Program Description

The program is designed to provide students with a solid foundation in the fundamentals of Aerospace Engineering by requiring at least one core course in each of the three branches of Aerospace Engineering (Fluid Mechanics, Solid Mechanics and Materials, Dynamics and Controls) as well as one course in mathematics.

Specialization can then be made by taking additional courses in one or more of these, and other, areas: Aerodynamics, Fluid Mechanics, Combustion/Propulsion, Structural Mechanics, Solid Mechanics and Materials, Dynamical Systems, Aerospace Control, Orbital Mechanics, and Spacecraft.

Admission Requirements

GPA Requirements:

The Department of Aerospace Engineering requires a GPA of 3.00 on a 4.00 scale (A=4) for previous B.S. degree and graduate work. However, having a GPA higher than the minimum is no guarantee of admission. Also, applicants having an MS degree generally must meet a higher standard.

Education Background Requirements:

Applicants must have a B.S. degree in aerospace engineering or a closely related field such as mechanical or civil engineering from an accredited college in the United States or an approved institution of higher learning abroad in order to be eligible to apply.

GRE

The department does not have a minimum score requirement for the GRE but a quantitative score in the 80th percentile is recommended.

English Proficiency Requirement:

The minimum Test of English as a Foreign Language (TOEFL) score for admission is 103. Students who wish to be considered for teaching assistantships should have a score of at least 24 on the Speak section of the TOEFL exam.

Additional Application Materials:

Students will need to provide a current resume, statement of purpose (1-2 pages), and three letters of reference.
Degree Requirements

The non-thesis Master of Science (MS) degree in Aerospace Engineering (AE) requires 32 credit hours of coursework. All students in the MS non-thesis option must complete at least one course from all three areas listed among the Aerospace Engineering Breadth Requirements (AFMCP: Aerodynamics, Fluid Mechanics, Combustion and Propulsion; ACDS: Astrodynamics, Controls and Dynamical Systems; SMM: Solid Mechanics and Materials). Graduate students are expected to exhibit competence in applied mathematics by taking at least one approved Mathematics course. An online seminar requirement also exists.

Online students have five years to complete the program. All online students receive access to recorded on-campus lectures and follow the class syllabus, including the same assignments, exams, and projects as on-campus students.

Total Coursework - 32 hours

- 500 Level Coursework - 12 hours
- Aerospace Engineering Coursework - 8 hours at the 500 level in AE
- Math Coursework - 1 course from approved list
- AE 590 Seminar - Enrolled all semesters
- Breadth Coursework - 1 course from all three specialty areas listed above
- Aerospace Engineering Coursework - 16 hours at 400 level or above

Program Contacts

Program Coordinators:
Staci McDannel
Coordinator of Academic Programs
Department of Aerospace Engineering
217.333.3674
tank@illinois.edu

Department of Aerospace Engineering
University of Illinois at Urbana-Champaign
306 Talbot Laboratory, MC-236
104 S. Wright Street
Urbana, IL 61801
217.333.2651
aerospace@illinois.edu

UIUC Admissions
The Graduate College
204 Coble Hall, MC-322
801 S. Wright St
Champaign, IL 61820
217.333.8019
grad@illinois.edu

Program URL: http://aerospace.illinois.edu/graduate-programs/online-ms-aerospace-engineering