

# Electronics Engineering Technology

Program ENGR.ELCT.AAS  
CIP 150303



## Associate in Applied Science Degree

The Electronics Engineering Technology (EET) program is primarily a transfer program. Successful graduates may transfer to a college or university which offers a four-year bachelor's degree in electronics engineering technology.

Mercer County Community College's EET program maintains a transfer agreement with the ECET program of NJIT. Other options for EET graduates include Rowan, Drexel, and Rutgers universities. Several of these institutions have programs which allow EET graduates to complete the requirements for a BSET degree in two years or a Master of Science (MSEE) in three years.

Options among four-year transfer programs include Biomedical Engineering, for job opportunities at the various New Jersey pharmaceutical companies; Computer Engineering, for positions ranging from programmers to systems administrators; General Electrical Engineering, for opportunities at the various electronics companies in New Jersey and the surrounding states; and Telecommunications Engineering, for positions with companies employing fiber optics or networking systems.

### PROGRAM OUTCOMES

- Communicate effectively in English, both orally and in written form;
- Demonstrate an understanding of the fundamentals of AC and DC electricity;
- Work as a team with fellow workers;
- Use a computer to access information from the Internet;
- Demonstrate mastery of college algebra and trigonometry;
- Demonstrate mastery of job skills such as soldering, metalworking, and PC board repair;
- Demonstrate an understanding of fundamental digital circuits;
- Demonstrate an understanding of analog circuits, including linear integrated circuits;
- Set up and operate modern electronic equipment such as DMM, oscilloscope, and signal generators.

Admission requires a high school diploma or its equivalent, with two years of algebra desired. One year of laboratory science (chemistry or physics) is strongly recommended for students who intend to transfer to a baccalaureate degree program.

Graduates may begin work directly as electronic technicians, electronic technologists, engineering aides, customer engineers, field service engineers, junior engineers, associate engineers, sales engineers, and systems test technicians. These positions are in the electronics

**NOTE:** All program listings are subject to periodic updates. Please consult your program advisor, academic division, or [www.mccc.edu/programs\\_degree](http://www.mccc.edu/programs_degree)

### A.A.S. Curriculum

Code	Course (lecture/lab hours)	Credits
<b>FIRST SEMESTER</b>		
CSW 100	College Success and Personal Wellness (2/0)†	2
EET 138	Introduction to Electronics I (3/3)	4
EET 140	Electronic Construction (1/3)	2
ENG 101	English Composition I (3/0)	3
MAT —	Mathematics elective <sup>1</sup>	4
<b>SECOND SEMESTER</b>		
EET 139	Introduction to Electronics II (3/3)	4
EET 215	Fiber Optics (3/2)	4
ENG 102	English Composition II (3/0)	3
— —	General Education elective <sup>2</sup>	3
— —	General Education elective <sup>3</sup>	3
<b>THIRD SEMESTER</b>		
EET 219	Electronic Networks (3/3)	4
EET 251	Digital Circuit Fundamentals (3/3)	4
— —	Science OR Technology elective <sup>4</sup>	3
— —	General Education elective	3
<b>FOURTH SEMESTER</b>		
EET 214	Communications Electronics (3/3)	4
EET 230	Linear Integrated Circuits (3/3)	4
EET 263	Digital Technology (3/3)	4
— —	Science OR Technology elective <sup>4</sup>	3
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NOTE: Electives should be selected in consultation with an academic advisor in order to assure maximum transfer of credits.

<sup>1</sup> Minimum mathematics requirement for students who do not plan to transfer to a bachelor degree program is MAT 146. Students who plan to transfer, working in consultation with an EET program advisor, should achieve MAT 151 level of proficiency or higher.

<sup>2</sup> Select course from either Social Science or Humanities general education categories.

<sup>3</sup> Select course from the following general education categories: Social Science, Humanities, Historical Perspective, Diversity and Global Perspective.

<sup>4</sup> Minimum requirement for students who do not plan to transfer is 6 credits selected from the approved list of general education science/technology electives. Students who plan to transfer to bachelor degree programs should complete PHY 101-102. Selection of courses should be made in consultation with an EET program advisor.

†Some exemptions apply. Consult academic advisor for details.

industry, communications, medical instrumentation, energy technology, digital and computer technology, and scientific or technological research and development.

Students planning to transfer should achieve mathematics proficiency at the calculus level and should select physics as their science/technology electives. They will be advised individually during their first session with an EET program advisor.

The college offers a related certificate program in Electronics Engineering Technology, which may be a desirable option for employed persons attending college part-time.

In a particular year, some required courses may be available only during the day or evening.