

Electrical and Computer Engineering–ECE

963 Advanced Topics in Systems (MTC)
Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. SA: EE 963

Topics vary each semester. Topics such as system identification and data fusion and adaptive filtering, robot dynamics and control, or adaptation and learning in neural networks and systems.

966 Advanced Topics in Signal Processing (MTC)
Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. SA: EE 966

Topics vary each semester. Topics such as discrete time processing of speech signals, multidimensional signal processing, or detection and estimation theory.

989 Advanced Topics in Plasma (MTC)
Fall of odd years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. SA: EE 989

Topics vary each semester. Topics such as plasma processing for IC fabrication, plasma diagnostic techniques.

999 Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 72 credits in all enrollments for this course. SA: EE 999

Doctoral dissertation research.

160 Diversity and Engineering
Fall, Spring. 2(2-0) P:M: (MTH 116 or concurrently or MTH 132 or concurrently) R: Open only to freshmen or sophomores in the College of Engineering.

Diversity and engineering. Transitional problems. Career options. Communication skills.

192 Environmental Issues Seminar
Fall, Spring. 1(1-0) A student may earn a maximum of 4 credits in all enrollments for this course. Interdepartmental with Natural Science; Agriculture and Natural Resources; Social Science; Communication Arts and Sciences. Administered by Natural Science. R: Open only to students in the College of Agriculture and Natural Resources or College of Engineering or College of Natural Science or College of Communication Arts and Sciences or College of Social Science. Approval of college.

Environmental issues and problems explored from a variety of perspectives, including legal, scientific, historical, political, socio-economic, and technical points of view.

290 Independent Study
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Open only to students in the College of Engineering, approval of college.

Independent undergraduate research in engineering.

291 Selected Topics
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Open only to freshmen or sophomores.

Experimental course development or special topics appropriate for freshmen and sophomores.

393 Engineering Cooperative Education
Fall, Spring, Summer. 1(1-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to students in the College of Engineering.

Pre-professional educational employment experiences in industry and government related to student's major. Educational employment assignment approved by College of Engineering.

400 Special Problems in International Engineering
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to juniors or seniors or graduate students in the College of Engineering.

Supervised study of selected topics in engineering using laboratories, equipment, and engineering design techniques. Given at various international universities and institutes.

475 Special Topics in International Engineering
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to juniors or seniors or graduate students in the College of Engineering.

Topics selected to supplement regular courses. Given at various international universities and institutes.

888 Capstone Project in Manufacturing
Fall, Spring, Summer. 3(1-6) Interdepartmental with Marketing and Supply Chain Management. R: Open only to seniors in the Manufacturing Engineering major or to students in the Business Management of Manufacturing major.

Problem solving in manufacturing. Design of products and processes for manufacturing using a systems approach. Teaming and communication skills are emphasized.

ENGLISH

ENG

Department of English College of Arts and Letters

090A Intensive English for Non-Native Speakers
Fall, Spring. 0 credit. [12(20-0)] R: Approval of English Language Center.

Explanation and intensive practice of English skills. Focus on beginning grammar, speaking, listening, reading, and writing.

090B Intensive English for Non-Native Speakers
Fall, Spring. 0 credit. [12(20-0)] R: Approval of English Language Center.

Explanation and intensive practice of English skills. Focus on intermediate grammar, speaking, listening, reading, and writing.

090C Intensive English for Non-Native Speakers
Fall, Spring. 0 credit. [12(20-0)] R: Approval of English Language Center.

Explanation and intensive practice of English skills. Focus on advanced grammar, speaking, listening, reading, and writing.

092 Academic Oral Skills for Non-Native Speakers of English
Fall, Spring. 0 credit. [3(3-0)] R: Approval of English Language Center.

Intensive speaking and listening practice of spoken academic English. Lecture-listening and note-taking strategies. Oral communication skills improved through discussions and classroom presentations.

093 Academic Reading and Writing Skills for Non-Native Speakers of English
Fall, Spring. 0 credit. [6(6-0)] R: Approval of English Language Center.

Integrative reading and writing strategies for academic purposes. Vocabulary development, intensive and extensive reading, and critical reading skills. Academic writing style and editing strategies.

094 Academic Reading Skills for Non-Native Speakers of English
Fall, Spring. 0 credit. [3(3-0)] R: Approval of English Language Center.

Intensive and extensive reading skills. Vocabulary development, pre-reading strategies, reading for comprehension, and critical reading skills.

095 Academic Writing Skills for Non-Native Speakers of English
Fall, Spring. 0 credit. [3(3-0)] R: Approval of English Language Center.

Writing, editing, and revision of journals, essays and research papers.

ENGINEERING

EGR

College of Engineering

101 Preview of Science
Fall. 1(1-0) Interdepartmental with Natural Science; Agriculture and Natural Resources; Social Science. Administered by Natural Science. R: Approval of college.

Overview of natural sciences. Transitional problems. Communications and computer skills. Problem solving skills. Diversity and ethics problems in science. Science and society.

124 Internet and Technology
Fall, Spring, Summer. 2(2-0)

The Internet from a user perspective and from a technical perspective. History and social impact of the Internet. Internet tools.

150 Engineers and the Engineering Profession
Spring. 2(2-0) R: Open only to freshmen or sophomores.

Overview of the engineering profession. Historical background. Engineering specialties. Engineers at work. Professionalism and ethics. Communication skills. Future trends and challenges.