YOUR EDUCATION. YOUR CAREER. YOUR CHOICE.

At Worcester Polytechnic Institute, we offer choices; these choices help support our students as they advance in their careers. These are the options for our electrical and computer engineering graduate program:

- Master of Science or Graduate Certificate
- Online, on campus or blended
- Thesis or non-thesis track
- Four areas of advanced specialization:
  - Analog Design
  - Digital Design
  - Power Systems Engineering
  - Systems Engineering

Through real-world research, theory and practice, and project-based approaches to classes, you are able to instantaneously apply what you learn into your work. Faculty who are industry experts and leaders teach both on campus and online; thus, ensuring a high-quality experience for the students.

BENEFITS OF ONLINE LEARNING

For more than 30 years, WPI has been a leader in off-campus delivery of education to students around the world. Having offered education in electrical and computer engineering on campus for over a century, we are now able to offer the programs online.

Our online programs:

- integrate the latest technologies in video, simulations, virtual chat, and discussion boards.
- give students the same high-quality class content, materials and dedicated faculty as on-campus students.
- provide a solution to receiving education that is highly praised and convenient.

Learn more about our online electrical and computer engineering programs at online.wpi.edu/+electrical.
CHOOSE YOUR SPECIALIZATION

Analog Design
- Design of analog and mixed-analog digital integrated circuits
- Effective use of simulation (such as SPICE) in the design process
- Solid-state physics of CMOS and bipolar devices
- Distributed design concepts of radio frequency circuits
- Scattering parameter, power flow, noise, and nonlinear system analysis

Digital Design
- Advanced design and test of complex systems
- Tools and techniques of component design
- Cutting-edge methodologies in system design, modeling and testing
- Design languages (Verilog and C++)

Power Systems Engineering
- Power flows in delivery networks - both steady state and transients
- Electro-mechanical energy conversion and power system operations and planning
- Dynamic system responses to disturbances
- Design of protection and control systems

Systems Engineering
- Integration of technology, management and development across large-scale projects
- System analysis, risk management, and operations
- Integration, verification and validation strategies
- Describe, design and develop complex hardware and/or software architectures
WORCESTER POLYTECHNIC INSTITUTE

WPI, one of the nation’s premier science- and engineering-focused universities, holds firm to its founding mission to provide an education that balances theory with practice. World-renowned faculty in science, engineering, technology, business, and the humanities and arts inspire and prepare students to be innovators, entrepreneurs, and leaders. Engaged in cutting-edge, collaborative research, students and their faculty mentors make important contributions to breakthroughs in fields such as biotechnology, clean energy, fire safety, information technology, learning sciences, materials processing, nanotechnology, and robotics.

CORPORATE AND PROFESSIONAL EDUCATION

WPI’s Department of Corporate and Professional Education (CPE) offers graduate certificates and master’s degrees, technical short courses, and professional development workshops customized to meet the needs of individual students, organizations, and industry demands. Programs are offered online, on-site at organizations, or in a blended format to fit the schedules of your employees and our students.

ELECTRICAL AND COMPUTER ENGINEERING

WPI’s Department of Electrical and Computer Engineering (ECE) is known for its innovative approach to education. Our hands-on, project-based method of teaching is particularly suited to produce tomorrow’s leaders of the dynamic, complex, and competitive field of electrical and computer engineering. Graduates of our programs are highly sought after by top-tier employers.