

2009-2010

B.S. in Electronics Engineering Technology

College of Sciences and Technology

What Is the Study of Electronics Engineering Technology?

The Electronics Engineering Technology program prepares engineering technologists who understand and can apply established scientific and engineering knowledge and methods in combination with technical skills of modern technology to support engineering activities. Students are provided with a strong concentration of both classroom instruction and practical hands-on laboratory design and testing experiences. Graduates are qualified for application positions in electronic systems analysis and design, product design and development, technical sales and service, and field engineering operations and maintenance.

Why Should I Consider This Major?

An Electronics Engineering Technology (EET) graduate will work in the electronics field in positions such as design and development, applications, test engineering, and technical sales. As a four-year engineering technology program the emphasis is on hands-on applications using parts, instrumentation and processes found in industry. It is a general electronics program that includes analog, digital, and microprocessor-based hardware and software analysis and design. An EET student should have a strong background in math, physics, and communication skills to be prepared for both technical and professional challenges.

The Electronics Engineering Technology degree program is accredited by the Technology Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone 410-347-7700.

How to Declare:

Students should declare their major early and seek departmental advisement.

Mid-Program Checkpoint:

Students intending to complete a Bachelor's of Science degree in Electronics Engineering Technology within four years should complete the following courses by the start of their junior year. Students are expected to follow all prerequisite requirements for courses and seek early departmental advisement

Coursework:

EETEC 270, 271, 272, 273, 274, 371, 372, 375

MATH 124 or 134, 125 or 135

CHEM 121

PHYS 121, 122, 123

COMM 101 or 235

CSCI 140

And 18 credits of technical electives and/or GURS

Other Activities:

Meet with Undergraduate Advisor to complete a plan of study.

Contact Information:

Engineering Technology
Departmental Website:
<http://www.etec.wvu.edu/>

Electronics Engineering
Technology Website:
<http://eet.etec.wvu.edu/>

Engineering Technology Chair
and EET Program Advisor:
Todd Morton
ET 209 ; 360-650-3380
Todd.Morton@wvu.edu

Sample Careers:

Supervision and technical
analysis or design

Design and development

Application support

Technical sales

Customer service

Computer maintenance

Communications

Embedded systems

Digital and analog electronics

Electrical power



Electronics Engineering Technology Major Requirements: 149 Credits

Electronics Core: 104 credits

- ETEC 270 Electronics Seminar (1)
- ETEC 271 Circuit Analysis I (4)
- ETEC 272 Electronics Devices and Circuits (4)
- ETEC 273 Digital Electronics (4)
- ETEC 274 Fundamentals of Microprocessors (5)
- ETEC 371 Circuit Analysis II (5)
- ETEC 372 Electronic Analysis and Design (5)
- ETEC 373 Digital Systems (5)
- ETEC 374 Microprocessor Applications (5)
- ETEC 375 Electronic Systems (5)
- ETEC 376 Electrical Power (5)
- ETEC 378 Network Analysis (4)
- ETEC 379 Active Linear and Non-Linear Circuits (5)
- ETEC 405 Communications Circuits (4)
- ETEC 454 Embedded Systems (4)
- ETEC 455 Communication Systems (4)
- ETEC 457 Automatic Control Systems (4)
- ETEC 471 Project Definition (2)
- ETEC 474 Microcomputer-Based Design (4)
- ETEC 475 Digital Communications (4)

Technical electives: 21 credits, of which 4 credits must be upper-division, as approved by the program coordinator.

Supporting Courses: 45 credits

Mathematics: 14 credits

- MATH 124 Calculus and Analytical Geometry
 - Or MATH 134 Honors Calculus I (5)
- MATH 125 Calculus and Analytical Geometry
 - Or MATH 135 Honors Calculus II (5)
- MATH 321 Mathematics for Technology (4)

Chemistry: 5 credits

- CHEM 121 General Chemistry I (5)

Physics: 15 credits

- PHYS 121 Physics with Calculus I/Lab (5)
- PHYS 122 Physics with Calculus II/Lab (5)
- PHYS 123 Electricity and Magnetism/Lab (5)

Communications: 7 credits

- COMM 101 Fundamentals of Speech (4)
 - Or COMM 235 Exposition and Argumentation (4)
- ENG 302 Introduction to Technical and Professional Writing (5)
 - Or ETEC 341 Engineering and Society (3)

Computer Science: 4 credits

- CSCI 140 Programming Fundamentals in C++(4)

Minimum total credits for the Electronics Engineering Technology degree, including additional GUR requirements, equal 186.

These courses are offered within this major and may be used to satisfy GUR or Writing Proficiency requirements.

BCOM: COMM 101 or 235

QSR: MATH 124 or 134

LSCI: PHYS 121, 122, 123

WP: Three Writing Proficiency points are required for graduation (they are noted as WP1, WP2, and WP3). Check [Classfinder](#) or [Online Timetable](#) for departmental offerings each quarter.

Other Engineering Technology Options:

B.S. Industrial Design (135 credits)

B.S. Industrial Technology (110 credits)

B.S. Manufacturing Engineering Technology (144 credits)

B.S. Plastics Engineering Technology (139 credits)

B.S. Vehicle Engineering Technology Option in Plastics Engineering Technology (139 credits)

Minor in Manufacturing Engineering Technology (18 credits)

Minor in Embedded Systems (27 credits)

Minor in Sustainable Design (30-32 credits)

Minor in Industrial Technology-Vehicle Design (25 credits)