



## 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; 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 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

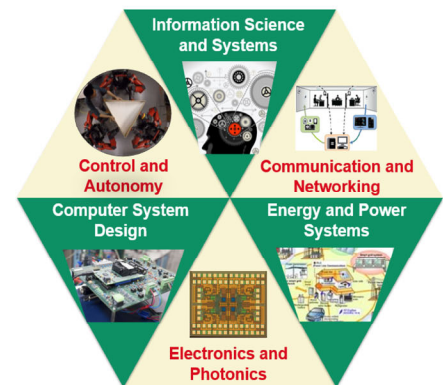
### Undergraduate Opportunities

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

### Graduate Student Support

- Almost all doctoral students receive  
financial assistance

## RESEARCH AREAS



## AFFILIATED RESEARCH CENTERS

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

