# Department of Aerospace Engineering and Mechanics

(Students starting or transferring to UA Fall 2009 or after)

## FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 Hrs</th>
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<tbody>
<tr>
<td>Placement</td>
<td>MATH 125 Calculus I MA 4</td>
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<tr>
<td></td>
<td>PH 105</td>
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<td></td>
<td>MATH 126</td>
</tr>
<tr>
<td>Placement</td>
<td>CH 101 Gen Chem NS 4</td>
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<tr>
<td></td>
<td>ENGR 111 Engineering the Future. ENGR 1</td>
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<td>MATH 112</td>
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<tr>
<td>Placement</td>
<td>ENGR 131 Eng Concepts and Design I ENGR 1</td>
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<td></td>
<td>MATH 112</td>
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<tr>
<td>Placement</td>
<td>EN 101 English Comp I FC 3</td>
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<td>EN 102</td>
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<tr>
<td></td>
<td>ENGR 141</td>
</tr>
<tr>
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<td>ENGR 151 Fund Eng Graphics ENGR 1</td>
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<table>
<thead>
<tr>
<th>Spring</th>
<th>16 Hrs</th>
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<tbody>
<tr>
<td>Placement</td>
<td>MATH 125</td>
</tr>
<tr>
<td></td>
<td>MATH 126 Calculus II MA 4</td>
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<tr>
<td></td>
<td>PH 106</td>
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<td>MATH 227 ME 215</td>
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<tr>
<td>Placement</td>
<td>PH 105</td>
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<td>ENGR 151</td>
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<td>EC 110 Microeconomics SB 3</td>
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<td></td>
<td>EN 102 English Comp II FC 3</td>
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<td></td>
<td>ENGR 141</td>
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<tr>
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<td>ENGR 151</td>
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<td>ENGR 151 Fund Eng Graphics ENGR 1</td>
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## SOPHOMORE YEAR

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<tbody>
<tr>
<td>Placement</td>
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<tr>
<td></td>
<td>MATH 227 Calculus III MA 4</td>
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<td></td>
<td>MATH 238 AEM 313</td>
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<tr>
<td>Placement</td>
<td>PH 105</td>
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<td></td>
<td>PH 106</td>
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<tr>
<td></td>
<td>Physics II NS 4</td>
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<td>AEM 201</td>
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<td>AEM 201</td>
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<td>Statics ES 3</td>
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<td>AEM 250 AEM 264</td>
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<td>AEM 250 AEM 311</td>
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<td>AEM 250</td>
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<td>Mechanics Lab ES 1</td>
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<td>ENGR 131</td>
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<td>Eng Concepts and Design II ENGR 1</td>
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<td>MATH 125</td>
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<td>AEM 249 Algorithms C 2</td>
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<td>MATH 125</td>
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<td>MATH 227 Intro to Linear Algebra MA 3</td>
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<td>AEM 258 Fluid Mechanics ES 3</td>
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<td>AEM 313</td>
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<td>AEM 451</td>
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<td>PH 106</td>
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<td>MATH 238 Fund Electrical Engineering ES 3</td>
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</tbody>
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## Key

- **F** = Fall semester only
- **S** = Spring semester only
- **C** = Computer requirement
- **CS** = Computer Science
- **ES** = Engineering Science
- **ENGR** = Freshman Engineering
- **FC** = Freshman Composition
- **HI/SB** = History/Social Science & Behavioral Science
- **HU/L/FA** = Humanities/Literature/Fine Arts
- **MATH** = Mathematics
- **NS** = Natural Science
- **W** = Writing requirement

### Legend

- **Pre-requisites**
- **Course #**
- **Title**
- **Area & Credits**
- **Downward Dependencies**

This is an unofficial flow chart prepared to assist students in planning their coursework. The University Catalog contains the official listing of academic information. Aerospace Engineering and Mechanics or other departments may change their prerequisites and corequisites from time to time as course content changes to keep pace with changing technologies. As these changes become known, they are posted on the academic bulletin board outside the department office. Students should consult the CATALOG and seek advisement prior to registering for courses.

Dr. Stanley E. Jones, Department Head
Aerospace Engineering and Mechanics

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Department of Aerospace Engineering and Mechanics
(Students starting or transferring to UA Fall 2009 or after)

JUNIOR YEAR
Fall 16 Hrs
AEM 264 AEM 311
AERODYNAMICS I
ES 3
AEM 249 AEM 250
Aircraft Structures
ES 3
MATH 238
AEM 413 AEM 416
ME 215
AEM 420
AEM 451
ENGINEERING ANALYSIS
ES/C 4
AEM 413
AERO DYNAMICS II
ES 4
AEM 402 AEM 423
AEM 468
AEM 474
AEM 341
AERODYNAMICS
ES 3
AEM 413
AERO DYNAMICS II
ES 3
AEM 402 AEM 414
AEM 413
AERO DYNAMICS II
ES 3
AEM 402 AEM 414
AEM 425
COMPUTATIONAL STRUCTURES
ES 3
AEM 468
FLIGHT DYNAMICS
AND CONTROLS I
ES 4
AEM 402 AEM 423
AEM 468
AEM 474
AEM 416
FLIGHT DYNAMICS
AND CONTROLS II
ES 4
AEM 402 AEM 423
AEM 468
AEM 474
AEM 403
AEROSPACE DESIGN I
ES 3
AEM 404
AEROSPACE DESIGN II
ES 3
AEM 408
PROPULSION
ES 3
AEM 413
AERO DYNAMICS II
ES 3
AEM 402 AEM 414
AEM 428
STRUCTURAL DESIGN AND TEST
ES/W 4
AEM 425
FLIGHT DYNAMICS
AND CONTROLS II
ES 4
AEM 402 AEM 423
AEM 468
AEM 474
AEM 461
AEROSPACE DESIGN II
ES 3
AEM Elective
ES 3
AEM Elective
ES 3
AEM Elective
ES 3
AEM Elective
ES 3
HIS Elective
ES 3
HIS Elective
ES 3
HIS Elective
ES 3
HIS Elective
ES 3

LEGEND

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**ENGR** = Freshman Engineering

**FC** = Freshman Composition

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**Pre-requisites**

**Co-requisites**

**Course #**

**Title**

**Area & Credits**

**Downward Dependencies**

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