course Type: Internship/Practicum
Credit Hour: 1
Restrictions: Enrollment is limited to Graduate level students. Enrollment limited to students in a Graduate Certificate, Master Materials Sci & NanoEng, Master of Bioengineering, Master of Chemical Eng, Master of Civil & Env Eng, Master of Comp & Appl Math, Master of Comp Sci & Eng, Master of Computer Science, Master of Data Science, Master of Electrical Comp Eng, Master of Eng Mgmt & Leadership, Master of Industrial Eng, Master of Mechanical Eng or Master of Statistics degrees.
Course Level: Graduate
Description: RCEL 541 is an applied practical and internship course that provides guided career and professional development for engineering students in a real-world industrial, academic, research, or other professional context. RCEL 541 prepares students to assimilate quickly and to exceed employer expectations during their internships. Students will develop a functional awareness of the vision, mission, strategy, and objectives of the organization, such that they may identify how their interests and skills align with the needs and culture of the company.

RCEL 542 - PROFESSIONAL COMMUNICATION FOR ENGINEERING LEADERS
Short Title: PROFESSIONAL COMMUNICATION
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture/Laboratory
Credit Hours: 3
Restrictions: Enrollment is limited to Graduate level students.
Course Level: Graduate
Description: To be truly influential in their fields, engineers need to be able to communicate their thoughts and opinions to management, peers, clients, and the public. They need to communicate clearly and confidently in a variety of professional situations. This course gives you the opportunity to learn, practice, and improve essential communication skills with emphasis on oral presentations, professional writing, and interpersonal communication. Graduate/Undergraduate Equivalency: RCEL 242.
Course URL: rcelconnect.org (http://rcelconnect.org)
RCEL 610 - ETHICS FOR ENGINEERS
Short Title: ETHICS FOR ENGINEERS
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Lecture
Credit Hours: 3
Restrictions: Enrollment is limited to students with a major in Applied
Physics/Bioengineering, App Phys/Chem-Biomolecular Eng, Applied
Physics/Electrical Eng, Applied Physics/Mechanical Eng, Appl Phys/
Materials Sci NanoEn, Applied Physics/Statistics, Bioengineering,
Computational & Applied Math, Chemical Engineering, Civil Engineering,
Computer Science, Computational Science & Eng, Electrical & Computer
Eng., Electrical Engineering, Environmental Engineering, Industrial
Engineering, Mechanical Engineering, Materials Science & NanoEng,
Systems/Synthetic/Phys Biology or Statistics. Enrollment is limited to
Graduate level students.
Course Level: Graduate
Description: Engineers can encounter a variety of ethical issues and
dilemmas in fulfilling their professional responsibilities. Ethical problems
can be considered somewhat analogous to engineering design problems:
both involve significant complexities, high degrees of uncertainty,
a number of boundary conditions and constraints, conformance
with criteria, identification and evaluation of alternatives responses,
and deciding on the best solution or action. This course will prepare
engineering students to understand the ethical issues related to their
profession, analyze the various options and alternative course of actions,
and implement the solutions to their ethical problems.

RCEL 677 - SPECIAL TOPICS
Short Title: SPECIAL TOPICS
Department: Center Engineering Leadership
Grade Mode: Standard Letter
Course Type: Internship/Practicum, Lecture, Laboratory, Lecture/
Laboratory, Seminar, Research, Independent Study
Credit Hours: 1-4
Course Level: Graduate
Description: Topics and credit hours vary each semester. Contact
department for current semester's topic(s). Repeatable for Credit.