

Electrical Engineering Technology

Mission Statement

The mission of the School of Applied Engineering and Technology is to provide value to our stakeholders through innovation in applied engineering education.

Electrical Engineering Technology is part of the technological field that requires the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities; it lies in the occupational spectrum between the technician and the engineer at the end of the spectrum closest to the engineer.

Program Educational Objectives (PEOs)

The Electrical Engineering Technology program at Southern Illinois University Carbondale prepares students to attain the following objectives, 3 to 5 years after graduation:

1. Become productive professionals and successfully formulate cost-effective solutions to real-world problems that are fundamental to electrical/electronic systems and related fields.
2. Pursue life-long learning through professional development activities, advanced degrees, professional licensure or certifications.
3. Serve the public and improve the quality of life by acting in a professional, safe and ethical manner.
4. Continually seek higher-level tasks requiring independent thinking and judgment, and advance professionally with increased responsibility.
5. Successfully integrate and contribute to the success of multi-disciplinary teams.

The undergraduate program in electrical engineering technology is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org. For each curriculum, a minimum of 30 hours in engineering technology courses must be taken in residence at Southern Illinois University Carbondale.

Bachelor of Science (B.S.) in Electrical Engineering Technology

The electrical engineering technology major is designed to prepare graduates who are capable of technical design and who can contribute to the development, production, testing, and installation of electrical and electronic devices, circuits, and systems. In addition, graduates are capable of participation in the planning and installation of power distribution systems and operating and maintaining complex electrical systems. Graduates of the program are employed in communications, power, electronics, sales, manufacturing, and other fields.

B.S. Electrical Engineering Technology Degree Requirements

Degree Requirements	Credit Hours
University Core Curriculum Requirements ¹	39
Foundation Skills	13
ENGL 101, ENGL 102	6
Mathematics (substitute Mathematics in major)	3
CMST 101	3

Degree Requirements	Credit Hours
UNIV 101	1
Disciplinary Studies	23
Fine Arts	3
Human Health	2
Humanities	6
Science (substitute PHYS in major for 3 hours)	6
Social Science	6
Integrative Studies	3
Multicultural	3
Requirements for Major in Electrical Engineering Technology	(6)+81
PHYS 203A, PHYS 203B, PHYS 253A, PHYS 253B	(3)+5
MATH 111, MATH 150, MATH 282	(3)+8
MGMT 202	3
ENGR 222, CS 202, ECE 222	2
EET 150, EET 238, EET 238L, EET 245, EET 245L, EET 304A, EET 304A-L, EET 304B, EET 304B-L, EET 332A, EET 332A-L, EET 332B, EET 332B-L, EET 403A, EET 403A-L, EET 437A, EET 437A-L, EET 437B, EET 437B-L, EET 438A, EET 438A-L, EET 438B, EET 438B-L, EET 439, EET 439L, EET 440, EET 440L, EET 495A, EET 495B	56
Technical electives	7
Total	120

¹ Courses in parentheses will also apply towards 6 hours in the University Core Curriculum, making a total of 39.

Capstone Option for Transfer Students

A Capstone Option may be available in the electrical engineering technology major and is explained on the Capstone Option page. Students holding associate degrees of at least 60 semester hours in non-baccalaureate-oriented programs or equivalent certification with a minimum grade point average of 2.0 are qualified. For the electrical engineering technology major, the associate degree or equivalent certification should be in an electrical or electronics-related field. This option permits qualified students

to fulfill their degree requirements by completing 60 semester hours of work approved by the Capstone advisor. Each individual's program of study may differ according to the previous academic work.

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