CORE SKILLSETS AND COURSES

- **Computer Systems**
  - Computer components and operations
  - Computer architecture and networking
  - Computer 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**
- 766 Undergraduates
- 41 Masters Students
- 94 Doctoral Students

- **Ranked 39th (EE), 45th (CSE) in 2020**
  - U.S. News & World Report Graduate Rankings
- **Ranked 22nd in 2020 TFE Times Best Master’s of Computer Engineering Programs**
- **Ranked 31st in College Factual Best Electrical Engineering Programs (8th in Mid-Atlantic)**

**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**
- Computer Science, Mechanical Engineering, Biomedical Engineering, Applied Physics

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

**Graduate Student Support**
- Almost all doctoral students receive financial assistance

RESEARCH AREAS

AFFILIATED RESEARCH CENTERS

- Center for Materials, Devices, and Integrated Systems (CMDIS) cmdis.rpi.edu
- Center for Automation Technologies and Systems (CATS) cats.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) cisl.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

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FACULTY

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

STAFF

- 3 Technical Support Staff
- 5 Administrative Support Staff