

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

Student: _____ CWID #: _____

Start Date: _____ End Date: _____ Advisor: _____

**Credit Hour Requirement: 30 total semester hours of coursework
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)

	Course Name	Credit Hours	Grade	Term
<input type="checkbox"/> Fluid Mechanics	_____	3	_____	_____
<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	_____	_____

OTHER APPROVED COURSES (9 hours)

one (1) course has to be in AEM

	Credit Hours	Grade	Term
AEM _____	3	_____	_____
_____	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.

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

Culminating Experience

Culminating Project – AEM 594
submit written project report

or

Pass one (1) PhD Qualifying Exam

	Date	Pass/Fail
Fluid Mechanics	_____	_____
Solid Mechanics	_____	_____
Dynamics	_____	_____
Mathematics	_____	_____