Aerospace Engineering, MS

ESAEROSPMS

Program description

Degree awarded: MS Aerospace Engineering

The MS program in aerospace engineering prepares engineers for doctoral study or industrial positions specializing in research, project management and product innovation in aerospace engineering.

The program stresses a sound foundation in technical fundamentals, communication and professionalism. To this end, a broad-based curriculum is offered in design, system dynamics and control; fluid mechanics and aerodynamics; mechanics and dynamics of solids and structures; transport phenomena; thermodynamics; and energy.

At a glance

- College/School: Ira A. Fulton Schools of Engineering
- Location: <u>Tempe</u>

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

Mechanical Engineering, BSE

Mechanical Engineering (Computational Mechanics), BSE

Mechanical Engineering (Energy and Environment), 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. Interested students can learn about eligibility requirements and <u>how to apply</u>.

Degree requirements

30 credit hours and a portfolio, or30 credit hours and a thesis, or30 credit hours including the required applied project course (MAE 593)

Major Area of Emphasis (12 or 15 credit hours)

Technical Electives (6 or 9 credit hours)

Mathematics (6 credit hours)

Culminating Experience (0-6 credit hours)

MAE 593 Applied Project (3) or MAE 599 Thesis (6) or portfolio (0)

Additional Curriculum Information

All students are admitted to the nonthesis option unless a faculty thesis advisor is secured, at which time the student can initiate a change to the thesis option.

The plan of study must be in accordance with university and program requirements. A minimum cumulative GPA of 3.00 (scale is 4.00 = "A") is required throughout the program. Candidates for the program must complete a minimum of 30 credit hours of courses at the 500 level and above, with a minimum cumulative GPA of 3.00 or above.

Students completing a portfolio for the culminating experience must complete at least 15 credit hours of graduate MAE coursework (500 level and above) for the major area of emphasis requirement. An additional three credit hours of elective coursework, for a total of nine credit hours, is also required.

Coursework for the major area of emphasis is restricted to MAE coursework.

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 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. personal statement
- 4. resume or curriculum vitae
- 5. three letters of recommendation
- 6. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide proof of English proficiency via a minimum score of 80 on the internet-based TOEFL regardless of their current residency.

Admission to the aerospace engineering graduate program is highly competitive.

Admission to the accelerated master's degree program requires an ASU GPA of 3.50 (scale is 4.00 = "A") in degree-applicable courses. All applications are subject to review, and admission is not guaranteed.

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> options to find out which will work best for them.

Application deadlines

Fall

Spring

expand

expand

Career opportunities

Professionals with a master's degree in aerospace engineering have strong opportunities at most levels in aerospace engineering in research, design and manufacturing at companies of all sizes as well as national laboratories (DOE, DOD, NASA). Analytical skills learned in aerospace engineering are also valued for other nonengineering positions.

Career examples include:

- engineer
- engineering manager or director
- research engineer

Contact information

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