

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 Vision**
Computer graphics; Machine vision;
Image processing
- **Circuits and Electronics**
Analog and digital circuit; Circuit
analysis, simulation, and design; Micro-
electronics; Integrated circuits, VLSI
- **Energy and Power**
Electromagnetic fields and waves;
Power grid; Renewable sources;
Electric machines
- **Design and Teamwork**
Embedded control; Engineering design;
Multidisciplinary capstone design

CONCENTRATION AREAS

- Intelligent Systems and Machine Learning
- Computer Networks
- Communications and Information
- Control, Robotics, and Automation
- Graphics and Vision
- Computer Hardware Systems
- Microelectronics
- Photonics, Optics, Optoelectronics
- Energy and Power Systems



ABOUT ELECTRICAL, COMPUTER, AND SYSTEMS ENGINEERING

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

Students

- 776 - Undergraduates
- 49 - Masters
- 98 - Doctoral



Ranked 31st (EE) 35th (CSE) in
2018 U.S. News & World Report
Graduate Rankings

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,
Internship, Co-op, Study Abroad

Graduate Student Support

- Almost all doctoral students received
financial assistance

RESEARCH AREAS

- AI and Machine Learning
- Communication and Networking
- Computer Hardware Systems
- Control, Robotics, Automation
- Electronics and Photonics
- Computer Vision Systems
- Power Electronics & Systems

AFFILIATED RESEARCH CENTERS

- Center for Materials, Device, and 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 Light
Enabled Systems and Applications (LESA)
lesa.rpi.edu
- NSF Engineering Research Center for
Ultra-Wide-Area Resilient Electric Energy
Transmission (CURRENT)
- Cognitive and Immersive Systems Lab (CISL)
cisl.rpi.edu
- Center for Initiatives in Pre-College Education
(CIPCE) cipce.rpi.edu

CONTACT US

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FACULTY

- 28 Tenured/Tenure-Tracked
- 8 Lecturers and Prof of Practice
- 7 IEEE Fellows, 5 NSF CAREER Awards
- 12M annual research expenditure

STAFF

- 6 Technical
Support Staff
- 5 Administrative
Support Staff

