Civil Engineering (Environmental Engineering), BSE

ASU is no longer accepting new students to this program. Please explore Degree Search for other similar program options.

Program Description

Civil engineering majors have three choices within the accredited BSE program:

- civil engineering
- civil engineering with environmental engineering concentration
- civil engineering with sustainable engineering concentration

The first choice allows students to choose among design and technical elective courses in their senior year. The other choices specify design and technical courses to students with minimal choices. Regardless of choice, the Bachelor of Science in engineering in civil engineering is accredited by ABET.*

Civil engineering with a concentration in environmental engineering is a transdisciplinary field based on traditional civil engineering principles and on chemistry, biology and geology. Environmental engineers are involved with:

- air pollution technology
- analysis of the fate and transport of pollutants
- application of sustainable practices in all areas of urban infrastructure
- construction of hazardous waste containment systems
- design and operation of water and wastewater treatment systems
- remediation of contaminated soils and waters
- surface water quality management
- water conservation and reuse

The curriculum also exposes students to other traditional civil engineering areas.

At a Glance

- **College/School:** Ira A. Fulton Schools of Engineering
- **Location:** Tempe
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 265 - Calculus for Engineers I
- **Math Intensity:** Substantial

Required Courses (Major Map)

2017 - 2018 Major Map
Major Map (Archives)

Concurrent Program Options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

Accelerated Program Options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's and master's degree with:

- Civil, Environmental and Sustainable Engineering, MSE
- Civil, Environmental, and Sustainable Engineering, MS
- Construction Engineering, MSE

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are advised by their academic departments to apply.

Admission Requirements

**General University Admission Requirements:**
All students are required to meet general university admission requirements.

First-year | Transfer | International | Readmission
Additional Requirements:

The admission standards for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission standards. International students may have an additional English language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant (see https://admission.asu.edu/international/undergrad-student), then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. minimum 1210 SAT combined evidence-based reading and writing plus math score or minimum 24 ACT combined score or 3.00 minimum ABOR GPA or class ranking in top 25% of high school class, and
2. no high school math or science competency deficiencies

Transfer Admission Requirements:

Transfer students with fewer than 24 transferable college credit hours:

- minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- no high school math or science competency deficiencies, and
- minimum 1210 SAT combined evidence-based reading and writing plus math score (or 1140 if taken prior to March 5, 2016) or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA, or class ranking in top 25% of high school class

Transfer students with 24 or more transferable college credit hours must meet EITHER the primary OR the secondary criteria (not both):

Primary Criteria

1. minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. no high school math or science competency deficiencies (if Admission Services requires submission of a high school transcript)

Secondary Criteria

1. minimum transfer GPA of 2.75 for 24 or more transfer hours, and
2. minimum GPA of 3.00 in all critical courses for Terms 1 and 2 (see major map for critical courses)

Change of Major Requirements

Students should refer to https://changemajor.apps.asu.edu for information about how to change a major to this program.
Transfer Options

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use MyPath2ASU™ to outline a list of recommended courses to take prior to transfer.

ASU has transfer partnerships in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and they help students save time and money in their college journey. Students may learn more about these programs by visiting the admission site: https://admission.asu.edu/transfer/MyPath2ASU.

Global Opportunities

Global Experience
With over 250 programs in more than 65 countries (programs vary in length, from one week to one year), study abroad is possible for all ASU students who wish to acquire global skills and knowledge in preparation for a 21st century career. Students earn ASU credit for completed courses, while staying on track for graduation, and they may apply financial aid and scholarships toward program costs. More information is available on the Global Education website. https://goglobal.asu.edu/

Career Opportunities

ASU graduates with a bachelor's degree in civil engineering with a concentration in environmental engineering find employment in:

- consulting firms
- industry
- municipalities
- regulatory agencies

The growth of environmental engineering positions has been balanced by the growing number of students entering the field, resulting in a stable job market.

A civil engineering background is an excellent foundation for jobs in management and public service. International opportunities are abundant and are likely to expand.

The bachelor's degree program in civil engineering prepares graduates for the fundamentals of engineering examination, the professional engineering examination and graduate degree programs.

Contact Information