

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>.

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 2014	130	2013-2014	18
Fall 2015	155	2014-2015	23
Fall 2016	151	2015-2016	15
Fall 2017	148	2016-2017	20
Fall 2018	148	2017-2018	29

ELECTRONIC ENGINEERING TECHNOLOGY CURRICULUM (PATHWAYS)

66 Credits required for AAS Degree

Curriculum Coordinator: Dr. Jalil Moghaddasi

Required Core

A. English Composition

- **ENG 110** Fundamentals of Composition and Rhetoric
OR **ENG 111** Composition and Rhetoric I (3 Credits)
- **ENG 112** Composition and Rhetoric II (3 Credits)

B. Mathematical and Quantitative Reasoning

- **MTH 30** Pre-Calculus Mathematics (4 Credits)

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 24

Major Requirements

- **ART 10** Art Survey *OR*
MUS 10 Music Survey (1 Credit)
- **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 (4 Credits)
- **ELC 94** Laser and Fiber Optic
Communications (4 Credits)
- **ELC 96** Digital Systems I (4 Credits)
- **FYS 11¹** First Year Seminar (1 Credit)
- **MTH 31** Calculus and
Analytical Geometry I (4 Credits)
- **PEA** Physical Education Activity Course (1 Credit)

SUBTOTAL 42

¹ 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.