



### ***Twin Cities Campus***

## **Aerospace Engineering and Mechanics M.Aero.E.**

*Aerospace Engineering & Mechanics*

### **College of Science and Engineering**

Link to a [list of faculty](#) for this program.

- **Students will no longer be accepted into this program after Spring 2014. Program requirements below are for current students only.**
- **Students are no longer being accepted into this program. Prospective applicants may be interested in the course-work only option in the Aerospace Engineering and Mechanics M.S. program.**

### **Contact Information:**

Director of Graduate Studies, Department of Aerospace Engineering and Mechanics, University of Minnesota, 107 Akerman Hall, 110 Union Street S.E., Minneapolis, MN 55455 (612-625-8000; fax: 612-626-1558)

Email: [aem-dgs@aem.umn.edu](mailto:aem-dgs@aem.umn.edu)

Website: <http://www.aem.umn.edu>

- Program Type: Master's
- Requirements for this program are current for Spring 2014
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Aerospace Engineering

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The Department of Aerospace Engineering and Mechanics offers M.S. and Ph.D. degrees in aerospace engineering and mechanics, as well as a professionally-oriented master of aerospace engineering. The graduate programs emphasize engineering sciences that are basic to fluid mechanics, aerospace systems, and solid mechanics. Theoretical, analytical, experimental, and computational aspects of these fields are covered by the courses and research opportunities offered by the department.

## **Program Delivery**

This program is available:

- via classroom (the majority of instruction is face-to-face)

## **Prerequisites for Admission**

The preferred undergraduate GPA for admittance to the program is 3.00.

A four-year B.S. degree in an engineering, basic science, or mathematics program is required. Admission depends primarily on the applicant's undergraduate record and letters of recommendation.

Other requirements to be completed before admission:

GRE scores are not required but are strongly recommended for students applying for graduate fellowships. In all cases, these test scores are taken into account if provided. Students are admitted fall semester only. Only under unusual circumstances are students allowed to begin their studies at another time during the academic year.

International applicants must submit score(s) from one of the following tests:

- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
- IELTS
  - Total Score: 6.5
- MELAB
  - Final score: 80

Key to [test abbreviations](#) (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.



## Program Requirements

**Plan C:** Plan C requires 22 major credits and 8 credits outside the major. There is no final exam.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

This program emphasizes coursework in engineering sciences that are basic to this field: fluid mechanics, aerospace systems, and solid mechanics. Options include coursework in aerodynamics and aerospace systems, dynamical systems, material properties, and fluid and solid behavior.

The M.Aero.E. program emphasizes the application of fluid mechanics, aerospace systems, and solid mechanics in aerospace engineering. The program must include at least 12 credits of 5xxx or 8xxx courses, and no more than 8 credits of 4xxx courses. Two semesters of AEM colloquium attendance are also required. In addition to the minimum credit requirement, the student must demonstrate an understanding of aerodynamics and aerospace vehicle mechanics, either from previous study or from additional coursework in the graduate program.