Aerospace Engineering and Mechanics Graduate Program
PhD-AEM Degree Requirement Checklist

Student:_____ CWID #:_____

Start Date:_____ End Date:_____ Advisor:_____

Credit Hour Requirement: 72 total semester hours

48 hours of coursework and 24 hours of dissertation

Seven (7) Year Time Limit

MAJOR
CORE COURSE REQUIREMENT (12 hours)

Aerospace Track

	Credit Hours	Grade	Term
AEM 500 Intermediate Fluid Mechanics	3	_____	_____
AEM 530 Continuum Mechanics	3	_____	_____
AEM 520 CFD or AEM 635 FEM	3	_____	_____
AEM 668 Advanced Dynamics of Flight	3	_____	_____

Mechanics Track

	Credit Hours	Grade	Term
AEM 500 Intermediate Fluid Mechanics	3	_____	_____
AEM 530 Continuum Mechanics	3	_____	_____
AEM 562 Intermediate Dynamics	3	_____	_____
AEM 637 Theory of Elasticity	3	_____	_____

MINOR
MATHEMATICS COURSE REQUIREMENT (9 hours)

	Credit Hours	Grade	Term
GES 554 Partial Differential Equations	3	_____	_____
GES 551 Matrix and Vector Analysis	3	_____	_____
Other (approved) _____	3	_____	_____

DISSERTATION COURSE REQUIREMENT (24 hours)

AEM 699 Dissertation Research

Credit Hours	Grade	Term	Credit Hours	Grade	Term
___	_____	_____	___	_____	_____
___	_____	_____	___	_____	_____
___	_____	_____	___	_____	_____
___	_____	_____	___	_____	_____

Once enrollment is initiated in AEM 699, a student must enroll without interruption each fall and spring semester for at least 3 hours until graduation.

Other Approved Courses (27 hours)

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

Coursework completed towards a Masters with a minimum "B" average can be applied to the PhD; a maximum of 24 hours may be transferred to UA from another institution.

PhD Qualifying Exams

Students must pass qualifying exams in 3 of the 4 areas and earn a "B" in the core course of the fourth (4) area.

- **take after two full years are completed and nine months before degree is awarded**
- **may be taken only twice**

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

Residency Requirement

Minimum requirement of 3 full years w/one (1) full year [2 consecutive semesters] in residence as a full-time student which cannot include dissertation research.

Admission to Candidacy (Aerospace Track)

(1) *earn 3.0 average for the Core courses and GES 554*
(2) *pass qualifying exams &*
(3) *defended Dissertation proposal*

- [ ] AEM 500 Intermediate Fluid Mechanics
- [ ] AEM 530 Continuum Mechanics
- [ ] AEM 520 CFD or AEM 635 FEM
- [ ] AEM 668 Advanced Dynamics of Flight
- [ ] GES 554 Partial Differential Equations
- [ ] Pass Qualifying Exams
- [ ] Dissertation Proposal defended

Admission to Candidacy (Mechanics Track)

(1) *earn 3.0 average for the Core courses and GES 554*
(2) *pass qualifying exams &*
(3) *defended Dissertation proposal*

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- [ ] AEM 530 Continuum Mechanics
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- [ ] AEM 637 Theory of Elasticity
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