

Civil Engineering

Civil engineers have been involved for many centuries in helping people throughout the world build and maintain the basic infrastructure in which they live. Civil engineers are responsible for designing and supervising the construction of buildings, roads, airports, tunnels, bridges, water supply and sewage systems, air pollution control and solid waste recycling. Civil engineers use the most sophisticated technology and the latest concepts in computer-aided design (CAD) during design, construction, project scheduling and cost control. The opportunity for creativity is endless because civil engineers are problem solvers, meeting the challenges of pollution, deteriorating infrastructure, traffic congestion, energy needs, earthquakes, urban redevelopment and community planning. For every infrastructure project there is a civil engineer to provide a custom design.

Career Opportunities

1. **In Private Practice:** Plans, designs, constructs and operates physical works and facilities used by the public.
2. **In Academia:** Teaches students the fundamentals of civil engineering. Also involved in research in order to advance the field of engineering.
3. **In Public Practice:** Involved in city and/or regional planning, layout and construction of highways and pipelines

Branches of Civil Engineering

1. Environmental Engineer
2. Construction/Project Management Engineer
3. Geotechnical Engineer
4. Structural Engineer
5. Transportation Engineer
6. Water Resources Engineer

The civil engineering curriculum is based upon providing a fully integrated design experience beginning with introductory courses in the study of engineering history and economics. From there, students are engaged in primary areas of practice within civil engineering (surveying structures, geotechnical, construction, water resources, transportation, and environmental). The goal of the civil engineering program is to prepare students to pursue graduate education in their specific areas of interest, conduct research, seek professional licensing, and become involved in project design, planning and execution.

Coursework

The objective of the civil engineering program at Temple University is to provide students with a broad knowledge of mathematics, physical and engineering sciences, computer utilization, communication skills, and societal factors from which students can synthesize unique solutions to relatively complex problems related to civil engineering.

Civil Engineering Curriculum

Math Requirements	18
Science Requirements	15
University Core	24
Major Requirements	33
Major Core Requirement	34
Total S.H.	124

Faculty

Temple's Engineering faculty is noted and recognized for its talents in teaching, advising, mentoring, and in scholarship. The College of Engineering currently has 35 full-time faculty members, making the faculty-to-student ratio about 20:1, and the size of a typical engineering class is 10-20 students.

Senior Design Projects

The Senior Design Project is a capstone course of the senior year for civil engineering students. The course is broken into two semesters and is designed to create a professional work environment in which a group of students, along with a faculty advisor (sometimes a local company may provide assistance and donate materials) work together to provide a solution to a problem.

Honors Program

Honors students at Temple University are part of the ultimate learning community. These exceptionally talented students enjoy course sections designed exclusively for them; the latest technology is integrated into all sections. The distinguished Honors Program faculty challenges students while addressing their unique needs. The Temple University Honors Program is available to students who have completed AP or high school honors courses, rank near the top of their class, and/or score in top percentiles on the SAT or ACT. The program is also available to transfer students who complete at least 24 credits at an ABET certified college and earn at least a 3.5 GPA.

Contact Us

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