MERCER
COUNTY COMMUNITY COLLEGE

2024-2025 Academic Year

Electronics Engineering Technology

Associate in Applied Science Degree (A.A.S.)

Business, Technology, and Professional Studies Division
609.570.3482 admiss@mccc.edu

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 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.

SEE ALSO:
Electronics Engineering Technology certificate program

DEGREE CURRICULUM

2024-2025 Academic Year

ENGR.ELCT.AAS
CIP 150303

The course sequence below represents a recommended example of how this degree program can be completed in two years, presuming a Fall Term start and satisfaction of all Developmental Studies (foundation courses) requirements and prerequisites. Actual approaches toward completion depend on each student's anticipated transfer institution, career objectives, or other individual circumstances.

Students are encouraged to meet regularly with an academic advisor or Success Coach to consider options, establish plans, and monitor progress.

Code	Course (lecture/lab hours)	Credits	To Do This Semester
FIRST SEMESTER			
EET 138	Introduction to Electronics I (3/3)	4	✓ Meet with your faculty advisor to complete an academic plan. Make sure you are aware of any course prerequisites you may need to take, and how long it will take to complete your degree.
EET 140	Electronic Construction (1/3)	2	
ENG 101	English Composition I (3/0)	3	
MAT 151	Calculus I for the Mathematical and Physical Sciences (4/0)		

	• Preferred for students intending to transfer to a baccalaureate program.	
	OR	4
MAT 146	Pre-Calculus (4/0)	

✓ Use your online tools: Check your MercerMail daily, utilize features of Office 365, and get to know Student Planning.

✓ Take advantage of Learning Centers or Online Tutoring to support your studies and assignments.

SECOND SEMESTER

EET 139	Introduction to Electronics II (3/3)	4
EET 145	Fiber Optics (2/3)	3
ENG 102	English Composition II (3/0)	3
— —	Social Science or Humanities general education elective	3
— —	General Education elective	3

✓ Transitioning to college can be challenging. Meet with your Success Coach for guidance and support.

✓ Apply for financial aid by May 1.

✓ Contact professors with questions and use their office hours to develop a connection. Talk with them to get the inside scoop on how your profession works.

✓ Be sure to visit the Career Services office to explore jobs, internships, and career information and get help with your resume and other career tools.

✓ Apply for Continuing Student scholarships at www.mccc.edu/m-scholarships.

THIRD SEMESTER

EET 219	Electronic Networks (3/3)	4

EET 251	Digital Circuit Fundamentals (3/3)	4	✓ Keep in contact with each professor and your faculty advisor. Make sure you are on track to graduate on time. ✓ Work with Career Services to formulate plans for after you've earned this degree. ✓ Develop team and leadership skills by getting involved in activities and clubs. ✓ Apply for Continuing Student scholarships at www.mccc.edu/m-scholarships. ✓ Manage your stress! Take advantage of the MCCC pool, Fitness Center, free yoga and Zumba. Reach out for counseling or other support if you need it. Your Success Coach can connect you with resources.
PHY 101	College Physics I (3/3)	4	
— —	General Education elective • Select course from the following general education categories: Social Science, Humanities, Historical Perspective, Diversity and Global Perspective, Written and Oral Communication.	3	
FOURTH SEMESTER			
EET 214	Communications Electronics (3/3)	4	✓ Get ready to start your career! Begin the job application process. ✓ Discuss your career plans with your faculty advisor. S/he can help you transition successfully.
EET 230	Linear Integrated Circuits (3/3)	4	
EET 263	Digital Technology (3/3)	4	
PHY 102	College Physics II (3/3)	4	
		60	

NOTE: Electives should be selected in consultation with an academic advisor in order to assure maximum transfer of credits.