### Aerospace Engineering Catalog 2022

#### Fall

<table>
<thead>
<tr>
<th>16 hours</th>
<th>Math 132 or 141 or 147 (3-4) (QR) FA, SP, SU</th>
<th>EF 142 or 151 or 157 (4) (EI) FA, SP</th>
<th>EF 115 (FA) FA, SP</th>
<th>Chem 122(3) and 123(1) or 128 (4) (NS) FA, SP, SU</th>
<th>English 101/102 or 109 or 118 or 131 (3) FA, SP, SU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq:</td>
<td>Math 141 is ACT Math.28 or SAT Math 660</td>
<td>Coreq: Math 130141/147 or higher</td>
<td>Coreq: EF 151 or 157</td>
<td>Prereq-Math 119, recommended</td>
<td>101 Regular, 118 Honors, 158 Chancellor Honors only; 131 English as Second Language</td>
</tr>
<tr>
<td></td>
<td>Prereq-Math 132 to Math 131</td>
<td>and EF 109 or CS 101 or CS 102</td>
<td></td>
<td>Background in Math 131</td>
<td>English 102 or 200 or 212 or 213 (2) FA, SP, SU</td>
</tr>
</tbody>
</table>

#### Spring 18 hours

<table>
<thead>
<tr>
<th>Math 142 or 146 (4) (QR) FA, SP, SU</th>
<th>Math 200 (4) FA, SP</th>
<th>EF 152 or 158 (4) (NS and EI) FA, SP, SU</th>
<th>ME 202 (2) FA, SP, SU</th>
<th>Coreq: EF 152 or 158 and Math 142 or 148</th>
<th>Vol Core (3) FA, SP, SU</th>
<th>English 102 or 200 or 212 or 213 (2) FA, SP, SU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq: Math 132 or 141 or 147</td>
<td>Coreq: EF 142/153/157 or C or higher</td>
<td>Coreq: Math 142 or 148</td>
<td>Coreq: Math 202</td>
<td>Coreq: Math 142 or 148</td>
<td>Vol Core (3) FA, SP, SU</td>
<td>English 102 or 200 or 212 or 213 (2) FA, SP, SU</td>
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</table>

### Coreq- Math 142 or 148

<table>
<thead>
<tr>
<th>Fall 19 hours</th>
<th>Math 241 or 247 (4) FA, SP, SU</th>
<th>AE 201 (1) FA</th>
<th>AE 210 (2) FA, SP</th>
<th>ME 231 (2) FA, SP, SU</th>
<th>Physics 231 (3) FA, SP</th>
<th>Vol Core (3) FA, SP, SU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq: Math 142 or 148</td>
<td>Restricted to engineering majors.</td>
<td>AE or ME majors. Sophomore or Junior or Senior</td>
<td>Coreq: Math 231</td>
<td>Coreq: Math 142 or 148</td>
<td>ME 202 with C or better</td>
<td>Vol Core (3) FA, SP, SU</td>
</tr>
<tr>
<td></td>
<td>Coreq: EF 152/158</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>English 102 or 200 or 212 or 213 (2) FA, SP, SU</td>
</tr>
</tbody>
</table>

### Fall 17 hours

<table>
<thead>
<tr>
<th>Math 231 or 237 (5) FA, SP, SU</th>
<th>Math 200 (4) FA, SP</th>
<th>ME 321 (3) FA, SP, SU</th>
<th>Vol Core (3) FA, SP, SU</th>
<th>ECON 201 or 207 (4) FA, SP, SU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq: Math 142 or 148</td>
<td>Coreq: EF 105 or CS 102</td>
<td>Coreq: ME 202 with C or better and Math 142/148 or C or better</td>
<td>Coreq: Math 231 or 237</td>
<td>Coreq: Social Science (SS)</td>
</tr>
<tr>
<td></td>
<td>Coreq: Ef 152/158</td>
<td></td>
<td></td>
<td>English 102 or 200 or 212 or 213 (2) FA, SP, SU</td>
</tr>
</tbody>
</table>

### Coreq- Math 241 or 247

<table>
<thead>
<tr>
<th>Fall 16 hours</th>
<th>Math 331 (3) FA, SP, SU</th>
<th>Math 241 or 247 (4) FA, SP, SU</th>
<th>Math 379 or 377 (4) FA, SP</th>
<th>Coreq: AE 341</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coreq: Math 231 or 247 or Math 241/247</td>
<td>Coreq: Math 231 with C or better and Math 241 or 247 or C or better</td>
<td>Coreq: Math 231 or 247 or Math 231</td>
<td>Coreq: AE 341</td>
<td></td>
</tr>
</tbody>
</table>

