MS in Mechanical and Aerospace Engineering

Degree Requirements

The master's requires a minimum of 30 hours beyond the bachelor's degree. There are two options for fulfilling the credit hour requirements: Special Project or Thesis.

Special Project

If the report option is chosen, a report must be prepared and submitted to the MAE Department. Reports follow the same manuscript guidelines as a thesis.

- 3-5 hrs of MAE problems
- 9 hrs of 8000 MAE courses minimum
- Maximum of 15 hrs 7000 or 8000 courses (outside MAE or in MAE)
- 1 hr seminar
- Special project report required by MAE
- No thesis required

Thesis

If the thesis option is chosen, a master's thesis must be prepared and presented to the Graduate School on CD-ROM as a PDF with required supplemental materials (http://gradschool.missouri.edu/policies/thesis-dissertation/guidelines/checklist-ch2.php). The students will be sent "Guidelines for Preparing Theses and Dissertations (http://gradschool.missouri.edu/policies/thesis-dissertation/guidelines)" from the Graduate School as soon as their Program of Study Form is submitted. See also: Thesis Process for Master's Students. (http://gradschool.missouri.edu/academics/thesis-dissertation/process)

- 9 hrs of 8000 MAE courses minimum
- Maximum of 12 hrs 7000 or 8000 courses (outside MAE or in MAE)
- 3 hrs 7000 or 8000 math (see requirements below)
- Maximum of 8 hrs research
- 1 hr seminar

Core Course Requirements

Students in Dynamics and Control area must take at least two from the following:

- MAE 7660 Vibration Analysis 3
- MAE 8001 Advanced Topics in Mechanical and Aerospace Engineering (Optimal Control) 3
- MAE 8280 Finite Element Methods 3
- MAE 8620 Advanced Dynamics 3
- MAE 8750 Nonlinear Control 3
- MAE 8320 Continuum Mechanics 3

Students in Mechanical and Materials area must take at least two from the following:

- MAE 8360 Theory of Plasticity 3
- MAE 8330 Theory of Elasticity 3
- MAE 8320 Continuum Mechanics 3
- MAE 8240 Mechanical Behavior of Materials 3
- MAE 8001 Advanced Topics in Mechanical and Aerospace Engineering (Materials Characterization) 3

Plan of Study

A plan of study is developed by the student and the advisor, subject to approval. The minimum degree requirement is 30 hours with a minimum of 18 hours at the 8000 level. Included within the 30 hours must be a special project report or thesis. A special project consists of three to five hours of MAE problems.

Alternatively, programs directed toward a thesis shall include three to eight hours of MAE 8990 (Research). A thesis or a report is approved by designated faculty committees and is deposited in the department libraries.

Passing the MS final committee fulfills the degree requirements.

Admission Contact Information

muengrgraduatesup1@missouri.edu

Application Deadline for all applicants

Fall deadline: May 31 (priority deadline Jan. 1)
Spring deadline: October 31 (priority deadline Oct 1)
Summer deadline: April 30

Admission Criteria

- BS in same or closely related field
- Minimum GPA: 3.0 during last 2 years
- Minimum GRE Score: 298 combined score on Verbal and Quantitative sections
- Minimum TOEFL score: 80
- Minimum academic IELTS overall score: 6.5
- Resume

Note: Lower GPAs require special action and substantiation, such as good test scores on the GRE or other recognized examinations.
How to apply to the MAE master’s program:

Step 1: All documents should be uploaded directly at https://applygrad.missouri.edu/apply.

Step 2: Required documents:

- Unofficial Transcripts (all Universities and Colleges attended) Uploaded in S (http://gradstudies.missouri.edu/admissions/apply)
- TOEFL/IELTS score - sent electronically to the University by ETS (Institution Code 6875 Department Code 1502)
- 3 letters of recommendation - uploaded in Slate by the recommenders. Letters must come from a school e-mail address, not personal accounts (like yahoo, gmail, etc).
- GRE score - sent electronically by ETS (Institution Code 6875 Department Code 1502)
- Statement of Objectives - one page letter telling about yourself and the area you will study if accepted (uploaded in Slate)
- CV/Résumé (Uploaded in Slate)

Contact:
Mechanical & Aerospace Engineering, Graduate Admissions
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