

**Aerospace Engineering and Mechanics Graduate Program  
MS-ESM Thesis Degree Requirement Checklist (Plan I)**

Student: \_\_\_\_\_ CWID #: \_\_\_\_\_

Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Credit Hour Requirement: 30 total semester hours**  
*24 hours of coursework and 6 hours of thesis*  
**Six (6) Year Time Limit**

**MAJOR**

**AEM COURSE REQUIREMENT (9 hours)**

	Credit Hours	Grade	Term
AEM 500 Intermediate Fluid Mechanics	3	_____	_____
AEM 562 Intermediate Dynamics	3	_____	_____
AEM 637 Theory of Elasticity	3	_____	_____

**AREA OF SPECIALIZATION COURSES (6 hours)**

*Two (2) additional courses beyond the core in one of the following areas (check one)*

		Credit Hours	Grade	Term
<input type="checkbox"/> fluid mechanics	Course Name			
<input type="checkbox"/> solid mechanics	_____	3	_____	_____
<input type="checkbox"/> dynamics	_____	3	_____	_____

**MINOR**

**MATHEMATICS COURSE REQUIREMENT (6 hours)**

*One course must be GES 554 Partial Differential Equations.*

	Credit Hours	Grade	Term
GES 554 Partial Differential Equations (REQUIRED)	3	_____	_____
AEM 585 Genetic Algorithms	3	_____	_____
AEM 587 Neural Networks	3	_____	_____
GES 551 Matrix and Vector Analysis	3	_____	_____
GES 658 Numerical Methods	3	_____	_____
Other (approved) _____	3	_____	_____

**APPROVED ELECTIVE (3 hours)**

	Credit Hours	Grade	Term
_____	3	_____	_____
_____	3	_____	_____
_____	3	_____	_____
_____	3	_____	_____

**Admission to Candidacy**

Admission to candidacy for the Master's degree can be filed after 12 semester hours of graduate credit is earned at UA. It should be approved by time of registration for the semester in which requirements for degree are completed.

**THESIS COURSE REQUIREMENT (6 hours)**

	Credit Hours	Grade	Term
AEM 599 Thesis Research	—	_____	_____
	—	_____	_____
	—	_____	_____

**Degree Requirements**

***earn 3.0 average for the core courses***

- AEM 500 Intermediate Fluid Mechanics
- AEM 562 Intermediate Dynamics
- AEM 637 Theory of Elasticity
- GES 554 Partial Differential Equations

*A thesis and abstract must be made available for departmental review two weeks prior to the Thesis defense. See Graduate Program Director before scheduling a defense.*