WRITTEN COMMUNICATION

These courses will satisfy the First-Year Engineering and University Core Curriculum requirements for written communication. If you have not yet satisfied this FYE requirement, please consider ranking your preference for these courses before your preregistraiton advising meeting.

AMST 10100 (3 CR) AMERICA & THE WORLD

This course examines the United States and the country's connections to the broader world. By exploring ideas about social class, economics, citizenship, food, race, gender, music, sexuality, immigration, sports, war, art, nationalism, and freedom, the course takes a comparative and critical approach the question: "what is America, and American, in an increasingly global world?" Students in this course will spend time thinking and writing about their place in an interconnected and constantly evolving world.

COM 20400 (3 CR) CRITICAL PERSPECTIVES ON COMMUNICATION

This course provides an Introduction to critical thinking and writing about communication. Draws on humanistic and qualitative traditions to help students learn and apply critical approaches to understanding communication.

ENGL 10600 (4 CR) FIRST-YEAR COMPOSITION

ENGL 10600 is the standard first-year composition course. Some of the writing will be done using multimedia, and some of it may be composed in short assignments. Writing topics will be closely tied to the course's theme or approach, and may include personal experiences as well as research-based arguments. Students may also be asked to write on topics that are related to their major fields of study.

ENGL 10800 (3 CR) ACCELERATED FIRST-YEAR COMPOSITION

ENGL 10800 is an accelerated composition course. Because it meets two or three times a week, without the regular instructor-student conferencing sessions of ENGL 10600, student success in English 10800 requires (a) more self- efficacy and self-regulation; (b) strong writing skills and/or prior writing experiences, and/or (c) the focused content provided by learning communities. In a nutshell, 108 is 106 without required conferencing.

HONR 19903 (3 CR) INTERDISCIPLINARY APPROACHES TO WRITING

This course is a writing-intensive course in which students learn how to find, evaluate, and use credible information, how to express themselves well in a variety of different written genres, and how to write for different audiences. Available only for Honors College students.

SCLA 10100 (3 CR) TRANSFORMATIVE TEXTS

Part of the Cornerstone Certificate program, SCLA 101 is based on the fundamental premise that great texts inform and inspire students, encouraging their creative and imaginative capacities, helping students see the world from different perspectives and broadening their worldview. Students will examine a series of texts, seeking to understand the contexts in which they were produced, as well as what these texts mean to us today.

ORAL COMMUNICATION

These courses will satisfy the First-Year Engineering and University Core Curriculum requirements for oral communication. If you have not yet satisfied this FYE requirement, please consider ranking your preference for these courses before your preregistraiton advising meeting.

COM 11400 (HONORS AVAILABLE) (3 CR) FUNDAMENTALS OF SPEECH

COM 11400 comprises the study of communication theories as applied to speech and involves practical communicative experiences ranging from interpersonal communication and small group processes to informative and persuasive speaking in standard speaker-audience situations.

COM 21700 (3 CR) COM 217 - SCIENCE WRITING AND PRESENTATION

COM 21700 is a course designed to equip students with skills to effectively express ideas and research through both the written and spoken words. Scientists and engineers must effectively communicate complex, technical information. This course will encourage students to explore and improve their ability to convey scientific ideas in multiple modalities to a wide variety of audiences.

EDPS 31500 (3 CR) COLLABORATIVE LEADERSHIP: INTERPERSONAL SKILLS

This course focuses on developing professional oral communication skills (i.e., conveying meaning through words, visual aids, and non-verbal elements) and understanding of the role of interpersonal and oral communication skills in areas such as leadership development, professionalism, conflict resolution, interviewing, team building, and ethics.

SCLA 10200 (3 CR) TRANSFORMATIVE TEXTS

Like SCLA 10100, SCLA 10200 is part of the Cornerstone Certificate program and is based on the fundamental premise that great texts – whether famous speeches, essays, or poetry as well as film and digital media – inform and inspire students, encouraging their creative and imaginative capacities, helping students see the world from different perspectives and broadening their worldview. In this class, students will collaboratively examine a series of texts (including digital media), seeking to understand the contexts in which these texts were produced as well as what these texts mean to us today. The primary focus of SCLA 10200 is on oral communication.

