CORE SKILLSETS 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; Microelectronics; 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 43th (EE), 47th (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 Autonomy
- Communication and Networking
- Computer System Design
- 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) cfes.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), cis1.rpi.edu
- Center for Mobility with Vertical Lift (MOVE) move.rpi.edu
- Center for Initiatives in Pro- College Education (CIPCE) cipce.rpi.edu

CONTACT US

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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