ELECTRONIC ENGINEERING TECHNOLOGY

Associate in Applied Science Degree | Career Program
Department of Engineering, Physics and Technology

Program Description

Electrical and electronic technicians build, test and maintain complex electronic equipment such as computers, control systems, communication networks, power systems and medical devices. The Electronic Engineering Technology (EET) program at Bronx Community College prepares graduates to join the workforce as technical professionals in a variety of industries and services or to transfer to a four-year baccalaureate program in engineering technology.

The technical curriculum is combined with a program of general education to assure that graduates of the EET program have the prerequisite skills in reading, writing and communication that are necessary to function effectively in the workplace. The Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org, under the commission's General Criteria and Program Criteria for Electronic Engineering Technology.

Electronic Engineering Technology students who plan to continue their studies may transfer directly to New York City College of Technology or other colleges offering the baccalaureate degree in Engineering Technology. Graduates' transfer credits for technology courses taken at BCC will be evaluated by each college.

Program Objectives

Within two or more years after graduation from Bronx Community College students in the Electronic Technology Program are expected to be

- graduates of a four-year baccalaureate program in Engineering Technology or pursuing additional formal education;
- gainfully employed as engineering technologists;
- attaining increasing levels of responsibility in their chosen career; and
- respectful of cultural diversity and practicing the profession in an ethical manner.

Learning Outcomes

Upon successful completion of the Electronic Engineering Technology program requirements, students will be able to:

1. Analyze and interpret technical data.
2. Use mathematics to solve problems in electronics.
3. Conduct standard tests and measurements.
4. Conduct, analyze and interpret experiments.
5. Identify, analyze, and solve engineering technology problems.
6. Design and build prototype electronic systems such as power supply, counters, AM & FM radio, Microprocessor Control Systems, and optical fiber transmitter and receiver.
7. Read circuit schematics, select electronic components.
8. Solder and assemble circuits and printed circuit boards (PCBs).
9. Simulate electronic circuits.
10. Work effectively in a team environment.

Annual student enrollment and graduation data for students in the Electronic Engineering Technology program

Semester and Year	Enrollment	Academic Year	Graduates
Fall 2019	102	2018-2019	24
Fall 2020	95	2019-2020	20
Fall 2021	93	2020-2021	16
Fall 2022	88	2021-2022	8
Fall 2023	97	2022-2023	9

ELECTRONIC ENGINEERING TECHNOLOGY CURRICULUM (PATHWAYS)

66 Credits required for AAS Degree
Curriculum Coordinator: Dr. Syed Rashid Zaidi

Required Core

A. English Composition

- **ENG 100** English Composition I: Integrated Reading and Writing *OR* **ENG 110** English Composition I: Fundamentals of Writing and Rhetoric *OR* **ENG 111** English Composition I: Writing and Rhetoric (3 Credits)
- **ENG 112** English Composition II: Writing and Rhetoric

B. Mathematical and Quantitative Reasoning

- **MTH 28** College Algebra and Elementary Trigonometry[1] (3 Credits) *OR* **MTH 28.5** College Algebra and Elementary Trigonometry (Corequisite)

C. Life and Physical Sciences

- **PHY 11** College Physics I (4 Credits)

Flexible Core

A. World Cultures and Global Issues

- **HIS 10** History of the Modern World *OR* **HIS 11** Introduction to the Modern World (3 Credits)

D. Individual and Society

- **COMM 11** Fundamentals of Interpersonal Communications (3 Credits)

E. Scientific World

- **PHY 12** College Physics II (4 Credits)

  SUBTOTAL 23

Major Requirements

- **ELC 11** DC Circuit Analysis (4 Credits)
- **ELC 15** Computer Applications in Technology (2 Credits)
- **ELC 18** Computer Programming for Engineering Technology (2 Credits)
- **ELC 21** AC Circuit Analysis (4 Credits)
- **ELC 25** Electronics I (4 Credits)
- **ELC 35** Electronics II (4 Credits)
- **ELC 51** Electronics Controls (3 Credits)
- **ELC 81** Electronics Communications (3 Credits)
- **ELC 94** Laser and Fiber Optic Communications (4 Credits)
- **ELC 96** Digital Systems I (4 Credits)
- **FYS 11**[1] First Year Seminar (1 Credit)
- **MTH 30**[1] Pre-Calculus Mathematics (4 Credits)
- **MTH 31** Calculus and Analytical Geometry I (4 Credits)

  SUBTOTAL 43

[1] Students who place out of MTH 28 will apply MTH 30 to Required Core B and must take 3 elective credits.

[2] Students must take FYS 11 prior to earning 24 equated or degree credits. Students who have earned 24 or more equated or degree credits are permitted to use the one credit as a free elective. It is highly recommended that students take FYS 11 in their first or second semester.