SEMINAR OPTIONS

There are a number of optional seminars available for FYE students. While they do not satisfy any specific degree requirements, they will earn STEM credit, and more importantly are opportunities to explore special interest topics. Most of these seminars are only taught in the fall semester.

ENGR 10301-15 CRN: 26544 – ENGINEERING & CLIMATE CHANGE - INSTRUCTOR: DONNA RILEY

How and why is the climate changing, and what is engineering's role in the problem and solutions? This weekly seminar hosted by Professor Donna Riley, Head of the School of Engineering Education, with guest lectures from climate experts at Purdue and beyond, will introduce students to the issue of global climate change as it relates to the field of engineering. Course topics include the science of weather and climate, the varied and disparate impacts of climate change, the politics of the climate debate, and concrete actions individuals, organizations, governments, and intergovernmental entities can take to address climate change. Assignments include weekly discussion posts, a short essay exploring evidence related to a climate science controversy, a problem set using back-of-the-envelope estimation for evaluating climate policy solutions, and a reflection on personal action addressing climate change.

ENGR 10301-SC1 CRN: 11994 - BIDC: INTRO TO MANUFACTURING - INSTRUCTOR: MATTHEW SWABEY

BIDC, Introduction to Prototyping course explores the field of manufacturing from the perspective of an engineer. This introductory course, geared for beginners, highlights common manufacturing processes utilized within Purdue's Bechtel Innovation Design Center. Among the Center's capabilities are state-of-the-art machines and tooling. Ultimately, after the completion of this course, students should be able to use many of the tools and processes in the Center. Familiarity with engineering communications, methods, materials, and process will give the student a basic skill set in product realization.

ENGR 10301-008 CRN: 24710 - PROFESSIONAL PRACTICE IN ENGR - INSTRUCTOR: JENNIFER STRICKLAND & JOE TORT

This course will serve to enhance First-Year Engineering students' professional development and prepare course participants for experiential learning opportunities such as Co-Ops and Internships. Students will learn career-planning essentials; craft resumes and cover letters; build networking tools; develop professional etiquettes; improve interview techniques; design a brand identity; present an elevator pitch. They will have the opportunity to connect with engineering student mentors who have already gained professional experience. Additionally, students will hear from several industry speakers on topics such as organizational culture, building a professional networking, creating effective working relationships, working effectively across cultures and more.

ENGR 10301-002 CRN: 11995 - CEM: LEADING THE WAY INSTRUCTOR: BRANDON FULK

Students in this will explore the diverse responsibilities and opportunities of Construction Engineering via guest lecturers, current students and panel discussions with industry representatives. The guest lecturers will introduce unique projects and discuss industry trends. The current students will share their summer internship experiences and be available for questions. The summer internship program, a curriculum requirement unique to Purdue's Division of Construction Engineering and Management (CEM), was developed to provide students with experiential training in conjunction with their academic coursework. The corporate contacts will share their experience in 'climbing the corporate ladder' and what it takes to be a successful manger/entrepreneur. The course will include lecture presentations, homework, student presentations, jobsite visits and a team project. (The instructor intends for all activities to cross engineering disciplines so that those students whom do not intend on enrolling in the Construction Engineering Professional School will still benefit from this course.)

ENGR 10301-013 CRN: 25889 - NUCL ENGINEERING IN PRACTICE - INSTRUCTOR: SEUNGJIN KIM

Weekly seminars led by nuclear engineering faculty to introduce a specific topic, problem, or discipline of nuclear engineering to First-Year Engineering (FYE) students. Seminars are designed to help students explore nuclear engineering and/or to assist in their decision of selecting nuclear engineering as a major.

