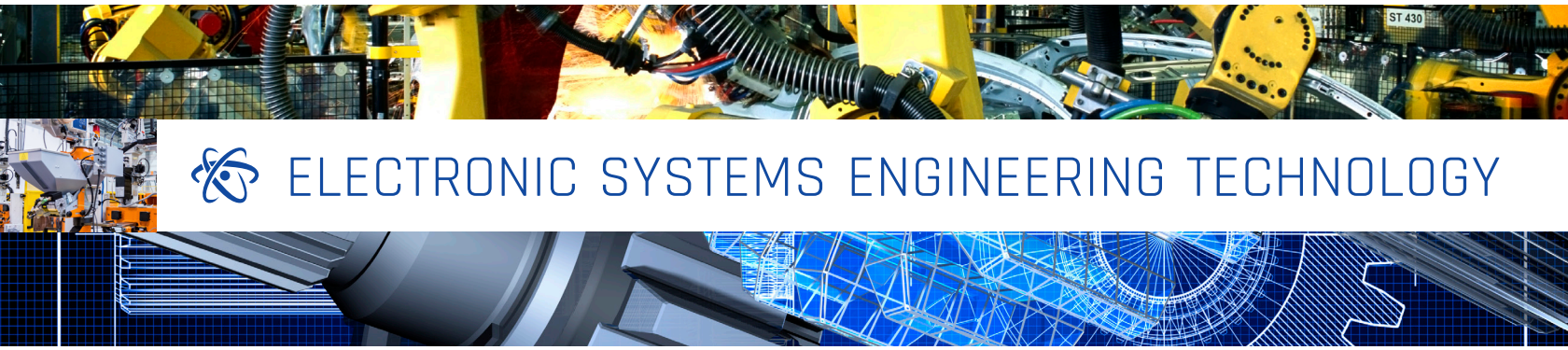
ecpi UNIVERSITY

NEWPORT NEWS, VIRGINIA BEACH, & ONLINE CAMPUSES
COLLEGE OF TECHNOLOGY
ELECTRONIC SYSTEMS ENGINEERING TECHNOLOGY
BACHELOR'S DEGREE



ELECTRONIC SYSTEMS ENGINEERING TECHNOLOGY

ESET graduates function in multidisciplinary teams to design, install, maintain, and repair systems, components, or processes meeting specific needs for engineering applications. They serve as a link between engineers and technicians in the workplace where they play a key role from the conception of electronic systems until their implementation. They are involved in the development, testing, production, and quality assurance of components and/or systems such as circuit boards, wireless phones, medical equipment, and control systems.

The curriculum provides ESET graduates with the education and foundation needed for employment in a variety of industries in the private and public sector, including the computer industry, homeland security, automation and manufacturing, and education. Electronic Systems concentration graduates are employed in a wide spectrum of areas in positions such as engineering consultant, electrical engineering or computer engineering technologist, product engineer, or project manager. Through ECPI University's year-round schedule, you could earn a Bachelor of Science Degree in Electronic Systems Engineering Technology with a concentration in Electronic Systems in as little as 2.5 years.

Outcomes

Students in the B.S. Electronic Systems Engineering Technology, ESET program learn to design and integrate electronic systems through a strong foundation in analog and digital electronics. They are able to apply the acquired engineering and mathematical principles to implement and improve systems and/or processes for engineering applications.

Upon Completion of the Bachelor of Science in Electronic Systems Engineering Technology, ESET, Graduates will have:

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to the discipline.
- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and an ability to function effectively as a member or leader on a technical team.
- An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
- An ability to apply written, oral, and graphical communication in both defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

ELECTRONIC SYSTEMS CONCENTRATION:

- Students enrolled in the Electronic Systems concentration will apply acquired knowledge to design and implement computer, control and embedded systems as well as implementing industrial automation solutions.

