

SPED 447 Seminar in Special Education (2). Explores the dynamics of the student teaching experience in partnership with the school community. Concurrent enrollment: SPED 445. Prerequisite: successful completion of all course requirements for degree or licensure. (F, S)

SPED 468 Workshop in Special Education (1–3). As announced. (May be repeated for a maximum of 3 hours in all education workshops.)

SPED 491 Directed Study (1–3). Independent study. (May be repeated for a maximum of 3 hours.) Prerequisite: consent of instructor.

SPED 493 Topics in Special Education (1–3). As announced. (May be repeated for a maximum of 6 hours.)

Electronics Engineering Technology (EET)

Note: Some math courses require prerequisites that can be fulfilled with satisfactory ACT/SAT scores. These minimum scores may be satisfied in the following ways:

For courses with MATH 107 as prerequisite, satisfactory scores are defined as

1. ACT math of 24 or higher **OR**
2. ACT math of 22 or 23 **AND** an algebra/geometry subscore of 9 **OR**
3. SAT math of 530 or higher

EET/ENGR 101 Introduction to Engineering (3). An introduction to fundamentals of engineering and its relation to science and mathematics. Topics include: engineering discipline, engineering methods using statistics, symbolic algebra, curve fitting and MATLAB software in engineering. (S)

EET 110 Basic Circuit Analysis (3). This course consists of materials for circuit analysis from a direct current (DC) standpoint. Topics include voltage, current, resistors, power and energy, plus analysis of series and parallel circuits. Prerequisite: satisfactory ACT/SAT score or MATH 107 (may be taken concurrently). Concurrent enrollment: EET 110L. (F)

EET 110L Basic Circuit Analysis Laboratory (NC). Concurrent enrollment: EET 110. (F)

EET/ENGR 111 Engineering Graphics (3). An introduction to engineering graphics using computer-aided design/drafting. Topics include geometric construction, orthographic projection, principle and auxiliary views, and related materials necessary to produce detailed drawings. Concurrent enrollment: EET/ENGR 111L. (F)

EET/ENGR 111L Engineering Graphics Laboratory (NC). Concurrent enrollment: EET/ENGR 111. (F)

EET 210 Intermediate Circuit Analysis (3). Topics include developing loop equations for series and parallel alternating circuits. Analog circuit simulation program familiarization. Investigation of impedance, frequency response, resonance, filter networks, transformers and complex waveforms. Prerequisites: EET 110/110L, MATH 120 or 119 (may be taken concurrently). Concurrent enrollment: EET 210L. (S)

EET 210L Intermediate Circuit Analysis Laboratory (NC). Concurrent enrollment: EET 210. (S)

EET 219 Computer Aided Drafting (3). Drawings of machines and machine-elements including threads, fasteners, springs and gears. The study of terminology, concepts, hardware/software and techniques necessary to understand, assemble, maintain and use a CAD system. Prerequisites: EET 111/111L. Concurrent enrollment: EET 219L. (S)

EET 219L Computer Aided Drafting Laboratory (NC). Concurrent enrollment: EET 219. (S)

EET 237 Semiconductor Devices (3). This course consists of materials for solid state devices such as diodes and transistors, small signal and elementary amplifier analysis. Prerequisites: EET 110/110L, MATH 119 (may be taken concurrently). Concurrent enrollment: EET 237L. (S)

EET 237L Semiconductor Devices Laboratory (NC). Concurrent enrollment: EET 237. (S)

EET 241 Logic Circuits (3). Pulse and logic circuits common to computers, data systems, analytical tools and their applications. Digital circuit analysis using computer simulations. Prerequisite: satisfactory ACT/SAT score or MATH 107 (may be taken concurrently). Concurrent enrollment: EET 241L. (F)

EET 241L Logic Circuits Laboratory (NC). Concurrent enrollment: EET 241. (F)

EET 242 Sequential Circuits and Applications (3). A continuation of Logic Circuits. The course will focus on sequential and finite state machines. Analysis of timing characteristics for flip-flops and latches are included. Prerequisites: EET 241/241L, MATH 119 (may be taken concurrently). Concurrent enrollment: EET 242L. (S)

