Arizona State University (Tempe campus)

Environmental Engineering, BSE

Study details

Course type: Bachelor's degree
Degree: Environmental Engineering, BSE ESEVEBSE
Study mode: Full time
Duration: 48 Month

Cost of study

Cost : 35 430 USD
Reg. fee : 85 USD
Scolarship :
Insurance : 2 765 USD

Intake/s

Jan/May/Aug

Requirements

Academic requirements

First-year students must:

- Have a 3.00 grade point average (GPA) (a "B" or better where "A"=4.00) from a secondary school. Some ASU programs may have higher admission or English proficiency requirements and may consider a minimum ACT or SAT score.
- Must have three years of high school coursework. (If you are currently in high school, ASU needs to see 9–11 grade coursework. If you have completed high school, ASU needs to see 10–12 grade coursework.)
- Must have and present a completed high school diploma or certificate.

Conditional admission

ASU may offer conditional undergraduate admission to international applicants to an on-campus program who meet the academic (aptitude) requirements but who are not proficient in English. This offer of conditional admission will give you time to improve your English proficiency before you start classes at ASU. Your conditional admission offer is good for up to three semesters, during which time you must meet one of these requirements to begin your ASU experience.

Competency requirements

International students who completed high school outside the U.S. are required to meet the following competency requirements:

- Math: four years (algebra I, geometry, algebra II and one course requiring algebra II as a prerequisite).

- Laboratory science: three years total (one year each from any of the following areas are accepted: biology, chemistry, earth science, integrated sciences and physics).

Provide evidence of English language proficiency (TOEFL 61)

Additional requirements:

First-year admission:

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

Accommodation

Provided by partner agencies

Speciality
STEM-OPT for international students on F-1 visas

This program may be eligible for an Optional Practical Training extension for up to 24 months. This OPT work authorization period may help international students gain skills and experience in the U.S. Those interested in an OPT extension should review ASU degrees that qualify for the STEM-OPT extension at ASU's International Students and Scholars Center website.

The OPT extension only applies to students on an F-1 visa and does not apply to students completing a degree through ASU Online.

Transfer admission requirements:

Transfer students with fewer than 24 transferable college credit hours:

1. minimum transfer GPA of 3.00 for fewer than 24 transfer hours, **and**
2. no high school math or science competency deficiencies, **and**
3. 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** a minimum high school cumulative GPA of 3.00 in ASU competency courses, **or** class ranking in top 25% of high school class

Transfer students with more than 24 transferable college credit hours:

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 ASU 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 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses)

Additional information

Program description

The BSE program in environmental engineering educates students to become tomorrow's engineers who solve complex environmental problems and design systems at the human, urban and planetary scales.

Environmental engineers are actively involved with the following topics and activities: air quality monitoring and air pollution control technology; analysis of the fate and transport of pollutants; application of sustainable design principles; design and operation of water and wastewater treatment systems; design of hazardous waste containment systems; design of solid waste management systems; remediation of contaminated soil, sediment and water; and water quality, water conservation and water reuse.

In recognition of the interdisciplinary nature of environmental engineering challenges, the degree program incorporates courses from humanities, social sciences, natural sciences, mathematics and engineering. Environmental engineering courses build on strong foundations in chemistry, microbiology, geology, physics and mathematics. Courses cover fundamental engineering concepts applied to environmental processes and environmental engineering design. Applied learning experiences, including a required internship or research experience and a capstone design course, are also part of the program.

Accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Environmental Engineering Program Criteria.

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 plus master's degree with:

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

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master’s during the junior year of their bachelor's degree program.

Global opportunities
Global experience

Global Education programs allow students with an open mind to further their understanding of the impact that the industrial world has on the environment around the globe. With more than 300 programs available to them, students can tailor their experience to their unique interests and skill sets.

Whether in a foreign country, in the U.S., or online, students broaden their educational experience, build communication skills, are challenged to adapt and persevere, and are exposed to research and internships around the world, increasing their professional network. Students' participation in study abroad demonstrates to employers that they can thrive in a global environment, helping them to stand out in a competitive industry.

Students earn ASU credit for completed courses while staying on track for graduation, and they may apply financial aid and scholarships to program costs.

Career opportunities

Graduates from the environmental engineering program have career opportunities in both the private and public sectors.

Opportunities exist in the private sector in both the consulting and manufacturing industries. The consulting industry is growing as greater environmental awareness and emerging novel pollutants require continual refinement of regulations and environmental system design standards, and the manufacturing industry employs environmental engineers to aid in environmental compliance and eco-efficiency.

In the public sector, municipalities and regulatory agencies require a knowledgeable workforce that understands how public policy can improve human health and ecosystem services through environmental engineering processes.