



Arizona State University (Tempe campus)

Exploration Systems Design (Instrumentation), MS

Study details

Course type: Master's degree

Degree: Exploration Systems Design (Instrumentation), MS LAESDIMS

Study mode: Full time

Duration: 24 Month

Cost of study

Cost : 38 526 USD

Reg. fee : 115 USD

Scholarship :

Insurance : 2 765 USD

Intake/s

Jan/Aug

Requirements

Admission requirements

- Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.
- Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in engineering, physical science or a related field 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 applicants must have 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. written statement
4. three letters of recommendation
5. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide proof of English proficiency (*TOEFL 80 (no band below 20) (IELTS 6.5 at least 6.0 in all skills)*) regardless of their current residency.

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 Exploration Systems Design (Instrumentation)

The MS program in exploration systems design with a concentration in instrumentation promotes the development and growth of engineering-literate scientists and science-literate engineers who are interested in the design, construction and implementation of scientific instrumentation. Its distinct curriculum combines science applications with engineering knowledge and skills through engineering and science courses focused on Earth science, space science and astrophysics. The concentration trains students to design the next generation of in situ or remote sensing instrumentation for exploration of the Earth, space and the universe.

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:

- Aerospace Engineering (Aeronautics), BSE
- Aerospace Engineering (Astronautics), BSE
- Aerospace Engineering (Autonomous Vehicle Systems), BSE
- Earth and Space Exploration, BS
- Earth and Space Exploration (Astrobiology and Biogeosciences), BS
- Earth and Space Exploration (Astrophysics), BS
- Earth and Space Exploration (Exploration Systems Design), BS
- Earth and Space Exploration (Geological and Planetary Sciences), BS
- Electrical Engineering, BSE
- Electrical Engineering (Electric Power and Energy Systems), BSE
- Mechanical Engineering, BSE

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.

Career opportunities

The U.S. Department of Labor predicts the economy will add an additional 63,000 jobs in engineering fields related to instrumentation and exploration systems design (involving electrical and electronics, aerospace and mechanical engineering). This is in addition to the 900,000 jobs already existing in the economy in these fields. <https://www.bls.gov/ooh/architecture-and-engineering/home.htm>

The state of Arizona has a considerable presence of aerospace and other technology companies with high demand for skilled labor. In particular, local aerospace companies have a need for students with direct experience and training in the space sector. The concentration in instrumentation is particularly positioned to provide this training.