



design cycle
from concept
development
through analysis,
design, report writing, and
presentation.

- Our **ASCE Student Chapter** provides students with opportunities to enhance leadership skills, build relationships with peers and alumni, and network with business leaders through conferences and seminars.
- At the **ASCE Deep South Conference**, students compete with over 13 engineering schools in the southeast region. Designing, building, and testing a concrete canoe & steel bridge gives students the opportunity to apply practical application of the engineering principles learned in the classroom, along with important team and project management skills they will need in their careers. Competitions in surveying, technical paper writing and presentation, and mystery events help students develop skills in oral presentation, written communication, and real-time problem solving.
- **Paid internships** are a large part of the civil engineering student's experience, connecting classroom principles in a "real-world" environment. The majority of our students have a paid internship in their junior and senior year that often leads to a full-time position within the company.

Why Engineering @ CBU?

An engineering degree from CBU will provide:

- Preparation for employment in a high demand job market
- Opportunities to earn one of the highest starting salaries for a 4-year degree
- A connection to a 50+ year legacy in engineering education

CBU offers exceptional return on investment:

- Ranked among the Best Value Colleges in Tennessee by Payscale.com, U.S. News & World Report, and BestValueSchools.com
- 97% of full-time undergraduate students receive some financial aid

Located in the heart of Midtown Memphis:

- Less than two miles from Overton Park, a 342-acre public park in Midtown Memphis
- Walking distance to the Cooper-Young and Overton Square Arts & Entertainment Districts

Bottom line: CBU graduates succeed. More than 95 percent of our recent class was employed or attending graduate school within 12 months of graduation. In fact, most already had jobs or placement in graduate schools when they crossed the stage at graduation.



GADOMSKI SCHOOL OF ENGINEERING
Department of CIVIL & ENVIRONMENTAL Engineering
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CIVIL & ENVIRONMENTAL ENGINEERING



WHAT IS CIVIL ENGINEERING?

Civil Engineering involves the design, construction, and maintenance of systems and structures upon which society depends every day - from buildings and the plants that power them, to the roads, bridges, tunnels, and waterways that connect them. Civil engineering also encompasses the control of the environment for the maintenance and improvement of our quality of life.

CAREERS IN CIVIL ENGINEERING

As a civil engineer, you have many subspecialty areas to choose from:

- **Structural Engineers** are concerned with the design and analysis of buildings, bridges, transmission towers, and other types of infrastructures.
- **Transportation Engineers** design highways, interchanges, high-speed railroad systems, traffic

signal systems, and airports.

- **Geotechnical Engineers** explore the subsurface conditions of a site, stabilize slopes, and design foundations.
- **Environmental Engineers** design systems to minimize pollution caused by wastewater, storm water, hazardous materials, chemicals, and air & noise.
- **Water Resource Engineers** design dams and channels to prevent erosion and flooding caused by heavy rains.
- **Construction Engineers** use advanced technology to minimize the cost of building and maintaining the world's infrastructure.

PROGRAM HIGHLIGHTS

The CBU civil engineering program is design-oriented and laboratory intensive, emphasizing hands-on experience and teamwork. We offer an education that

balances theory and practice with emphasis on the traditional areas of structural, transportation, geotechnical, environmental, and construction engineering. Here are some of the highlights of the civil & environmental engineering program at CBU:

- **Technical electives** help you customize your education. Courses in Traffic Engineering, Environmental Site Assessment, Open Channel Hydraulics, Bridge Engineering, Pavement Design, Construction Management, and many more are available.
- **Undergraduate research:** Our Civil Engineering faculty and students are very active in many areas of research, including: soil property modification, structural optimization, sustainable construction materials, surface water management, and



"I am forever grateful for my time spent at CBU. The Department of Civil & Environmental Engineering prepared me to be a prime candidate in the professional and academic endeavors I have pursued. From the professional clubs and societies to the undergraduate research opportunities, CBU has so much to offer to its students." – Christie Moore (CE '18)



"At CBU, you get to interact with the faculty individually. They encourage you to work independently to learn the material but are always there to help when needed. It's a perfect balance of a challenging education and excellent support system."

*– Dr. Andrew Assadollahi, P.E.
(Faculty, CE '09)*



much more. Having research experience as an undergraduate student is a unique opportunity that helps prepare our students to work in consulting, obtain a graduate degree, or work as a research and development engineer.

- A **Capstone Experience** challenges students to apply what they have learned in a comprehensive design project often done in conjunction with an internship and a professional engineering practitioner. This three-semester experience requires students to engage in a complete