### Spring 18 hours

<table>
<thead>
<tr>
<th>Math 353 (3) SP</th>
<th>ME 353 or 357 (3) FA, SP, SU</th>
<th>ME 351 (3) SP</th>
<th>ME 344 (3) SP, SU</th>
<th>ME 345 (3) (3A) FA, SP, SU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq: ME 321</td>
<td>Prereq: ME 231 and Math 231 with grades of C or better</td>
<td>Prereq: AE 341/347 and ME 331</td>
<td>Prereq: ME 331 or Math 231 and 301 or 397</td>
<td>Prereq: ME 321</td>
</tr>
<tr>
<td></td>
<td>Coreq: AE 341</td>
<td>ME 331</td>
<td>ME 331</td>
<td>Coreq: AE 341/347 and ME 331, BME 341/347, and ME 363/367 or BME 363/367, and ECE 301</td>
</tr>
</tbody>
</table>

### Coreq- Math 341

<table>
<thead>
<tr>
<th>Fall 15 hours</th>
<th>AE 422 (3) FA</th>
<th>AE 423 (3) FA</th>
<th>AE 424 (3) FA</th>
<th>AE 493 (3) (OC) FA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq: AE 351 and 370 or 377</td>
<td>Prereq: AE 351</td>
<td>Prereq: Math 351 or ME 344</td>
<td>Prereq: AE 351, AE 307/377, AE 363</td>
<td>Departmental Elective (3)</td>
</tr>
</tbody>
</table>

### Spring 15 hours

<table>
<thead>
<tr>
<th>AE 449 (3) (WC) SP</th>
<th>AE 468 (3) (ADD) SP</th>
<th>Vol Core (3) FA, SP, SU</th>
<th>Global Citizenship International (GC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereq: AE 345, 351, and 425</td>
<td>Prereq: AE 422, 490, AE 345, ME majors only</td>
<td>Departmental Elective (3)</td>
<td>Departmental Elective (3)</td>
</tr>
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### Departmental Electives

- Choose from: Any 400 level AE course not otherwise required for the major, ME 351, 355, 366, 405, 491, 493, 465, 470, 472 or 475 or 478, 480.
- Other courses require prior approval by the department.

### Full Status Progression

A lower-division student may apply for progression to upper division after completing EF 152/158, CHEM 221, and EF 151/157 with a grade of C or better in each, and an overall GPA of at least 2.4.

### Provisional Status Progression

Students who have completed EF 152/158, CHEM 221, and EF 151/157 with a grade of C or better and have an overall GPA between 2.0 and 2.4 may apply for provisional status. The granting of provisional status is based on the availability of space in upper-division programs. Students who are accepted into the provisional status program must maintain a minimum grade point average of 2.0 in all upper-division courses to progress to upper-division status. Students who fail to maintain a minimum GPA of 2.0 in upper-division courses will be dropped from upper-division courses.

### Transfer Students

Students transferring more than 28 hours from another institution are considered transfer students. Transfer students must meet the same criteria as non-transfer students, using transfer grades for acceptable substitutions. Transfer courses with grades below a C will not be accepted to fulfill any departmental requirements.

### Academic Standing

The faculty of the Department of Mechanical, Aerospace and Biomedical Engineering expect all students who enter to make progress toward graduation. To graduate from the department, a student must earn a minimum grade point average of 2.0 in all upper-division courses. Students not meeting the required GPA may be dropped from the major.

### Transfer Students

The faculty of the Department of Mechanical, Aerospace and Biomedical Engineering expect all students who enter to make progress toward graduation. To graduate from the department, a student must earn a minimum grade point average of 2.0 in all upper-division courses. Students not meeting the required GPA may be dropped from the major.

### Graduation Requirements

A minimum GPA of 2.0 in all upper-division courses is required to graduate. No more than two upper-division courses in which grades below a C are earned may be counted toward graduation. This is in addition to the university's graduation requirements.

Students also have opportunities for an Honors Concentration and/or a five year BS/MS program. See the Undergraduate Catalog for details and requirements.

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Volunteer Core courses highlighted in light orange.