

COLLEGE OF ENGINEERING AND POLYMER SCIENCE

The College of Engineering and Polymer Science at the University is committed to excellence in undergraduate and graduate education as well as cutting-edge research. The College of Engineering and Polymer Science is the second oldest college at the University. The College consists of the departments of Biomedical Engineering; Chemical, Biomolecular, and Corrosion Engineering; Civil Engineering; Electrical and Computer Engineering; Mechanical Engineering; Computer Science; Computer Information Systems; and the School of Polymer Science and Polymer Engineering. The College fulfills the mission of an urban research university by educating students, engaging with local industry, and conducting research. The current research focus of the College includes: tribology, lubrication, surfaces, advanced energy, transportation, separations/filtration, nanotechnology, aero-propulsion, catalysis, corrosion, controls, computational mechanics, manufacturing, biomaterials, smart materials, composites and civil structures, wellness, sensors and networks, complex modeling and simulation, polymer physics, polymer chemistry, polymer fabrication, and polymer processing. The College also has numerous research centers funded by industry, the state, and federal agencies.

The College has always had a vibrant graduate program, and for more than forty years, has offered an interdisciplinary Ph.D. in Engineering program. It also offers Ph.D.s in Polymer Science and in Polymer Engineering, along with a variety of Masters degrees.

The mission of graduate education in the College is to:

- Train engineers and scientists to think critically and solve complex engineering problems.
- Train students to develop theory, methodology, and develop experimental skills to investigate emerging issues in engineering and science that effect state and national interests.
- Provide excellence in research findings via theses, doctoral dissertations, and professional publications.
- Train students to be future educators.
- Train students in industrial research.
- Train students to work on interdisciplinary teams.

As the state of Ohio positions itself at the forefront of engineering, science and technology, appropriately trained scientists and engineers are needed in all fields. The College graduate programs provide education and training that equips students with the maturity and ability to assume leadership roles in all engineering fields. The interdisciplinary nature of the College's graduate programs attracts a variety of students from all over the country and the world. Many of the graduate students come from industry as well as government agencies.

College Website (<https://www.uakron.edu/ceps/>)

College of Engineering and Polymer Science Dean's Office

These interdisciplinary programs are available to students from any of the engineering disciplines.

- Engineering, MSE (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/engineering-mse/>)

- Engineering, PhD (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/engineering-phd/>)

Departments and Schools

Department of Biomedical Engineering

- Biomedical Engineering, MBE (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/biomedical-engineering/biomedical-engineering-mbe/>)
- Biomedical Engineering, MSE (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/biomedical-engineering/biomedical-engineering-mse/>)

For more information, visit the Department of Biomedical Engineering website (<https://www.uakron.edu/engineering/bme/>).

Department of Chemical, Biomolecular, and Corrosion Engineering

- Chemical Engineering, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/chemical-engineering/chemical-engineering-ms/>)

For more information, visit the Department of Chemical, Biomolecular, and Corrosion Engineering website (<https://uakron.edu/engineering/cbe/>).

Department of Civil Engineering

- Civil Engineering, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/civil-engineering/civil-engineering-ms/>)
- Environmental Engineering, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/civil-engineering/environmental-engineering-certificate/>)
- Geotechnical Engineering, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/civil-engineering/geotechnical-engineering-certificate/>)
- Nuclear Engineering, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/civil-engineering/nuclear-engineering-certificate/>)
- Structural Engineering, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/civil-engineering/structural-engineering-certificate/>)
- Transportation Engineering, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/civil-engineering/transportation-engineering-certificate/>)

For more information, visit the Department of Civil Engineering website (<https://uakron.edu/engineering/ce/>).

Department of Computer Science

- Computational Data Science, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/computer-science/computational-data-science-certificate/>)
- Computer Science, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/computer-science/computer-science-ms/>)

For more information, visit the Department of Computer Science website (<https://www.uakron.edu/computer/cs/>).

Department of Electrical and Computer Engineering

- Electrical and Computer Engineering, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/electrical-computer-engineering/electrical-engineering-ms/>)

For more information, visit the Department of Electrical and Computer Engineering website (<https://www.uakron.edu/engineering/ece/>).

Department of Mathematics

- Applied Mathematics, Accelerated BS/MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/math/applied-mathematics-accelerated-bs-ms/>)
- Applied Mathematics, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/math/applied-mathematics-ms/>)

For more information, visit the Department of Mathematics website (<https://www.uakron.edu/math/>).

Department of Mechanical Engineering

- Manufacturing, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/mechanical-engineering/manufacturing-certificate/>)
- Mechanical Engineering, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/mechanical-engineering/mechanical-engineering-ms/>)

For more information, visit the Department of Mechanical Engineering website (<https://www.uakron.edu/engineering/me/>).

School of Polymer Science and Polymer Engineering

- Elastomer Science and Engineering, Certificate (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/elastomer-science-engineering-certificate/>)
- Master of Polymer Science and Polymer Engineering (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/master-polymer-science-engineering/>)
- Polymer Engineering, MSPE (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/polymer-engineering-mspe/>)
- Polymer Engineering, PhD (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/polymer-engineering-phd/>)
- Polymer Materials and Engineering at Beijing University of Chemical Technology, BE/ Polymer Science, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/polymer-science-materials-engineering-ms/>)
- Polymer Materials and Engineering at Beijing University of Chemical Technology, BE/Polymer Engineering, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/polymer-materials-engineering-mspe/>)
- Polymer Science, MS (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/polymer-science-ms/>)
- Polymer Science, PhD (<https://bulletin.uakron.edu/graduate/colleges-programs/engineering/polymer-science-engineering/polymer-science-phd/>)

For more information, visit the School of Polymer Science and Polymer Engineering website (<https://www.uakron.edu/polymer/>).