# Department of Aerospace Engineering and Mechanics
(Effective Fall 2013 – 126 hours)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>SOPHOMORE YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong> 16 Hrs</td>
<td><strong>Spring</strong> 15 Hrs</td>
</tr>
<tr>
<td>Placement</td>
<td>Placement</td>
</tr>
<tr>
<td>MATH 125 Calculus I MA 4</td>
<td>CH 101 Gen Chem NS 4</td>
</tr>
<tr>
<td>MATH 105</td>
<td>PH 105 Physics I NS 4</td>
</tr>
<tr>
<td>Placement</td>
<td>Placement</td>
</tr>
<tr>
<td>ENGR 103 Engineering Foundations ENGR 3</td>
<td>MATH 100</td>
</tr>
<tr>
<td>MATH 125</td>
<td>MATH 101</td>
</tr>
<tr>
<td>EN 101 English Comp I FC 3</td>
<td>EN 102 English Comp II FC 3</td>
</tr>
<tr>
<td>Placement or EN 099</td>
<td>ENGR 103</td>
</tr>
</tbody>
</table>

## Legend
- **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
- **HUL/FA** = Humanities/Literature/Fine Arts
- **MATH** = Mathematics
- **NS** = Natural Science
- **W** = Writing requirement

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. John Baker, Department Head
Aerospace Engineering and Mechanics

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

ver: 2013_08_19
Department of Aerospace Engineering and Mechanics
(Effective Fall 2013 – 126 hours)

**JUNIOR YEAR**

**Fall 16 Hrs**

- AEM 264
- AEM 311
- MATH 238

- AEM 313
  - Aerodynamics I
  - ES 3

- AEM 341
  - Aircraft Structures
  - ES 3

- AEM 249
  - AEM 250

- AEM 249
  - AEM 327
  - MATH 238

- MATH 126
  or MATH 132

- ME 215
  - Thermodynamics
  - ES 3

- HU/L/FA Elective
  - HU/L/FA 3

**Spring 16 Hrs**

- AEM 313
  - AEM 349
- AEM 368
  - Flight Dynamics and Controls I
  - ES 4

- AEM 402
  - AEM 413
- AEM 413
  - Aerodynamics II
  - ES 3

- AEM 461
  - Computational Structures
  - ES/C 3

- AEM Elective
  - HI/SB 3

**Fall 15 Hrs**

- AEM 341
- AEM 368
- AEM 413
- AEM 468

- AEM 402
  - AEM 413
- AEM 402
  - AEM 468

- AEM 408
  - Propulsion
  - ES 3

- AEM Elective
  - ES 3

**SENIOR YEAR**

**Fall 16 Hrs**

- AEM 402
  - AEM 404
- AEM 404
  - Aerospace Design I
  - ES 3

- AEM 413
  - AEM 408
- AEM 408
  - Propulsion
  - ES 3

- AEM 461
  - AEM 428
- AEM 428
  - Structural Design
  - ES/W 4

- AEM Elective
  - HI/SB 3

**Spring 16 Hrs**

- AEM 402
  - AEM 413
- AEM 413
  - Aerodynamics II
  - ES 3

- AEM 468
  - Flight Dynamics and Controls II
  - ES 4

- AEM Elective
  - HI/SB 3

- HU/L/FA Elective
  - HU/L/FA 3

---

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. John Baker, Department Head
Aerospace Engineering and Mechanics

**Legend**

- **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

**Key**

- **Pre-requisites**
- **Co-requisites**
- **Downward Dependencies**

ver: 2013_08_19