

DEPARTMENT FACULTY AND RESEARCH INTERESTS

Akyurtlu, Alkim, Ph.D., Penn State
Computational electromagnetics, metamaterials and antennas

Armiento, Craig, Ph.D., MIT
Fiber optics, semiconductor and devices

Chandra, Kavitha, Eng.D, University of Massachusetts Lowell
Acoustics, Communications networks and performance models

Chigan, Tricia, Ph.D., SUNY at Stony Brook
Communication networks and network security

Dutta, Joyita, Ph.D., University of Southern California
Biomedical image reconstruction and analysis

Hu, Tingshu, Ph.D. University of Virginia
Dynamic systems and control

Ibe, Oliver, Sc.D., MIT
Mobile and converged communications

Lu, Xuejun, Ph.D., University of Texas Austin
Optoelectronics, nanophotonics, and fiber optics

Luo, Yan, Ph.D., University of California Riverside
Computer architecture, network systems

Mah'd, Mufeed, Ph.D., University of Western Ontario
Digital signal and medical image processing

Margala, Martin, Ph.D., University of Alberta
Digital and mixed-signal VLSI design and VLSI testing

Megherbi, Dalila, Ph.D., Brown University
Digital Image Processing, Computer Vision, Machine Learning & Computational Intelligence, Networking, Distributed High Performance Computing, and Embedded Systems

Mil'Shtein, Samson, Ph.D., University of Jerusalem
Semiconductor electronics and technology

Pakdelian, Siavash, Ph.D., Texas A&M University
Electric machines and drives, Power electronics

Prasad, Kanti, Ph.D., University of South Carolina
Reliability analysis and enhancement for GaAs and silicon devices

Rao, Tenneti C., Ph.D., Indian Institute of Science
Electromagnetics

Son, Seung Woo, Ph.D., Penn State
High performance computing

Therrien, Joel, Ph.D., University of Illinois, Urbana-Champaign
Nanoelectronic devices

Thompson, Charles, Ph.D., MIT
Acoustics, systems and field theory

Vokkarane, Vinod, Ph.D., University of Texas, Dallas
Communication networks and reliability

Wang, Xingwei, Ph.D., Virginia Tech
Optical biosensing and biomedical devices, sensors

Weitzen, Jay, Ph.D., University of Wisconsin, Madison
Wireless communication

Wickramarathne, Thanuka, Ph.D., University of Miami
Signal Processing, Multi-Sensor Data Fusion

Yu, Hengyong, Ph.D., Xi'an Jiaotong University
Medical Image Processing

Zhang, Hualiang, Ph.D., HKUST
Applied Electromagnetics, High-Frequency Circuits and Systems

DEGREES AND CERTIFICATES

Computer Engineering Programs

Master of Science (M.S.)
Doctor of Philosophy (Ph.D.)

Electrical Engineering Programs

Master of Science (M.S.)
Doctor of Philosophy (Ph.D.)

Graduate Certificate Programs

Communications Engineering
Field Programmable Gate Array
Microwave and Wireless Engineering
Stochastic Systems
VLSI and microelectronics
Biomedical Engineering
Energy Conversion
Integrated Engineering Systems
Nanotechnology
Photonics and Optoelectronics
Telecommunications



<http://www.uml.edu/ecegrad>

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Engineering



Electrical & Computer Engineering

Graduate Programs

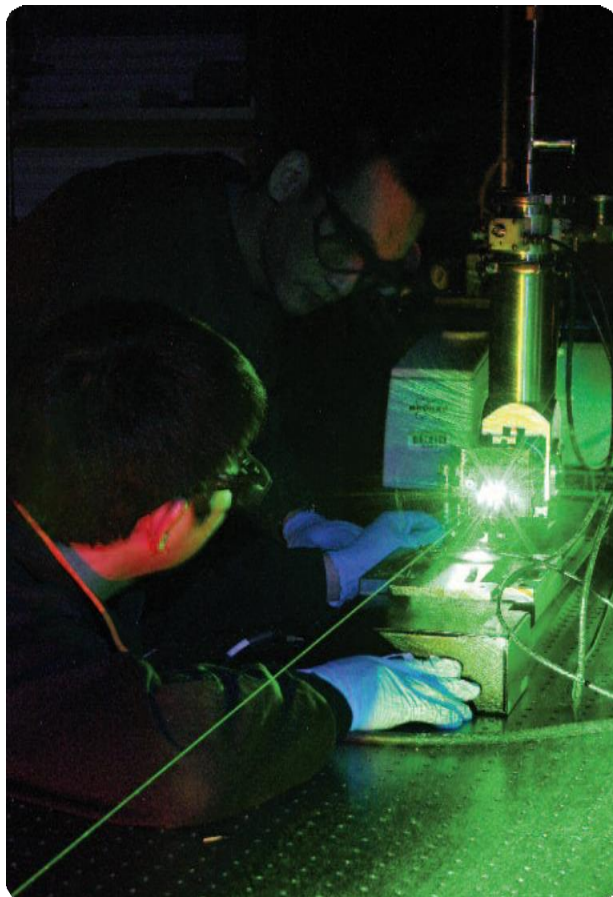


<http://www.uml.edu/ecegrad>

ELECTRICAL & COMPUTER ENGINEERING GRADUATE PROGRAMS

WHO WE ARE

The Department of Electrical and Computer Engineering (ECE) at the University of Massachusetts Lowell offers graduate programs leading to Master of Science (M.S.), and Doctor of Philosophy (Ph.D.) degrees. Our research is funded by the National Science Foundation, the Air Force Office of Scientific Research, the Defense Advanced Research Projects Agency, the Office of Naval Research and various companies, including Raytheon and Intel.