EET 242L Sequential Circuits and Applications Laboratory (NC). Concurrent enrollment: EET 242. (S)

EET 268 Workshop in Engineering Technology (1–3). As announced. (May be repeated for a maximum of 6 hours.) (TBA)

EET 280 Electric Machines and Sensors (3). DC motors and generators, induction motors and generators, and various electrical and mechanical sensors are studied. Course emphasis is on the motor's principal of operation and application with PLC. Prerequisites: EET 210/210L, 237/237L. Concurrent enrollment: EET 280L. (F)

EET 280L Electric Machines and Sensors Lab (NC). Concurrent enrollment: EET 280. (F)

EET 293 Topics in Engineering Technology (1–3). As announced. (May be repeated for a maximum of 6 hours with consent of instructor or advisor.)

EET 310 Linear Systems Analysis (3). This course includes topics necessary for design and analysis of complex electronic circuits. Topics include: network analysis, analysis of continuous-time and discrete-time systems, sampling theorem, Laplace transform. Prerequisites: EET 210/210L; MATH 124. Concurrent enrollment: EET 310L. (Alt F)

EET 310L Linear Systems Analysis Laboratory (NC). Concurrent enrollment: EET 310. (F)

EET 337 Operational Amplifiers (3). A continuation of Semiconductor Devices. Operational amplifiers, troubleshooting and low-and-high frequency amplifiers are studied. Prerequisites: EET 237/237L. Concurrent enrollment: EET 337L. (F)

EET 337L Operational Amplifiers Laboratory (NC). Concurrent enrollment: EET 337. (F)

EET/CS 340 Microprocessors and Assembly Programming (3). Programming and use of microcomputer hardware to perform basic and advanced control functions. Topics include architecture and instruction set of microprocessors, timing diagrams, address decoding schemes and interrupt handling. Prerequisites: EET 241/241L or CS 123. (F)

EET 357 Electronic Communications I (3). Electronic circuits of modern electronic communications are studied. Topics include basic radio frequency transmitter and receiving systems, antennas and audio signal processing. Prerequisites: EET 337/337L, MATH 120. Concurrent enrollment: EET 357L. (Alt F)

- EET 357L Electronic Communications I Laboratory (NC).** Concurrent enrollment: EET 357. (Alt F)
- EET 421 Special Problems (1–2).** May be repeated for a maximum of 6 hours.
- EET 437 Electronic Circuit Design/Analysis (3).** A continuation of Operational Amplifiers course. The materials covered in this course include transistors modeling, transistors small signal analysis, transistors frequency response and compound configurations. Prerequisites: EET 337/337L. Concurrent enrollment: EET 437L. (Alt S)
- EET 437L Electronic Circuit Design/Analysis Laboratory (NC).** Concurrent enrollment: EET 437. (Alt S)
- EET 441 Circuit Design with PLDs (3).** Topics include study of design techniques used in digital electronics from programmable logic perspectives. A comparison between PLDs approach to that of using hardwired design is conducted. Prerequisite: EET 242. Concurrent enrollment: EET 441L. (F)
- EET 441L Circuit Design with PLDs Laboratory (NC).** Concurrent enrollment: EET 441. (F)
- EET 450 Control Systems (3).** Materials for this course include feedback theory of control systems and the principles of continuous and discrete control systems. Prerequisites: EET 310/310L, 337/337L, 357. Concurrent enrollment: EET 450L. (Alt S)
- EET 450L Control Systems Laboratory (NC).** Concurrent enrollment: EET 450. (Alt S)
- EET 457 Electronic Communications II (3).** The course presents advanced materials within modern electronic communications. Materials include microwave devices, fiber optics and radio-wave propagation. Digital and data communication, and system noise sources are also investigated. Prerequisites: EET 357/357L. Concurrent enrollment: EET 457L. (Alt S)
- EET 457L Electronic Communications II Laboratory (NC).** Concurrent enrollment: EET 457. (Alt S)
- EET 468 Workshop in Engineering Technology (1–3).** As announced. (May be repeated for a maximum of 6 credits.) (TBA)
- EET 472 Microprocessor and Microcomputer Interfacing (3).** Design of microcontroller applications using evaluation boards. Interfacing to external memory and I/O devices. Study of A/D and D/A conversions. Prerequisite: EET/CS 340. Concurrent enrollment: EET 472L. (S)
- EET 472L Microprocessor and Microcomputer Interfacing Laboratory (NC).** Concurrent enrollment: EET 472. (S)
- EET 489 Industrial Internship (3).** For three (3) hours credit a student must be employed for a minimum of 20 hours per week during a regular semester and 40 hours per week during the summer semester. Prerequisite: consent of department committee.
- EET 490 Special Project (3).** Engineer Technology project with particular emphasis on analysis, design, documentation and application to one or more practical problems. Prerequisites: EET 242, 337, 340, 357. (Alt S)
- EET 491 Directed Study (1–3).** Independent study. (May be repeated for a maximum of 4 credits with consent of instructor/advisor.) Prerequisite: consent of instructor.
- EET 493 Topics in Engineering Technology (1–3).** (May be repeated for a maximum of 6 credits with consent of instructor or advisor.) Prerequisite: consent of instructor.

