TECHNOLOGY (TECH)

Visit the Course Schedule Search website to find out when courses will be offered during the academic year.

Read more about the courses within this subject prefix in the descriptions provided below.

TECH 400 - Introduction to CEPS Programs
Credits: 1
An overview of programs offered by the College of Engineering and Physical Sciences with an emphasis on skills needed to be successful academically, career opportunities and professional development. Required course of all undeclared majors in CEPS.
Grade Mode: Credit/Fail Grading

TECH 401 - Scientific Research Exploration
Credits: 2
This course introduces incoming freshmen to the scientific research process via a hands-on approach, which includes case studies, group work, and a two-week immersion experience under the guidance of the College of Engineering and Physical Sciences (CEPS) faculty. Course readings, discussions, and active participation in local research will facilitate the student's exploration of experimental design, hypothesis testing, data collection and analysis, interpretation of results, and effective communication of research findings. In the context of a group research project, students begin thinking like scientists, as well as strengthening their math, writing, an oral communication skills.
Grade Mode: Credit/Fail Grading

TECH 402 - Introduction to CEPS Career Exploration
Credits: 1
This course will build on TECH 400's academic exploration and guide CEPS students as they identify ways to self-reflect and build experience to become well-rounded applicants for experiential learning opportunities (internships and research), graduate school, and their future careers. An emphasis will be placed on identifying ways to harness transferable skills through hands-on experiences beyond the classroom (jobs, volunteer work, clubs and orgs) applicable to the student's field(s) of interest.
Prerequisite(s): TECH 400 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

TECH 411 - Innovation Scholars I
Credits: 2
A research driven introduction to the university experience. Science, mathematical, and engineering principles will be applied within a cohort research experience for first year students. Under the direction of a faculty mentor(s), student teams will be guided through a year-long research experience culminating in a presentation of research results at the Undergraduate Research Conference, or equivalent activity.
Grade Mode: Credit/Fail Grading

TECH 412 - Innovation Scholars II
Credits: 2
A research driven introduction to the university experience. Science, mathematical, and engineering principles will be applied within a cohort research experience for first year students. Under the direction of a faculty mentor(s), student teams will be guided through a year-long research experience culminating in a presentation of research results at the Undergraduate Research Conference, or equivalent activity.
Attributes: Inquiry (Discovery)
Prerequisite(s): TECH 411 with a minimum grade of D-.
Grade Mode: Credit/Fail Grading

TECH 602 - Machine Shop Training
Credits: 1
In this course, the operation of the basic metal-cutting machine tools (e.g., engine lathe, milling machine, drill press, band saw, cut-off saw, etc.) are demonstrated. The students receive introductory training on the safe operation of these machines as well as on safe practices in the machine shop. Two small projects are completed to demonstrate basic machine shop abilities by the end of the course. Students must successfully complete an online shop safety quiz prior to the first day of the course. Offered spring and fall semesters only.
Equivalent(s): TECH 602A
Grade Mode: Credit/Fail Grading
Special Fee: Yes

TECH 750 - Intellectual Asset Management for Engineers and Scientists
Credits: 4
This course provides an introduction to the most important topic in the 21 century--intellectual assets. Students will receive an overview in practical, real-world aspects of managing intellectual assets (copyright, patents, trademarks, trade secrets, etc.). Students taking this course will be exposed to lectures, guest presentations, and case studies aimed at increasing their understanding of intellectual property strategies and related legal issues; technology assessment; technology valuation; licensing issues, strategies and negotiation techniques; business planning and start-up company development; and strategies for attracting investment for new ideas. The instructors and guest speakers for the course are involved in managing, protecting, investing in, or commercializing intellectual property assets in real world settings such as university technology transfer offices, patent law firms, venture capital firms, start-up companies, and related settings.
Grade Mode: Letter Grading

TECH 780 - Intellectual Property Law for Engineers & Scientists
Credits: 3
This course will cover the major doctrines of trade secrets, patents, copyrights, and trademarks, including what kinds of information qualify for protection, what must be done to obtain that protection, what rights owners and others have to use the information, and the underlying policy choices made by legislators and courts.
Grade Mode: Letter Grading

TECH 797 - Undergraduate Ocean Research Project
Credits: 2
Students work as members of interdisciplinary project teams on contemporary ocean-related problems under the guidance of a faculty adviser. Student team defines problem, prepares a budget, conducts literature surveys, engages in dialogue with experts in the community, deals with vendors, designs, and builds a working engineering model, gathers and analyzes scientific data or conducts a comprehensive study, makes interim reports, and defends the results before a jury of experts. A yearlong effort: 2 credits each semester, 4 credits total, an IA (continuous course) grade given at the end of the first semester.
Attributes: Writing Intensive Course
Repeat Rule: May be repeated up to 1 time.
Equivalent(s): TECH 697
Grade Mode: Letter Grading