Possible Career Track

- Electrical/Computer Engineering Technologist
- Industrial Engineer
- Product Engineer
- Project Manager

ABET Engineering Technology Accreditation Commission

ABET, The Bachelor of Science in Electronic Systems Engineering Technology and the Bachelor of Science in Mechanical Engineering Technology programs at the Virginia Beach and Newport News, VA campuses and Online are accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org. ABET, 415 North Charles Street, Baltimore, MD 21201 +1.410.347.7700

ELECTRONIC SYSTEMS ENGINEERING TECHNOLOGY
BACHELOR OF SCIENCE DEGREE

To receive the Bachelor of Science in Electronic Systems Engineering Technology, the student must earn 124 semester credit hours. The program requires a minimum of eight semesters, 30 months or 120 weeks of instruction.

Program Requirements are as follows:

CORE CURRICULUM 52 SEMESTER CREDIT HOURS	CREDITS
Electric Circuits I	3
Electric Circuits II	3
Electric Circuits LAB	1
Circuit Analysis	3
Semiconductor Devices	3
Electronic Systems Applications	3
Industrial Applications	3
Instrumentation and Measurement LAB	1
Digital Systems I	3
Digital Systems II	3
Digital Systems LAB	1
Introduction to Computer Networking	3
Introduction to Programming	3
Applied Engineering Programming	3
Introduction to Programmable Logic Controllers	3
Introduction to Programmable Logic Controllers LAB	1
Programmable Logic Controllers and Robotics	3
Programmable Logic Controllers and Robotics LAB	1
ONE PAIR OF THE FOLLOWING	
Motor Drives	3
Motor Drives LAB	1
Microcontrollers	3
Microcontrollers LAB	1
Senior Project	3
Senior Project LAB	1

SELF INTEGRATION 9 SEMESTER CREDIT HOURS	
Computer Configuration I	3
Engineering Math & Software Applications	3
Career Orientation Seminar	0
Essentials for Success	3

ARTS AND SCIENCES* 37 SEMESTER CREDIT HOURS	CREDITS
Arts and Sciences Capstone	3
Principles of Communication	3
College Composition	3
Advanced Composition	3
Culture and Diversity	3
College Algebra	3
Pre-calculus	3
Applied Calculus I	3
Applied Calculus II	3
Physics	3
Physics LAB	1
TWO OF THE FOLLOWING	
Macroeconomics	3
Microeconomics	3
Introduction to Psychology	3
Positive Psychology	3

*For allowable substitutions of arts and sciences courses, see the Arts and Sciences Department page

ELECTRONIC SYSTEMS ENGINEERING TECHNOLOGY 16 SEMESTER CREDIT HOURS	
Computer Configuration II	3
Computer Configuration II LAB	1
Data Communications and Networking **OR** Network Protocols and Services	3
Semiconductor Processing	3
Digital Communications I	3
Introduction to Communications Systems	3

ELECTIVES SEMESTER CREDIT HOURS	10

SEMESTER CREDIT HOURS	124

*These are the courses making up the degree plan at the time of student enrollment. The University at its sole discretion may modify the program track as deemed necessary.

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STUDENT INVESTMENT

START DATE _____

ORIENTATION _____

ELECTRONIC SYSTEMS ENGINEERING TECHNOLOGY PROGRAM DEGREES

Tuition Includes

- Tutoring
- Parking fees
- Graduate employment services
- Externships (if applicable)
- Subsidized certification vouchers
- Full- and part-time job assistance while attending school

BACHELOR'S DEGREE

- Electronic Systems Engineering Technology
- Mechatronics (ESET)

*Programs offered vary by campus location.

Application Fee $15 non-refundable, one-time charge

Registration Fee $100

Monthly Payment Monthly payments are determined after all federal grants and loans, scholarships, and alternative loans are applied.

What You Need

- Complete FAFSA online at fafsa.gov (for help go to: ecpi.edu/fa)
- 3 references

Program Cost

- Bachelor's = 8 semesters x $8,712 = $69,696 (estimate)
- ECPI semester = 15 weeks consisting of three 5-week terms
- Technology fee = $480.00 per semester
- ECPI University reserves the right to make changes in tuition and fees without further notice.