CORE SKILLS AND COURSES

- Computer Systems
  - Computer components and operations
  - Computer architecture and networking
  - Operating systems
- Data and Information
  - Probability and statistics; Signal processing; Analog and digital communication
- Learning and Control
  - Time and frequency domains; Feedback control; Digital control; Machine learning
- Image Science and Computer Vision
  - Computer graphics; Machine vision; Image processing
- Circuits and Electronics
  - Analog and digital circuits; Circuit analysis, simulation, and design; Micro electronics; Integrated circuits, VLSI
- Energy and Power
  - Electromagnetic fields and waves; Power grids; Renewable sources; Electric machines
- Design and Teamwork
  - Embedded control; Engineering design; Multidisciplinary capstone design

CONCENTRATION AREAS

- Microelectronics
- Photonics
- Computer Hardware
- Power Electronics
- Power Systems
- AI & Learning
- Vision & Imaging
- Communication & Network Science
- Control & Automation
- Robotics

ABOUT ELECTRICAL, COMPUTER, AND SYSTEMS ENGINEERING

Founded in 1907, one of the first Electrical Engineering programs in the U.S.

Students
- 785 Undergraduates
- 32 Masters Students
- 90 Doctoral Students

- Ranked 39th (EE), 45th (CSE) in 2021 U.S. News & World Report Graduate Rankings
- Ranked 24th in 2021 TFE Times Best Master's of Computer Engineering Programs
- Ranked 12th in College Factual Best Electrical Engineering Programs

Degrees Offered
- Electrical Engineering (B.S., M.S., M.Eng., Ph.D.)
- Computer Systems Engineering (B.S., M.S., M.Eng., Ph.D.)
- Minors in Electrical Engineering, Computer Systems Engineering

Dual Major Opportunities
- Electrical and Computer Systems Engineering, Computer Science, Applied Physics, ITWS

Undergraduate Opportunities
- Undergraduate Research Projects, Internships, Co-ops, Study Abroad

Graduate Student Support
- Almost all doctoral students receive financial assistance

RESEARCH AREAS

- Information Science and Systems
- Control and Automation
- Computer System Design
- Communication and Networking
- Energy and Power Systems
- Electronics and Photonics

AFFILIATED RESEARCH CENTERS

- Center for Materials, Devices, and Integrated Systems (CMDIS) cmdis.rpi.edu
- Center for Future Energy Systems (CFES) data.rpi.edu
- NSF Engineering Research Center for Lighting Enabled Systems and Applications (LESA) lesa.rpi.edu
- NSF Engineering Research Center for Ultra-Wide-Area Resilient Electric Energy Transmission (CURENT)
- Cognitive and Immersive Systems Lab (CISL) lab.rpi.edu
- Center for Mobility with Vertical Lift (MOVE) move.rpi.edu
- Center for Initiatives in Pre-College Education (CIPCE) cipce.rpi.edu

CONTACT US

John Wen, Department Head
info@ecse.rpi.edu  •  (518) 276-5316

FACULTY
- 27 Tenured/Tenure-Track
- 5 Lecturers and Professors of Practice
- 9 IEEE Fellows, 6 NSF CAREER Awards
- $10M annual research expenditures

STAFF
- 3 Technical Support Staff
- 4 Administrative Support Staff