Engineering Management, BSE

Program Description

The BSE program in engineering management is designed to provide students with skills required for effective management and leadership of engineering-driven enterprises.

The curriculum provides a breadth of engineering science and design with depth in one specific area suitable for practice. This knowledge is augmented with an understanding of business practices and organizational behavior and with the development of management skills, enabling the graduate to succeed in the management of a scientific or engineering enterprise. Topics covered include project and resource management, financial engineering, risk management, configuration management, service plans, product liability, entrepreneurship and operations management, in addition to product design and process development.

Graduates have a deep understanding of at least one industry sector based upon the focus area courses.

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

ASU offers programs that lead to professional licensure with the state of Arizona and may allow graduates to be eligible for licensure in other states. Students should check the professional licensure list for the Ira A. Fulton Schools of Engineering to determine if this program meets requirements in their state: [https://asuonline.asu.edu/about-us/licensure/](https://asuonline.asu.edu/about-us/licensure/). Students should note that not all programs within the Fulton Schools of Engineering lead to professional licensure.

At a Glance

- **College/School:** [Ira A. Fulton Schools of Engineering](https://fulton.asu.edu)
- **Location:** Tempe campus or online, [ASU Local@Los Angeles](https://asuonline.asu.edu/about-us/licensure/)

- **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)

2021 - 2022 Major Map (On-campus)
2021 - 2022 Major Map (Online)
Concurrent Option
Major Map (Archives)

Concurrent Program Options

Students can choose to create their own concurrent degree combination to match their interests by working with their academic advisor during or after their first semester of study. Some concurrent combinations are not possible due to high levels of overlap in curriculum; students should speak with their academic advisor for more details.

This degree is also offered as a concurrent program with an integrated major map with the following:

Economics, BS

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:

Industrial Engineering, MS

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.

Freshman | Transfer | International | Readmission

Additional Requirements:

The admission requirements for majors in the Ira A. Fulton Schools of Engineering are higher than minimum university admission requirements. Students should select a second major choice when applying for admission to a degree program in the Ira A. Fulton Schools of Engineering.

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 (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. Admission may be granted with one deficiency in no more than two competency areas: https://admission.asu.edu/first-year/competency-requirements. Deficiencies in both math and laboratory science are not acceptable.

**Transfer Admission Requirements:**

**Transfer students with fewer than 24 transferable college credit hours:**

1. minimum transfer GPA of 2.75 for less than 24 transfer hours, and
2. satisfy the freshmen admission requirements

**Transfer students with more than 24 transferable college credit hours:**

1. minimum transfer GPA of 2.75 for 24 or more transfer hours, and
2. if Admission Services requires submission of a high school transcript, admission may be granted with one deficiency in no more than two competency areas: https://admission.asu.edu/first-year/competency-requirements. Deficiencies in both math and laboratory science are not acceptable.

**Concurrent degree admission: Engineering Management, BSE and Economics, BS:**

1. minimum 1250 SAT combined evidence-based reading and writing plus math score (650 minimum on SAT math) or minimum 29 ACT combined score (29 minimum on ACT math), and
2. 3.00 minimum ABOR GPA

**Change of Major Requirements**

Admission requirements for many majors in the Ira A. Fulton Schools of Engineering are higher than university admission standards. https://engineering.asu.edu/admission-requirements/

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

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may view the program description and request more information here.

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 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/pathway-programs.

Global Opportunities

Global Experience
With over 250 programs available, study abroad allows students to tailor their experience to their unique interests and skill sets. Students in engineering management are able to gain hands-on experience in various countries; most recent examples include Germany and Singapore.

Students acquire heightened cultural competency and leadership and critical thinking skills through study abroad, and this valuable experience on their resumes ensures they stand out in a competitive field. https://goglobal.asu.edu/

Career Opportunities

An engineering management graduate is prepared to begin a career as a:

• production supervisor
• project management team member or lead
• supply logistics engineer
• system specification and customer relationship management specialist or similar role

Graduates are ready to progress through successively higher levels of management responsibility.

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>Compliance Manager</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td>Construction Manager</td>
<td>8.5%</td>
<td>$97,180</td>
</tr>
<tr>
<td>Environmental Engineer</td>
<td>3.1%</td>
<td>$92,120</td>
</tr>
<tr>
<td>General Manager (GM)</td>
<td>5.8%</td>
<td>$103,650</td>
</tr>
<tr>
<td>IT Project Manager</td>
<td>5.7%</td>
<td>$92,870</td>
</tr>
<tr>
<td>Information Technology Manager (IT Manager)</td>
<td>10.4%</td>
<td>$151,150</td>
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<tr>
<td>Quality Control Manager</td>
<td>0.9%</td>
<td>$108,790</td>
</tr>
<tr>
<td>Regulatory Affairs Manager</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td>Wind Energy Project Manager</td>
<td>not available</td>
<td></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**

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