B.S. Aerospace Engineering  
2016-2017 Academic Year

Student Information
Name: ___________________  OSU ID: ___________________  OSU Admit Term: __________
Phone: ___________________  Email (name.number@osu.edu): ___________________

Suggested Curriculum
This should be used as a guide only. Semester offerings are subject to change.

<table>
<thead>
<tr>
<th>Year</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MATH 1151 (Calculus 1)</td>
<td>MATH 1172 (Engineering Math A)</td>
</tr>
<tr>
<td></td>
<td>PHYSICS 1250 (Mechanics, Thermal, Waves)</td>
<td>CHEM 1250 (Gen Chem for Engineers)</td>
</tr>
<tr>
<td></td>
<td>ENGR 1181 (Fundamentals of Engr 1)</td>
<td>ENGR 1182 (Fundamentals of Engr 2)</td>
</tr>
<tr>
<td></td>
<td>ENGR 1100 (Engineering Survey)</td>
<td>General Education</td>
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<tr>
<td></td>
<td>General Education</td>
<td>General Education</td>
</tr>
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<td></td>
<td></td>
<td>3 hr</td>
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<tr>
<td></td>
<td>MATH 2173 (Engineering Math B)</td>
<td>MATH 2174 (Lin Alg &amp; Diff Eq)</td>
</tr>
<tr>
<td></td>
<td>PHYSICS 1251 (E&amp;M, Optics, Modern Phys)</td>
<td>AEROENG 2201 (Intro to AAE 2)</td>
</tr>
<tr>
<td></td>
<td>AEROENG 2200* (Intro to AAE 1)</td>
<td>AEROENG 2405 (Thermodynamics)</td>
</tr>
<tr>
<td></td>
<td>MECHENG 2040* (Statics &amp; Mechanics)</td>
<td>MECHENG 2030 (Dynamics)</td>
</tr>
<tr>
<td></td>
<td>ENGR 1221* (Programming - MATLAB)</td>
<td>ECE 2300 (Circuits)</td>
</tr>
<tr>
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<td></td>
<td>3 hr</td>
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<tr>
<td>2</td>
<td>AEROENG 3520 (Flight Vehicle Dynamics)</td>
<td>AEROENG 3521 (Flight Vehicle Control)</td>
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<td>AEROENG 3560 (Fluids I)</td>
<td>AEROENG 3543 (Flight Vehicle Structure 2)</td>
</tr>
<tr>
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<td>AEROENG 3542 (Flight Vehicle Structure 1)</td>
<td>AEROENG 3570 (Gasdynamics)</td>
</tr>
<tr>
<td></td>
<td>AEROENG 3581 (Numerical Methods)</td>
<td>AEROENG 3580 (Heat Transfer)</td>
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<td>General Education</td>
<td>General Education</td>
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<tr>
<td></td>
<td></td>
<td>3 hr</td>
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<tr>
<td>3</td>
<td>AEROENG 4510 (Experimental Projects 1)</td>
<td>AEROENG 4511(Experimental Projects 2)</td>
</tr>
<tr>
<td></td>
<td>AEROENG 4515 (Pre-Dsgn of Atmos Flt Veh)</td>
<td>AEROENG 4516 (Dsgn of Atmos Flt Veh)</td>
</tr>
<tr>
<td></td>
<td>AEROENG 4517 (Space Veh and Systems 1)</td>
<td>AEROENG 4518 (Dsgn Space Veh and Sys 2)</td>
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<td>AEROENG 4550 (Flight Veh Propulsion)</td>
<td>Technical Elective</td>
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<td>Technical Elective</td>
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</table>

*These required courses can be taken without being in the major.

Total Hours to complete the degree program = 128

Courses in bold face are only offered during the listed term

All students must satisfy the credit hour minimum (32 credit hours) for math and basic sciences. Students with high math or science placements (i.e. Math 161 without “EM” or “K” credit for Math 151) and transfer students should consult with the MAE academic advisors to ensure this minimum is met. Such students may be required to take extra coursework to meet graduation requirements.

Acceptance Criteria
Formal application to the major is required and applications are accepted only once a year during Autumn Term. Prerequisite courses to the major are English 1110.xx and the EPHR courses listed below. Acceptance into the Aerospace Engineering major is competitive based on a student’s EPHR. Email maeadvisor@osu.edu for more information.

EPHR is calculated on the following courses: AEROENG 2200; CHEM 1250; ENGR 1181, 1182; MATH 1172, 2173; MECHENG 2040; PHYSICS 1250, 1251; or their equivalents.
## Technical and Other Electives
See an MAE advisor for a list of approved technical electives.

## General Education Requirement

### Writing and Communication

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1110.xx</td>
<td>3</td>
</tr>
<tr>
<td>Second Writing Course</td>
<td>3</td>
</tr>
</tbody>
</table>

### Social Science

*Only one course per Social Science group may count.*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
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</tbody>
</table>

### Literature

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Visual and Performing Arts

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Historical Study

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
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</table>

### Second Historical Study or Cultures and Ideas

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
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</tbody>
</table>

### Social Diversity in the U.S. or Global Diversity

*Some courses may overlap with another GE category. See course list.*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 / 3</td>
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</tbody>
</table>

### Ethics

*Some courses may overlap with another GE category. See course list.*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>0 / 3</td>
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</tbody>
</table>

## Foreign Language

*Pre-approved substitutions*

**A.** Substitution A: Completion through enrollment in a foreign language sequence through 1103, or enrollment in a foreign language course with a prerequisite of 1103, can be substituted for one Gen Ed course requirement as a Cultures & Ideas.

**B.** Substitution B: Completion of a foreign language minor can be substituted for two Gen Ed courses: one course as a Social Science, (Individuals & Groups or Organizations & Polities subgroups only) and one course as either a Literature or a Cultures & Ideas.

**Parameters:** Students must choose either Substitution A OR Substitution B. Both substitutions cannot be applied simultaneously.

## University Capstone (Cross-Disciplinary Seminar)

*Pre-approved substitutions*

Completion of a Social Science 3597 or 4597 can be substituted for a Social Science general education course in any group. Completion of an Arts & Humanities 3597 or 4597 can be substituted for a Visual/Performing Arts general education course.

See the list of approved general education courses for additional details: [www.advising.engineering.osu.edu](http://www.advising.engineering.osu.edu).