Electrical Engineering Technology, B.S.

Program Description

Engineering Technology is a branch of engineering education that emphasizes the practical aspects of engineering rather than abstract concepts or theories. It is a blend of the application of science, engineering knowledge, and technical skills used in support of engineering activities. The Electrical Engineering Technology (EET) program prepares graduates to enter the technical workforce in a variety of fields. Communications, instrumentation, automation, control systems, power, robotics, computers, and medical electronics are but a few of these fields. Within these fields, Electrical Engineering Technology graduates are typically involved in areas such as: development, design, quality assurance, technical documentation, production, maintenance, test, field service, or technical sales.

The Electrical Engineering Technology degree is designed to allow flexibility in the choice of EET electives. As an option, students may wish to choose two or more of their electives from a particular focus area.

 This program is a part of the Southern Polytechnic College of Engineering and Engineering Technology.

Accreditation

The Bachelor of Science with a major in Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

Admission, Enrollment, and Graduation Policies

Admission Requirements

This program does not have specific admission requirements and only admission to Kennesaw State University is required. For more information, please visit the Admissions section of the Catalog.

Graduation Requirement

Each student is expected to meet the requirements outlined in Academic Policies 5.0 PROGRAM REQUIREMENTS & GRADUATION.

Program Course Requirements

Core IMPACTS Curriculum (42 Credit Hours)

General Education Core IMPACTS Curriculum

Core IMPACTS Curriculum Requirements Specific to This Major

Science Majors: Must take MATH 1113 or higher in Mathematics & Quantitative Skills and MATH 1179 or higher in Applied Math.

Science and Engineering Majors**:** Must take two four-hour laboratory sciences in Natural Sciences. Students must choose from CHEM 1211/1211L , CHEM 1212/1212L , PHYS 1111/1111L*, PHYS 1112/1112L , PHYS 2211/2211L*, PHYS 2212/2212L , BIOL 1107/1107L , or BIOL 1108/1108L.

*Students cannot take both PHYS 1111/L and PHYS 2211/L nor PHYS 1112/L and PHYS 2212/L.

Core Field of Study (18 Credit Hours)

Students must earn a grade of "C" or better in these courses.

- EDG 1210: Survey of Engineering Graphics
- ECET 1101: Circuits I
- MATH 2202: Calculus II
- ENGT 2000: Applied Engineering Math
- CHEM 1211: Principles of Chemistry I
- CHEM 1211L: Principles of Chemistry Laboratory I
  Two (2) credit hours carried over from Technology, Mathematics, and Sciences.

Major Requirements (52 Credit Hours)

Students must earn a grade of "C" or better in these courses.

- ENGR 1000: Introduction to Engineering
- ECET 1001L: Introduction to Electrical Engineering Technology Lab
- ECET 1101L: Circuits I Lab
- ECET 1200: Digital I
- ECET 1200L: Digital I Lab
- ECET 2111: Circuits II
- ECET 2111L: Circuits II Lab
- ECET 2210: Digital II
- ECET 2210L: Digital II Lab
- ECET 2300: Electronics I
- ECET 2300L: Electronics I Lab
- ECET 2310: Electronics II

- ECET 2310L: Electronics II Lab
- ECET 3400: Data Communications
- ECET 3410: High Frequency Systems
- ECET 3500: Survey of Electric Machines
- ECET 3500L: Survey of Electric Machines Lab
- ECET 3600: Test Engineering
- ECET 3600L: Test Engineering Lab
- ECET 3620: Signals and Systems Analysis
- ECET 3710: Hardware Programming and Interfacing
- ECET 3710L: Hardware Programming and Interfacing Lab
- ECET 4610: Control Systems
- ECET 4610L: Control Systems Lab
- ENGT 4901: Engineering Technology Senior Design I
- ENGT 4902: Engineering Technology Senior Design II

Major Electives (9 Credit Hours)

Students must earn a grade of "C" or better in these courses. Select 9 credit hours from the following list of courses:

- ECET 3701: Embedded Systems
- ECET 3701L: Embedded Systems Lab
- ECET 4420: Communications Circuit Applications
- ECET 4420L: Communications Circuit Applications Lab
- ECET 4510: Power System Analysis
- ECET 4520: Industrial Distribution Systems, Illumination, and the NEC
- ECET 4530: Industrial Motor Control
- ECET 4630: Digital Signal Processing
- ECET 4730: VHDL and Field Programmable Gate Arrays
- ECET 4820: Communications Networks and the Internet

Program Total (121 Credit Hours)