English (ENG)

- ENG 100 Basic Writing Skills (3).** Specific instruction in basic composition, sentence construction, paragraph development and introduction to the essay. Class format includes individualized instruction. Credit will not count toward graduation. (F, S)
- ENG 102 English Composition (3).** Specific instruction in college-level reading and writing, various types/forms of academic essays, writing as a process, critical thinking, close reading and standards of academic discourse. Placement by ACT score. Must earn minimum grade of “C.” (F, S, Su)
- ENG 104 English Composition and Research (3).** A continuation of ENG 102; applies critical thinking, reading, and writing skills to research paper writing. In order to enhance students’ interdisciplinary research, special topics may be selected. Must earn minimum grade of “C.” Prerequisite: ENG 102 or 108 with a minimum grade of “C.” (F, S, Su)
- ENG 106 English as a Second Language (3).** English for the non-native speaker based on the application of modern linguistics. Open only to students whose native language is not English. (This course does not meet the undergraduate requirements for freshman composition.) Concurrent enrollment: ENG 106L. (F)
- ENG 106L English as a Second Language Lab (1).** Practice speaking English in a group situation: topics include cultural exchange, history, customs, current events, education and personal life experiences. Open only to students whose native language is not English. Concurrent enrollment: ENG 106. (F)
- ENG 107 English as a Second Language (3).** A continuation of ENG 106; developmental language for use in the academic and business worlds; syntactic analyses. Open only to students whose native language is not English. (This course does not meet the undergraduate requirements for freshman composition.) Concurrent enrollment: ENG 107L. (S)
- ENG 107L English as a Second Language Lab (1).** Continuation of ENG 106L. Concurrent enrollment: ENG 107. (S)
- ENG 108 English Composition (Honors) (3).** Writing expository and persuasive essays; enhanced critical thinking and writing skills based on reading and discussion of diverse texts related to a main topic or idea. Must earn minimum grade of “C.” Prerequisite: honors standing or consent of instructor. (F)
- ENG 109 Composition and Research (Honors) (3).** A continuation of ENG 108; applies critical thinking, reading and writing skills to scholarly research paper writing. To enhance students’ interdisciplinary research, special topics may be selected. Must earn minimum grade of “C.” Prerequisite: ENG 102 or 108 with a minimum grade of “C;” honors standing or consent of instructor. (S)
- ENG 201 Types of Literature (3).** An introduction to a literary genre. Subtitles vary by semesters. A. Short Story; B. Novel; C. Drama; D. Poetry; E. Science Fiction. (May be repeated for credit under different subtitle, with consent of instructor.) Designed primarily for non-majors. (F, S)
- ENG 211 Introduction to Literature (3).** Elements of the short story, the novel, poetry and drama: mythology, literary terms, basic techniques of each literary form; practice in writing about literature. (F, S)
- ENG 221 British Literature Survey I (3).** Overview of British literature from *Beowulf* to the eighteenth century. Prerequisite: ENG 211 recommended. (F)
- ENG 222 British Literature Survey II (3).** Overview of British literature from pre-romanticism to the contemporary period. Prerequisite: ENG 211 recommended. (S)