ELECTRICAL AND COMPUTER ENGINEERING
UIC Open House Fall 2023
Today’s agenda

• UIC introductions
• ECE at UIC with Drs Tuninetti (department head), Revelo (senior design coordinator) and Kosmach (director of undergraduate studies)
• Q&A
Electrical and Computer Engineering at UIC
Academics

Majors

• Electrical Engineering (EE)
• Computer Engineering (CE)
• Engineering Physics (EP)
Credit breakdown (all majors):

- General education and English = 21 credit hours
- Foundation of math and science = 32 credit hours
- Core ECE courses = 58 credit hours
- Technical electives = 17 credit hours
- **Total = 128 credit hours**

Can be completed in 8 terms, with an average of 16 credit hours per term.

Many minors to choose from!
Who is UIC ECE?

Students in Fall 2023

- 526 computer engineering majors
- 313 electrical engineering majors
- 16 engineering physics majors
- 200 graduate students (MS, PhD)
Who is UIC ECE?

Faculty
- 40 faculty members, including 34 tenured and tenure-track faculty and 6 additional teaching faculty
- Very seldom employ adjuncts
Real-world projects
Inclusive excellence
State of the art research facilities
We are a one-of-a-kind place to learn

Diverse student population [https://diversity.uic.edu/data/](https://diversity.uic.edu/data/)
- There is no majority student racial or ethnic group at UIC

Diverse faculty [https://ece.uic.edu/faculty-and-staff/](https://ece.uic.edu/faculty-and-staff/)
- More than one-third women; all faculty have wide-ranging involvement with research and teaching

Guaranteed Paid Internship Program [https://ecc.uic.edu/students/freshman-internship-program/](https://ecc.uic.edu/students/freshman-internship-program/)
- Guaranteed compensated internships for students who meet program requirements (minimum GPA, participate in Freshman Engineering Success Program, etc.)

Chicago!
- Internships, networking, alumni community of more than 15,000 graduates
Award-winning research faculty

Including:

• 2 (+ 2 emeritus) UIC Distinguished Professors
• 12 NSF (National Science Foundation) CAREER Award recipients
• 13 IEEE (Institute of Electrical and Electronics Engineer) Fellows
• Editors and associate editors of leading technical journals
• Fellows of other professional organizations including APS, AIMBE, AAAS, SPIE, URS
In our Guaranteed Paid Internship Program (GPIP), you may work on:

- Robotics* [*visit our labs today at 10:30am and 1:30pm]  
- Nanoscale structures and fabrication*  
- Machine learning and Deep learning  
- Quantum information science  
- Smartphone communication technologies and 6G wireless  
- Renewable energy and smart grids  
- Power electronics and switching technology  
- Fault-tolerant computing  
- Hardware verification and validation  
- Video tracking and analysis, including environmental and health monitoring  
- Internet of things
Career Success

Did you know?

• More than 400 employers have hired UIC engineering and computer science graduates in the last few years
• We have a dedicated career center in the college of engineering
• More than 180 companies came to our fall career fair this past week
• Almost half (90+!!) of these companies are looking for CE majors, and more than one-third (60+!!) are seeking EE majors
Starting salaries

According to UIC’s Engineering Career Center, the most recent survey of graduates showed:

• **ECE majors**: report starting salaries of $60,000 to $75,000
• **EE majors**: reported highest salary range at $75,000 to $100,000
• **CE majors**: reported their highest salary range at $110,000
ECE in your everyday life – we connect you to anyone anywhere
ECE in your everyday life – we empower doctors with sophisticated diagnostics equipment
ECE in your everyday life – we pave the way for green sustainable life on our planet
ECE in your everyday life – Biden recently signs $280 billion CHIPS Act.

$50 billion federal investment in domestic chip plants would create 185,000 temporary American jobs and add nearly $25 billion to the U.S. economy each year until 2026 as new fabs are built.
ECE in your everyday life – quantum technology
Computer Engineering

- 128 credit hours
- Degree requirements can be completed in 8 terms, with an average of 16 credit hours per term
- Choose from a range of minors including computer science
Electrical Engineering

- 128 credit hours
- Degree requirements can be completed in 8 terms, with an average of 16 credit hours per term
- Choose from a range of minors
Engineering Physics

- 128 credit hours
- Degree requirements can be completed in 8 terms, with an average of 16 credit hours per term
- Choose from a range of minors
Undergraduate student resources

- Academic advising [https://engineering.uic.edu/undergraduate/advising/](https://engineering.uic.edu/undergraduate/advising/)
- Undergraduate student research [https://engineering.uic.edu/coe-research/](https://engineering.uic.edu/coe-research/)
- Diversity programming, including support to help students from underrepresented populations to succeed [https://engineeringequity.uic.edu](https://engineeringequity.uic.edu)
- Engineering Career Center [https://ecc.uic.edu](https://ecc.uic.edu)
- Innovation Center (classes piloted by companies) [https://innovationcenter.uic.edu](https://innovationcenter.uic.edu)
- MakerSpace [https://makerspace.uic.edu](https://makerspace.uic.edu)
- Women in Engineering Programs [https://wiep.uic.edu](https://wiep.uic.edu)
- 32 student organizations [https://engineering.uic.edu/undergraduate/student-groups/](https://engineering.uic.edu/undergraduate/student-groups/)
The college has 32 student organizations. Some are of particular interest to EE, CE, and EP majors: organizations [https://engineering.uic.edu/undergraduate/student-groups/](https://engineering.uic.edu/undergraduate/student-groups/)

- Institute of Electrical and Electronics Engineers (IEEE)
- Engineering World Health
- Eta Kappa Nu honor society
- American Institute of Aeronautics and Astronautics
- Society of Automotive Engineers (UIC Motorsports)
- Vehicle Electronics and Systems Engineering
- Engineers Without Borders
Preparing for internships and jobs

**Engineering EXPO for senior design projects** Judged by faculty, industry, professionals, and UIC alumni

**Research 1 institution opportunities** Study and investigate alongside some of the best faculty researchers in the nation

**Work experience here in Chicago** Internships, co-op opportunities, part-time jobs

**Prepare for graduate school** Curriculum and advising to improve your chance of admission to top programs
We hope that you will join us!
Electrical and computer engineering

Questions are welcome!