

# AEROSPACE ENGINEERING - MASTER OF SCIENCE IN AEROSPACE ENGINEERING

Students may select one of two options for completing their MS degree. Selection of a particular option must be made during the first semester of study in conjunction with selecting a permanent adviser.

## Thesis Option

### Requirements

M E 570	Engineering Analysis I	3
Select at least 18 credits of A E graduate courses <sup>1</sup>		18
Select one or both from the following:		
A E 509	Individualized Study	3
A E 510	Special Topics <sup>2</sup>	6
Total Credits		30

<sup>1</sup> Up to 6 credits of M E graduate courses may be substituted with the approval of the Graduate Coordinator. All course must be 500 level or above.

<sup>2</sup> Special topics courses offered formally on a one time basis.

**Publication Requirement:** a refereed conference paper accepted or a refereed journal article in review or accepted by graduation. The MS thesis can be a reformatted version of this paper. Exceptions may be made on a case by case basis by the department head.

## Coursework Option

### Requirements

M E 570	Engineering Analysis I	3
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### Core Courses

Select one core course from 4 of the 5 following topic areas:	12
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#### Space Dynamics

A E 562	Astrodynamics
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#### Aerodynamics

Select one from the following:

M E 530	Intermediate Fluid Mechanics
M E 533	Computational and Theoretical Fluid Mechanics
A E 552	Introduction to Gasdynamics

#### Structural Dynamics and Control

Select one from the following:

M E 512	Vibrations
A E 527	Control of Mechanical Systems

#### Mechanics

Select one from the following:

M E 502	Elasticity I
M E 504	Continuum Mechanics

#### Engineering Analysis

Select one from the following:

M E 518	Finite Element Analysis
M E 580	Engineering Analysis II

### Additional Requirements

Select 4 additional A E courses (500 level or above) from the following: <sup>3</sup> 12

Core Courses listed above		
Research Area Courses		
A E 509	Individualized Study	
A E 510	Special Topics	
Select one course (500 level or above) from related areas <sup>4</sup>	3	
Total Credits		30

<sup>3</sup> Graduate M E courses may be substituted for A E courses with the approval of the Graduate Program Coordinator.

<sup>4</sup> If course is not in A E or M E program, approval of the Graduate Program Coordinator is required.

## Selection of MS Option and Permanent Adviser

Newly admitted graduate students will be assigned a temporary advisor for the first semester, but they must select a degree option and permanent advisor before registering for the second semester.

In considering a decision about option and advisor, the student should arrange to meet with several members of the graduate faculty during the first six weeks of study to discuss specific educational objectives. The student can use these meetings to become familiar with faculty interests and research projects currently in progress. The faculty member must agree (in writing) to serve as the student's advisor.

All students must pass a final examination. The final examination is to be conducted by the student's advisory committee and is taken after completing all coursework and thesis work for the thesis option, or all coursework for the course-only option.