WHY CHOOSE CIVIL, STRUCTURAL AND ENVIRONMENTAL ENGINEERING AT UB?

Curriculum
Tailor your studies to match your interests and career objectives with the department’s broad selection of courses.

Experiential Learning Opportunities
Gain hands-on experience via research assistantships and internships.

World-Class Faculty
Be taught and mentored by faculty members who are outstanding teachers and recognized internationally for their research.

Facilities
Utilize cutting-edge research and teaching laboratories.

Affordability
Spend less on tuition. UB has a worldwide reputation for academic excellence, but the cost of attending is much less than many other comparable public and private universities.

Successful Alumni
Join the department’s network of accomplished alumni who have gone on to successful careers in academia at universities such as Cornell University, Penn State University, Rensselaer Polytechnic Institute, Rice University, Texas A&M, University of California, Berkeley, and the University of Washington. Many alumni have also pursued careers in industry at top-tier companies including AECOM, Arup, CH2M Hill, Ecology and Environment, Energo, Exxon Mobil, HDR, KPFF, Mueser Rutledge, Parsons, SOM, Southern Company, Thornton Tomasetti, and Weidlinger Associates.

DEGREES OFFERED

Master of Science (MS) in Civil Engineering: a 30-credit program of advanced study designed for students who want to enhance their knowledge and understanding within a specialized discipline. Students may choose from three options: (1) all-course option, with comprehensive exam; (2) project, with formal report and presentation; or (3) thesis, including formal defense.

Master of Science (MS) in Engineering Science: a 30-credit program designed for students with strong natural science and mathematics backgrounds who want to pursue careers in environmental science. Students may choose from three options: (1) all-course option, with comprehensive exam; (2) project, with formal report and presentation; or (3) thesis, including formal defense.

Doctor of Philosophy (PhD) in Civil Engineering: a 72-credit program of specialized education and research culminating in a dissertation that embodies the results of original research and gives evidence of high scholarship. At least 42 credit hours beyond the MS degree are required for the PhD degree, including 12 to 24 credit hours for dissertation and at least 18 hours of coursework.

TECHNICAL CONCENTRATION AREAS

Within the MS and PhD degree programs, CSEE offers seven different areas of technical concentration, as listed below.

- Bridge Engineering
- Computational Engineering Mechanics
- Environmental and Water Resources Engineering
- Environmental Science (MS, Engineering Science only)
- Geomechanics and Geotechnical Engineering
- Structural and Earthquake Engineering
- Transportation Systems Engineering
ADMISSIONS INFORMATION

Q: What is the minimum Grade Point Average (GPA) to be admitted?
A: MS Applicants: 3.0/4.0 scale in undergraduate coursework
PhD Applicants: 3.4/4.0 scale in undergraduate coursework (and graduate coursework, if applicable)

Q: What is the application deadline for fall semester?
A: It is recommended that all application materials and supporting documents be submitted via the online GrAdMit application system (http://www.gradmit.buffalo.edu/) by January 15 for international and domestic applicants.

Q: What is the minimum recommended GRE score?
A: Competitive candidates typically have a combined verbal and quantitative score of 300 or higher, with a quantitative score in the 80th percentile. (Note: The CSEE Department Code for the GRE is 1102; the UB Institutional Code is 2925.)

Q: What is the English language proficiency requirement for applicants whose native language is not English?
A: One of the following is required:
• TOEFL: 79 (IBT), 550 (PBT); competitive IBT score is 90
• IELTS: 6.5 (with no individual sub-score below 6.0)
• PTE: 55 (with no individual sub-score below 50)

For complete application requirements, please visit http://engineering.buffalo.edu/civil-structural-environmental/graduate/admissions.

To apply, please visit http://www.gradmit.buffalo.edu/.

GENERAL FINANCIAL SUPPORT INFORMATION

CSEE awards teaching assistantships on a competitive basis to MS and PhD students with outstanding qualifications. Typically, teaching assistantships, with tuition scholarships, are awarded on an annual basis for students starting in the fall semester. Applicants desiring financial aid should check the appropriate box on the application and comply with the specified deadlines. Research assistantships are generally administrated by individual faculty members directing research projects and not by the department.

SCHOOL AND UNIVERSITY

A member of the prestigious Association of American Universities, the University at Buffalo stands in the first rank among the nation’s research-intensive public universities. UB Engineering is New York State’s largest and most comprehensive public school of engineering. In the top 15 percent of the nation’s 300 engineering schools, UB Engineering offers a wide variety of excellent instruction, research opportunities, resources and facilities to its students.

CONTACT INFORMATION

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FACULTY

The department continues to enhance its academic strengths and research portfolio with the addition of 12 new faculty members in the past three years in the areas of structures, bridge engineering, geotechnics, transportation, and water resources and environmental engineering.

Michael Constantinou, SUNY Distinguished Professor, is credited with major contributions in the development and implementation of seismic isolation systems, viscous energy dissipation systems (dampers) and the toggle-brace and scissor-jack systems in various types of civil infrastructures. His honors include the 2004 SUNY Chancellor’s Award for Excellence in Scholarship and Creative Activities, the 2005 Charles Pankow Award for Innovation and the 2015 ASCE Newmark Medal.

Ning Dai, Assistant Professor, joined the department in 2014 after receiving her PhD in Chemical and Environmental Engineering from Yale University. Dr. Dai’s research focuses on the interface of environmental analytical chemistry, treatment processes and reactor engineering. She is currently studying a group of harmful compounds, N-nitrosamines, as byproducts of two important processes: amine-based CO₂ capture and drinking water disinfection.

To apply, please visit http://www.gradmit.buffalo.edu/.

DEPARTMENT OF CIVIL, STRUCTURAL AND ENVIRONMENTAL ENGINEERING Graduate Studies http://engineering.buffalo.edu/csee