

Electrical and Computer Engineering

► The University of Rochester's Department of Electrical and Computer Engineering (ECE) offers undergraduate and graduate programs that enable students to explore the breadth of topics that make up modern ECE. These range from new devices for sensing, communicating, and computing; integrated circuits and computer systems; and signal processing and communication systems. Such knowledge can be applied to a variety of industries that have broad societal impact, including health care, energy, national security, manufacturing, telecommunications, consumer goods, and media and entertainment.

The department focuses on teaching the fundamental aspects of electrical and computer engineering, including circuits and systems, electromagnetics, microelectronics, digital systems, computer architecture, and signals and communications. Many students enrich

their learning experience through research, internships, and even study abroad.

The collegial atmosphere encourages close interaction between faculty and students. Upon graduation, many undergraduates enter fields as different as microelectronics, music, and entertainment, while others pursue advanced studies.

Points of Pride Collaborative Approach

The department provides leadership for University-level initiatives ranging from nanotechnology and energy to regional economic development through technology transfer and interdisciplinary research between technology and the arts. The core technologies explored in ECE are applicable throughout every aspect of the University and lend themselves to close collaboration with the Eastman School of Music and the University of Rochester Medical Center.

Distinguished Faculty

In 2019, Thomas Howard, professor of electrical and computer engineering was awarded the NASA Early Career Faculty Award. Professor Qiang Lin was awarded a 2019 Presidential Early Career Award for Scientists and Engineers. In 2020, Assistant Professor Stephen Wu received an NSF Early Career Award. Distinguished Professor Mark Bocko received the Hajim Outstanding Faculty Award in May 2021.

Sponsored Research

Master's and doctoral students work on projects sponsored by federal agencies such as the National Science Foundation and the National Institutes of Health; various agencies, including the Department of Defense; and many companies from small startups to large corporations.



"Rochester does great justice to the saying that college is what one makes of it. Few institutions scale so generously. At my every turn, however confused, I was fortunate to be provided new avenues (whether they tended toward original research or to assisting the ECE curriculum). I remain grateful to all those who made these chances so possible and abundant."

Yujin Nakamoto '21

electrical and computer engineering major and a Robert L. Wells Prize recipient

How You Can Help

Gifts to the department will help enrich the academic experience for ECE students. Consider any of these giving opportunities:

Students

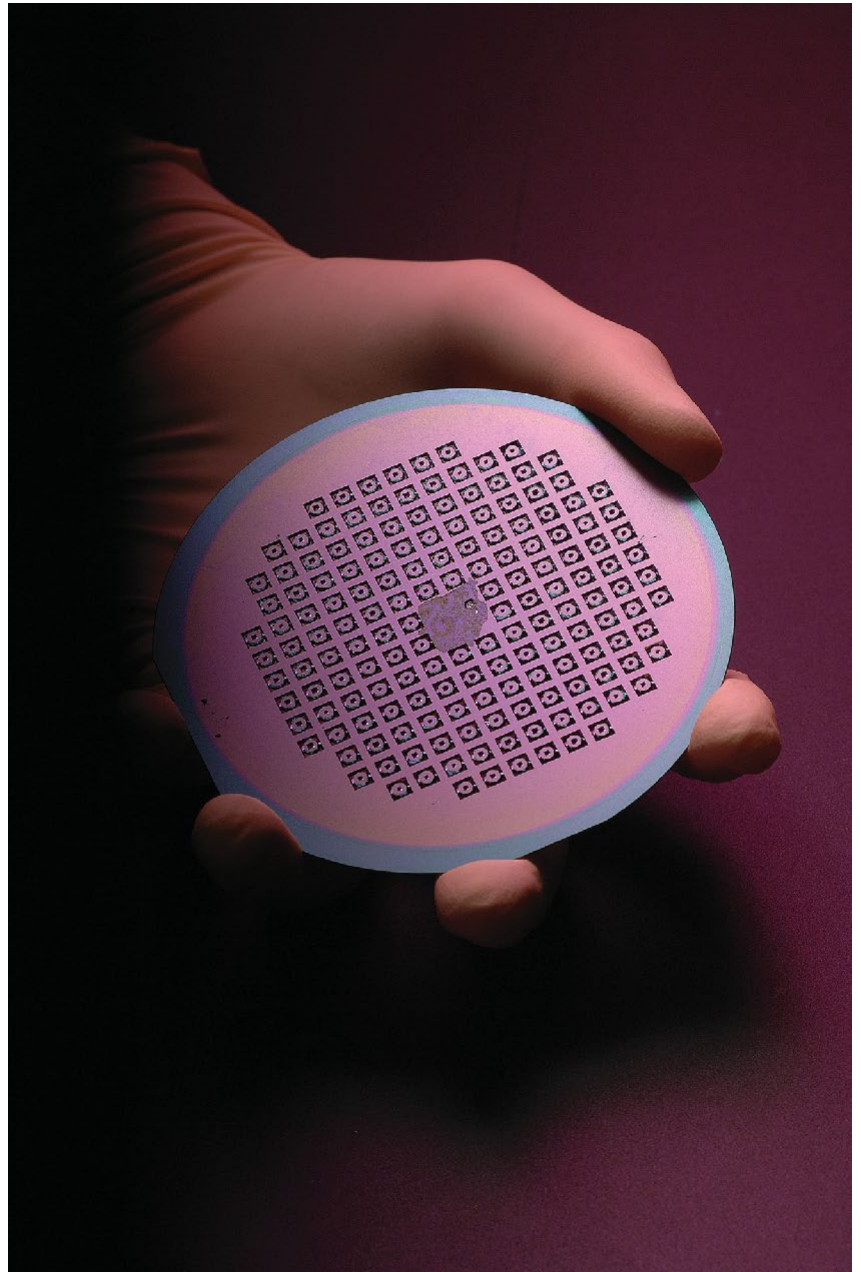
Supporting students is one of the highest priorities at Rochester. Create a scholarship, as these encourage underrepresented groups to pursue electrical and computer engineering. Or provide funds to facilitate participation in conferences, professional development programs, and prestigious national competitions, such as the Mini Baja and Solar Splash contests. The department is also building a professional network for its students, identifying alumni and friends who would be open to engaging students by providing career support and mentorship.

Faculty

Endowed positions help attract and retain faculty and staff of exceptional talent and are among the most prestigious and visible honors at the University. Investing in an endowed professorship or chaired professorship ensures that students are served by world-class faculty.

Learning Environment

Putting the most up-to-date equipment and technology into students' hands is an important part of the department's success. The University's investment in a new



recording studio, control room mixing rooms, and sound design lab was a major milestone for the audio and music engineering (AME) program. This state-of-the-art

studio opened within Gavett Hall in the fall of 2019. Additional spacing is needed. Naming opportunities exist to support all of these activities.

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www.ece.rochester.edu