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

Engineers are creative problem-solvers who help shape the future. No profession unleashes the spirit of innovation like engineering.

**Program Description**

The ABET-accredited BSE engineering program prepares graduates to collaborate across disciplines to design and build solutions to real-world problems. In the Bachelor of Science in Engineering program, students apply fundamental engineering knowledge and design thinking to real projects every semester.

Students in the humanitarian engineering concentration first build a broad engineering foundation to which they add the skills and knowledge necessary to adapt water and energy systems to local and developing-world needs. They work with ASU’s Global Resolve organization to learn to identify and implement appropriate technological and cultural solutions. Graduates of the concentration will be positioned to work on transdisciplinary teams addressing vital engineering needs of communities in the developing world. They have real-world experience with the challenges and opportunities inherent in this environment and impact lives by solving real problems.

Accredited by the Engineering Accreditation Commission of ABET, [http://www.abet.org](http://www.abet.org)

This major is eligible for the Western Undergraduate Exchange (WUE) program at the following location: Polytechnic campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program.

**At a Glance**

- **College/School:** Ira A. Fulton Schools of Engineering
• **Location:** Polytechnic campus

• **Additional Program Fee:** No
• **Second Language Requirement:** No
• **First Required Math Course:** MAT 265 - Calculus for Engineers I.
• **Math Intensity:** Substantial

### Required Courses (Major Map)

2016 - 2017 Major Map
Major Map (Archives)

### Accelerated Degrees

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:

Secondary Education (Teacher Certification), MEd

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

### Admission Requirements

**General University Admission Requirements:**

All students are required to meet general university admission requirements.

Freshman | Transfer | International | Readmission

### Transfer Agreements

ASU has partnered with colleges and universities in Arizona, California, Illinois and Washington to provide transfer curriculum pathways. Students should select their current institution to see if there is a partnership agreement between the institution and ASU for this degree program. Students who do not see their state or institution listed should check back as ASU is always working on creating new partnerships.
Global Opportunities

Global Experience

With over 250 programs in more than 65 countries (ranging from one week to one year), study abroad is possible for all ASU students wishing to gain 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 may apply financial aid and scholarships toward program costs. https://mystudyabroad.asu.edu/.

Career Opportunities

Engineers collaborate on transdisciplinary teams to design, manufacture and deliver innovative technological products and services. The Bachelor of Science in Engineering program enables students to develop sophisticated technical skills in tandem with the professional skills of communication, teamwork and collaboration, and self-motivation and adaptability that many employers seek. The humanitarian engineering concentration prepares students for graduate school in civil engineering, sustainability and development; it
also prepares students for careers in general engineering applications, disaster relief and aid, and nongovernmental organization development work both in the U.S. and globally. The program's emphasis on open-ended design and project-based learning supports the development of entrepreneurial skills and attitudes, and some students start companies of their own.

Career examples include but are not limited to those shown in the following list. Advanced degrees or certifications may be required for academic or clinical positions.

<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Engineering Professor</td>
<td>14.6%</td>
<td>$98,360</td>
</tr>
<tr>
<td>Energy Engineer</td>
<td>6.4%</td>
<td>$97,250</td>
</tr>
<tr>
<td>Human Factors Engineer</td>
<td>9.7%</td>
<td>$85,880</td>
</tr>
<tr>
<td>Solar Energy Systems Engineer</td>
<td>6.4%</td>
<td>$97,250</td>
</tr>
<tr>
<td>Wind Energy Engineer</td>
<td>6.4%</td>
<td>$97,250</td>
</tr>
</tbody>
</table>

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

☀ Bright Outlook ☀ Green Occupation

Contact Information

Engineering Programs | WANER 201
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