FIELDS OF SPECIALIZATION

Our experienced faculty has active research programs in a diverse number of specialization areas including:

- Additive Manufacturing
- Alternative Energy Sources
- Communications
- Computer Architecture
- Control Systems
- Digital Signal Processing
- Distributed Networking
- Embedded Systems
- High Performance Computing
- Metamaterials
- Nanotechnology
- Optoelectronic Devices
- Power distribution
- Printed Electronics

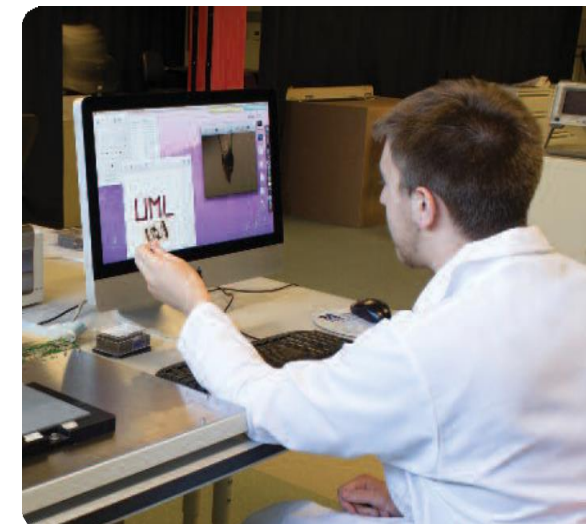
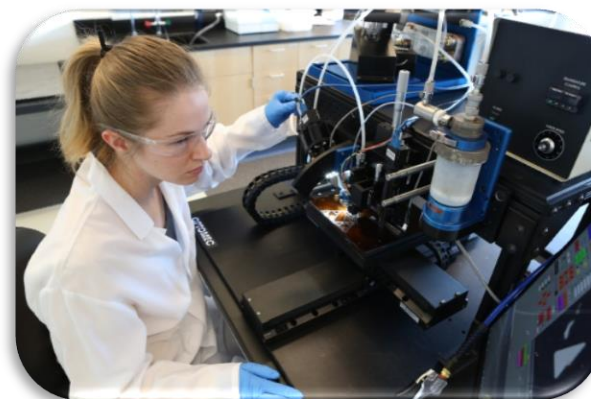
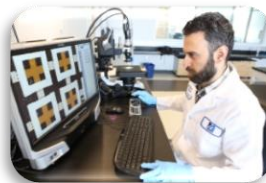
RESEARCH CENTERS AND LABORATORIES

Research Centers

- Advanced Electronics Technology Center
- Center for Advanced Computation and Telecommunications
- Center for Machine/Human Intelligence, Networking and Distributed Systems
- Center for Photonics, Electromagnetics and Nanoelectronics
- Raytheon-UML-Research Institute

Research Labs

Advanced Digital Systems Design and Microprocessors Laboratory, Computer Architecture Laboratory, Distributed Semiconductor Industrial Processing Laboratory, Microwave Laboratory, Networking, Artificial and Machine Intelligence and Computer Vision Laboratory, Renewable Energy Laboratory, Computer Architecture and Network Systems Laboratory, VLSI Design Laboratory



ADMISSION REQUIREMENTS

All applicants for either the M.S. or Ph.D. programs in electrical engineering must take the GRE general examination. Official transcripts and three letters of recommendation must be submitted along with the graduate application. Foreign students without a bachelor's degree from a U.S. institution are required to take the TOEFL or IELTS examination. After the minimum requirements are met, the EE Graduate Committee evaluates each case on an individual basis.

FINANCIAL SUPPORT

A number of ECE Department Teaching Assistant (TA) positions are available for doctoral students. Research Assistant (RA) positions may be awarded to incoming students who have outstanding credentials. The students are also encouraged to seek out faculty members whose research fields closely match the area in which they would like to pursue their degree.

DEADLINES

Although there are no deadlines to apply, in order to be considered for a department Teaching Assistantship, applications for the Fall semester must be completed by **February 15** and **October 1** for the Spring semester of the following year.

CONTACTS

For more information on the Electrical and Computer Engineering Graduate Programs, please visit:

<http://www.uml.edu/ecegrad>

Graduate Program Coordinators:

Master of Science:

Prof. Xuejun Lu

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Doctoral:

Prof. Alkim Akyurtlu

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