Engineering Courses

Courses

ENGR 1300. Intro To Science & Engineering.
Introduction to Science and Engineering (3-0) This course will help the student to develop learning, study, and group skills, improve math application skills, and develop critical thinking and basic computer skills and problem solving skills. Basic concepts in engineering and science will be introduced.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

ENGR 1301. Intro-Eng Design & Innovation.
Experience engineering: design, simulate, build, and test creative solutions to problems. Project-based learning environment helps students acquire an appreciation for the central ideas of engineering design as an on-time, on-budget and fit-for-purpose solutions to a poorly specified, open-ended problem. Students build key skills, including concept development, critical thinking and evaluation skills, clear communication, research and information literacy skills and the skills involved in successfully functioning within a team environment to complete a given task.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

ENGR 1401. Introduction to ENGR & Design.
Introduction to Engineering and Design (3-3) This course will introduce the student to effective procedures for solving engineering and design problems using mathematics, computers, basic measuring systems and devices, computational tools and statistical concepts. The course will also introduce the student to the engineering profession, including the role and responsibilities of the engineer in today's society.
4 Credit Hours
6 Total Contact Hours
3 Lab Hours
3 Lecture Hours
0 Other Hours

Prerequisite(s):
(ENGL 1311 w/C or better ) AND (MATH 1411 w/C or better ) OR (MATH 1312 w/C or better ) OR (MATH 2313 w/C or better ) OR (MATH 2326 w/C or better ) OR (MATH 1411A w/C or better AND MATH 1411B w/C or better AND MATH 1411C w/C or better)

ENGR 2050. Engineering Leadership II.

0 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CE,CS,EE,IE,ME,MT,PREE

Prerequisite(s): (ENGR 1050 w/P or better)

ENGR 3050. Engineering Leadership III.

0 Credit Hours
2 Total Contact Hours
0 Lab Hours
2 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CE,CS,EE,IE,ME,MT,PREE

Prerequisite(s): (ENGR 2050 w/P or better)
ENGR 4330. Innovation Technology.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Classification Restrictions:
Restricted to class of JR,SR

Intellectual Property Law This course introduces students to intellectual property law, with particular attention to topics of interest for the fields of engineering and computing. The course focuses on the constitutional provisions, laws and court decisions that create and define rights in intellectual property, with primary attention to patents and copyrights, and with secondary attention to trade secrets. Students will gain basic skills in critical thinking, reading, understanding and explaining statutes and cases relating to intellectual property.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Classification Restrictions:
Restricted to class of JR,SR

Prerequisite(s): (EL 4331 w/C or better) AND (POLS 4325 w/C or better)

ENGR 4332. Law and Commercialization.
Law and Commercialization This course introduces students to the technology commercialization process, with particular attention to topics of interest for the fields of engineering, science, and business. The course focuses on the practical aspects of invention disclosure, patent protection, marketing, and licensing, and technology start-up formation and fundraising. Students will gain skills in invention triaging, patent claim amendments, drafting patent marketing materials, and negotiating commercialization-related contracts.
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Classification Restrictions:
Restricted to class of JR,SR