

AEROSPACE ENGINEERING, M.E.

The Graduate School has general requirements for M.E students that must be met by all degree candidates (including earning at least 30 credit hours beyond the bachelor's degree for master's degrees). The Aerospace Engineering Program has added requirements (which are listed below) that must be met before students can complete their degrees.

Degree Requirements

An M.E. student must take a minimum of 30 hours of graded graduate courses. For M.E. degree, the student must take five required courses. All remaining course work must be taken from an approved list of courses, which includes engineering and mathematics courses numbered 500 or above. Other courses must be approved by the student's advisor and the graduate studies committee. All candidates for the M.E. degree must complete comprehensive assessment that is distinct from program course requirements.

Program of Study for the Masters Program in Aerospace Engineering

Required Courses

All M.S. and M.E. candidates in Aerospace Engineering will be required to take the five (5) core courses listed below:

Course	Title	Credits
EMCH 508	Finite Element Analysis in Mechanical Engineering	3
EMCH 577	Aerospace Structures I	3
EMCH 744	Aerodynamics & Flight Mechanics	3
EMCH 585	Introduction to Composite Materials	3
EMCH 721	Aeroelasticity	3
Total Credit Hours		15

Elective Aerospace Courses

All students in Aerospace Engineering must take a minimum of two (2) courses from the following courses:

Course	Title	Credits
EMCH 743	Aircraft and Rocket Propulsion	3
EMCH 777	Aerospace Structures II	3
EMCH 522	Design for Manufacture and Assembly	3
EMCH 544	Compressible Fluid Flow	3
EMCH 516	Control Theory in Mechanical Engineering	3
EMCH 532	Intermediate Dynamics	3
EMCH 571	Mechanical Behavior of Materials	3
EMCH 701	Methods of Engineering Analysis	3
ENCP 707	Continuum Mechanics	3
EMCH 721	Aeroelasticity	3
EMCH 751	Advanced Heat Transfer	3
EMCH 741	Viscous and Turbulent Flow	3
EMCH 794	Thermodynamics	3
EMCH 785	Design of Composite Materials for Aerospace Structures	3
EMCH 881	Fatigue of Materials	3

Other Elective Courses

All remaining work must be taken from an approved list of courses which currently includes all engineering courses numbered 500 or above and math courses numbered 700 or above. Business courses numbered 500 or above may be taken with advance approval by the advisor and the Graduate Studies Committee. Other courses will be added to the list as approved by the faculty.

Additional Program of Study Requirements

Course and Program Grades

Courses **not** satisfying the requirements for a graduate degree are:

1. Any course with a grade of D+, D or F.
2. More than 12 credits with grade of C+ or below (the 4-C Rule).
3. Any course taken on a non-letter grade basis (except thesis).
4. More than 12 semester hours of credits from a previous graduate degree program.

The student must **maintain a minimum grade point average of 3.0** in:

1. All courses taken as part of the official degree program.
2. All courses numbered 700 or above.
3. All courses taken for graduate credit, including those not included in the official degree program.
4. Pass/Fail – A "fail" grade counts toward the 4-C rule.

Comprehensive Examination

For the M.E. degree, a student passes the comprehensive exam by demonstrating competence in a written exam.