



Arizona State University (Tempe campus)

Biological Design, MS

Study details

Course type: Master's degree

Degree: Biological Design, MS ESBDEMS

Study mode: Full time

Duration: 24 Month

Cost of study

Cost : 29 880 USD

Reg. fee : 115 USD

Scholarship :

Insurance : 2 765 USD

Intake/s

Jan/May/Aug

Requirements

Admission requirements

Applicants must fulfill the requirements of both the Graduate College and the Ira A. Fulton Schools of Engineering. Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in a related field, including physical sciences, biological sciences, and engineering, from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program or a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. three letters of recommendation
4. personal statement
5. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide proof of English proficiency regardless of their current residency. Applicants whose native language is not English are required to achieve a minimum score of 90 on the TOEFL iBT.

The application process is very competitive, and candidates are strongly encouraged to adhere to all priority deadlines.

Accommodation

Provided by partner agencies;

On-campus housing and meals \$18,933

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

Degree awarded: MS Biological Design

Students pursuing the MS degree in biological design are trained in the continuum between technology and biology by participating in a flexible training program that requires students to take one program core course (Principles of Biological Design), one course from a suite of biotechnology courses, and one from a suite of statistics courses.

The flexibility of this program, while maintaining key instructional structure, allows students from both traditional and nontraditional engineering backgrounds to have simultaneous access to training and mentoring in both engineering and technology with a biological focus. This gives students from diverse backgrounds access to transdisciplinary education and training that they would not have in traditional program settings.

As part of coursework and applied projects or theses, students read literature; identify critical problems related to energy, environment, human health, sustainability and security; and develop solutions to these problems using a synergy of technological and biological solutions, either in teams (course projects) or individually (thesis or applied project). Students are mentored by faculty from different colleges and schools at ASU.

Career opportunities

Opportunities for graduates include placement in the broader biotechnology industry, including biopharmaceutical processing, biomanufacturing, sustainable biotechnology, and food and agribusiness industries. Some graduates pursue careers in entrepreneurship (e.g., startup companies), law (e.g., patent law), regulatory affairs and medicine.

Career examples include:

- clinical laboratory technologist
- environmental engineer
- environmental scientist and specialist
- epidemiologist
- health and safety engineer
- microbiologist