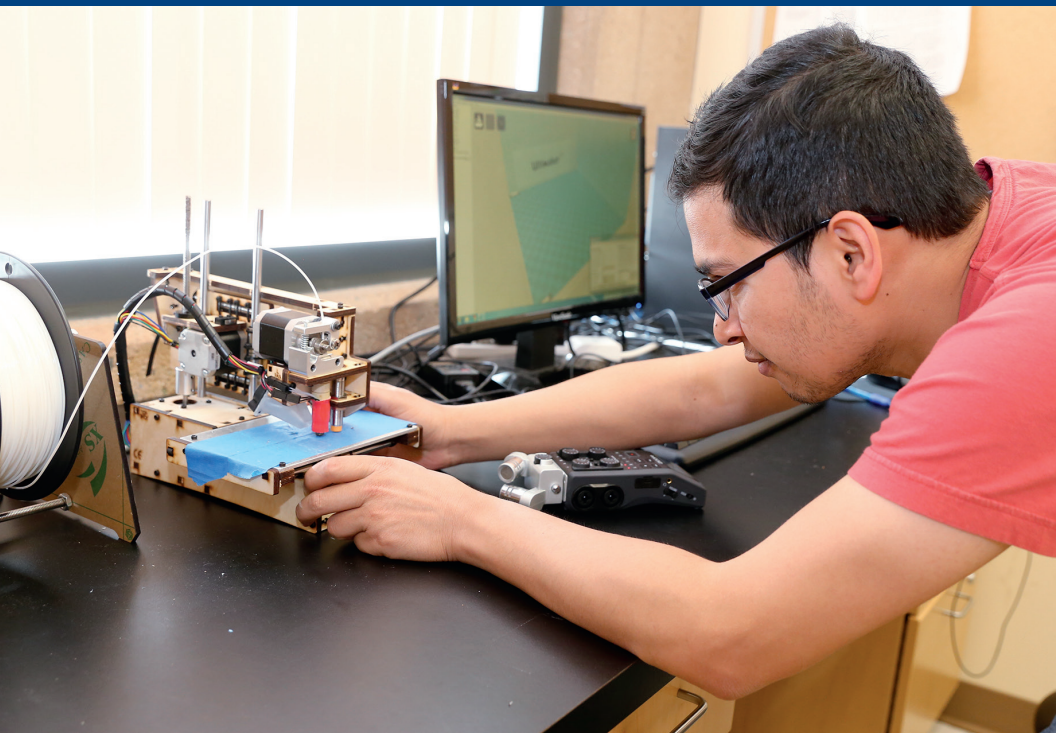
GRADUATE PROGRAM

Electrical and Computer Engineering

http://engineering.uci.edu/dept/eecs/graduate



Electrical engineering and computer science is a broad field encompassing such diverse subject areas as computer systems, distributed computing, computer networks, control, electronics, photonics, digital systems, circuits (analog, digital, mixed-mode and power electronics), security, machine learning, cyberphysical systems, communications, signal processing, electromagnetics and physics of semiconductor devices. Knowledge of the mathematical and natural sciences is applied to the theory, design and implementation of devices and systems for the benefit of society.

DEGREES OFFERED

M.S. & Ph.D.

HIGHLIGHTS

- A collaborative and diverse environment
- Cutting-edge and interdisciplinary research
- Great location and connections to industry
- Internationally renowned faculty who are all top experts in their fields

AFFILIATED FACILITIES

- California Institute for Telecommunications and Information Technology
- Center for Embedded Computer Systems
- Center for Pervasive Communications and Computing
- Integrated Nanosystems Research Facility

CONCENTRATIONS

- **Computer Engineering:** researching parallel and distributed computer systems, distributed software architectures and databases, ultra-reliable real-time computer systems, VLSI architectures, reconfigurable computing, computer design automation, low-power design, embedded systems, computer communication protocols, computer networks, security, programming languages for parallel/distributed processing, knowledge management, service-oriented architectures and software engineering
- **Electrical Engineering:** researching optical and solid-state devices, including quantum electronics and optics, integrated electro-optics and acoustics, design of semiconductor devices and materials, analog and mixed-signal IC design, microwave and microwave devices, and scanning acoustic microscopy; systems engineering and signal processing, including communication theory, machine vision, signal processing, power electronics, neural networks, communications networks, systems engineering and control systems

RESEARCH FOCUS AREAS

- Electronic Devices, Circuits
- Optoelectronics, Microscopy, Nano optics
- NanoBioElectronics & Sensing, MEMS
- Communications
- Information Theory, Signal Processing
- Power Electronics
- Systems Engineering
- Security, Cyberphysical Systems
- Machine Learning

ADMISSION

The Department of Electrical Engineering and Computer Science has a strong commitment to diversity and encourages domestic and international students to apply. Prospective students should apply directly to the electrical and computer engineering program, specifying M.S. or Ph.D. degree goal. Applicants are evaluated based on prior coursework and potential for creative research and teaching. Application materials should include official university transcripts, letters of recommendation, GRE test scores, TOEFL/IELTS score (if applicable) and statement of purpose.

RECOMMENDED BACKGROUND

It is strongly recommended that students have a background and training in core engineering topics. A student who enters the program without adequate undergraduate preparation may be required to complete additional coursework.

UCI Samueli
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GRADUATE COORDINATORS

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