Mechanical Engineering, MS

ESMEMS

Program Description

Degree Awarded: MS Mechanical Engineering

The MS program in mechanical engineering prepares engineers for doctoral study or industrial positions that specialize in research, project management and product innovation in mechanical 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:** Tempe campus

Accelerated Degrees

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:

  - 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. During their junior year, eligible students will be advised by their academic departments to apply.

**Degree Requirements**

30 credit hours and a portfolio, or
30 credit hours and a thesis

**Major Area of Emphasis (12 or 15 credit hours)**

**Electives (6 or 9 credit hours)**

**Mathematics (6 credit hours)**

**Culminating Experience (0 or 6 credit hours)**
MAE 599 Thesis (6) or
portfolio (0)

**Additional Curriculum Information**

This program offers two culminating experience options: a thesis option and a nonthesis (portfolio) option. 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 approved courses at the 500 level and above, with a minimum cumulative GPA of 3.00 or above.

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, in any field, from a regionally accredited institution.
Applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum of a 3.00 cumulative GPA (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. official GRE score
4. personal statement
5. resume or curriculum vitae
6. three letters of recommendation
7. proof of English proficiency

**Additional Application Information**

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

Admission to the mechanical engineering graduate program is highly competitive and preferred applicants have an undergraduate degree in aerospace engineering or mechanical engineering.

Admission to the 4+1 degree program requires a 3.50 ASU GPA (scale is 4.00 = "A") in degree-applicable courses. All applications are subject to review and admission is not guaranteed.

Applicants should see the program website for application deadlines.

**Application Deadlines**

**Fall**

**Spring**

**Global Opportunities**

PLuS Alliance
Global Experience
Global Degree

**Career Opportunities**

**Contact Information**