ENGR 10301-007 CRN: 24545 – INTRODUCTION TO UNDERGRADUATE RESEARCH INSTRUCTOR: JOHN HOWARTER & DARSHINI RENDER

This introductory course will serve to enrich First-Year student's professional development and prepare course participants for research opportunities at Purdue and beyond including Summer Undergraduate Research Fellowship Programs.

SEMINAR OPTIONS

(CONTINUED)

ENGR 10301-017 CRN: 29873 – DEFENSE AND NATIONAL SECURITY - INSTRUCTOR: STEPHEN BEAUDOIN

The US Departments of Energy, Defense and Homeland Security play important roles in ensuring the security of our nation. These agencies ensure safety in transportation security environments; organize, deploy and supply our military; maintain stewardship of our nuclear arsenal; and develop and deploy our cybersecurity strategies, among setting the vision for advancing state-of-the-art solutions for pandemics, computing, energy, climate, and other advanced engineering challenges. This seminar will feature presentations by Purdue faculty and invited world-class researchers who work for the Departments of Energy, Defense and Homeland Security. These presentations will introduce topics related to the complex intersection of engineering, policy, and government research, and will demonstrate the many exciting opportunities Boilermakers have to work on these topics. The course will be taught in synchronous, online mode, which means online discussions will be led by researchers from the Army Research Lab, Sandia National Labs, and the Department of Homeland Security

ENGR 18000 - MINORITIES IN ENGINEERING SEMINAR INSTRUCTOR: TBD

The Minority Engineering Program Seminar, was established in 1987 to promote awareness of campus-wide academic and non-academic support systems; to facilitate interaction between students, faculty, staff, upperclassmen, alumni, and corporate sponsors; and to develop and share strategies for academic and professional success. Open to all students, it offers a platform for corporate and alumni supporters to meet and greet students as mentors and/or prospective employers. Through weekly assignments, students develop content for a personal portfolio to guide their educational development and showcase their personal, professional, and technical skills.

ENGR 19400 CRN: 19992, 19993 OR 24841 - WOMEN IN ENGINEERING SEMINAR - INSTRUCTOR: SUZANNE ZURN-BIRKHIMER

An overview of the career opportunities for women in engineering. Speakers from a variety of engineering organizations discuss their career paths and share their strategies for success. The content and activities of the course may be of particular interest to women. Open to all entering engineering students.

MSE 19000-001 CRN: 14788 - INTRO TO MATERIALS ENGR - INSTRUCTOR: CHELSEA DAVIS

An introduction to materials science and engineering. Emphasis on the "processing, structure, properties, performance" relationships that lead to the development of materials for society's needs.

CE 29900-007 CRN 29128 – NEXT GENERATION MOBILITY INSTRUCTOR: DARCY BULLOCK

Technology is quickly transforming the movement of people and goods. The future is exciting, but the transition may be complicated. This course will introduce students to (a) ways in which Smart Mobility will redefine society and (b) methods to make the transition sooner. Topics will include: mobility as a service, the transition to self-driving vehicles, impacts upon transit and pedestrians, safety and infrastructure, smart parking management, freight movement between cities, and efficient trip planning and evacuation.

CE 29900-006 CRN 28727 – INTRO TO ENGINEERING OF WATER INSTRUCTOR: CARY TROY

An introductory, hands on exposure to topics, techniques, and faculty in the water areas of civil engineering. Topics include: Pollutant transport in rivers and streams, swimming pool chemistry, drinking water supply and treatment, wastewater recycling and treatment, flood and watershed modeling, green infrastructure, waves and coastal engineering, and more!

ME 19900 – HOW STUFF WORKS INSTRUCTOR: JULIA KING

An introduction to Mechanical Engineering for First-Year Engineering students interested in exploring a career in ME. The course is student led and involves a mix of presentations from successful alumni about their chosen careers coupled with fun hands-on experiences related to the invited industries leading to a better understanding of the broad career opportunities available to students with an ME degree. Little or no mechanical experience is required. A variety of common products are dissected to learn the underlying engineering design and fabrication fundamentals. Students are also introduced to the standard engineering terminology used in common products.