Arizona State University (Polytechnic Campus)

Manufacturing Engineering, BS

Study details

Course type: Bachelor's degree
Degree: Manufacturing Engineering, BS TSMEGRBS
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)

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.

Additional information

Program description

Successful manufacturing enterprises prosper in the global marketplace through a balance of design, sustainability, quality and production. Manufacturing engineering combines manufacturing processes (e.g., how materials are altered in either shape or properties) and the processes of manufacturing (e.g., design and management of manufacturing systems).

The BS program in manufacturing engineering prepares students to analyze, synthesize and control manufacturing operations using statistical methods; to collaborate across disciplines to design and build automated manufacturing systems for factory operation; to design innovative products and the equipment, tooling and environments necessary for their manufacture; to model, simulate and analyze manufacturing production processes for both small- and large-scale environments; and to provide technological leadership.

The curriculum is project-based, hands-on, teamwork-oriented and delivered in outstanding fabrication facilities. Graduates of this program become key team members who create and implement processes for making such varied products as airplanes, surgical instruments, toys and foodstuffs.

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

This major is eligible for the Western Undergraduate Exchange 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% of Arizona resident tuition plus all applicable fees.

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:

- Engineering, MS
- Manufacturing Engineering, MS
- Robotics and Autonomous Systems (Systems 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

Students learn to thrive in a global environment through the rich educational and interpersonal experiences inherent in study abroad. A resume enhanced by the valuable study abroad experience impresses prospective employers and also helps students stand out should they decide to pursue advanced study.

With over 300 Global Education program opportunities available to them, students are able to tailor their experience to their unique interests and skill sets. Whether in a foreign country, in the U.S. or online, students build communication skills, learn to adapt and persevere, and are exposed to research and internships across the world, increasing their professional network.

Career opportunities

Engineers collaborate on transdisciplinary teams to design, manufacture and deliver innovative technological products and services.

Graduates possess the technical skills in tandem with the professional skills of communication, teamwork and collaboration and the self-motivation and adaptability that many employers seek. Graduates are prepared to work in large corporations, government agencies and small businesses, and to pursue advanced degrees in graduate school. 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.

Graduates typically work as manufacturing engineers in a variety of companies, large and small. They are often members of design and development teams, cooperating with people within and outside their companies. Career employment opportunities include direct manufacturing support, manufacturing management, and quality control and assurance. Small and new startup companies value the strong, broad and practical engineering skill set of program graduates. Program graduates are well placed and command top salaries.