Mechanical Engineering Undergraduate Curriculum

**FRESHMAN YEAR**
- **FALL**: MATH 1A, CHEM 1A/L or CHEM 4A/L, E7*
- **SPRING**: MATH 1B, PHYS 7A, R&C A

**SOPHOMORE YEAR**
- **FALL**: MATH 53, PHYS 7B, ME 40, E26, ME C85
- **SPRING**: MATH 54, ME 104, ME 106, ME 108, ME 109, ME 132

**JUNIOR YEAR**
- **FALL**: ME 100, ME 103**, ME 108, ME 135, H/SS (3-4)
- **SPRING**: ME 102B, ME 110, ME 120, ME 136, ME 179

**SENIOR YEAR**
- **FALL**: ME 103**, ME 146, ME 165, ME 176, ME 178, E/SS (3-4)
- **SPRING**: ME 102B, ME 110, ME 120, ME 136, ME 179

**GENERAL NOTES**
- If prereqs are met, students are encouraged to take E7 in Freshman Fall.
- Math 53 & 54 must be completed before taking any upper div ME course.
- Please be aware that though courses may not be listed as official prereqs, upper div courses are taught with the expectation that you have taken lower div courses.
- **Planned
- All courses below are considered ME-Sponsored.

**GENERAL TECHNICAL ELECTIVE NOTES**
- 15 Units of tech elective are required.
- 1 Course must be from the Design List.
- 1 Course must be from the QS list.
- Only 3 units of the 15 can be from lower div courses. A lower div tech is not required.
- Up to 6 of the 15 units may be taken from outside the dept; the rest must be ME-sponsored.
- ME 191K is not a technical course; it is an H/SS.
- **Lab section not required.

**LOWER DIV OPTIONS**
- Astro 7A, 7B
- BioE 10
- Bio 1A & 1AL, 1B
- Chem 1B, 3A*, 3B*, 4B
- Civ Eng 11, 60, 70, 93
- CS C8, 61A, 61B, 61C, 70
- Des Inv 15, 90E
- EPS 50
- EE 16B, 20
- ENG 11
- ENG 40
- Math 55
- M5E 45*
- MCB 32*
- Physics 7C
- Stat 20, 21

**DESIGN COURSES**
- All of the courses below are considered ME-Sponsored.
- ENG 128
- ME 101
- ME 110
- ME 117
- ME 119
- ME 130
- ME 135
- ME 146
- ME 165
- ME 176
- ME 178
- ME 179

**QUANTITATIVE SCIENCE (QS)**
- This requirement seeks to endow students with QS skills to complement the intensive hands-on courses required in the upper division.
- All of the courses below are considered ME-Sponsored.
- Additional courses outside MechE can be found at [https://www.me.berkeley.edu/undergraduate/course-information/undergraduate-technical-electives#quantsci](https://www.me.berkeley.edu/undergraduate/course-information/undergraduate-technical-electives#quantsci)

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<table>
<thead>
<tr>
<th>Course</th>
<th>Prereqs</th>
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<tbody>
<tr>
<td>CHEM 1A</td>
<td>High school chemistry recommended</td>
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<tr>
<td>ENG 25</td>
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<td>ENG 26</td>
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<tr>
<td>ENG 27</td>
<td>ENG 25 (co-requisite)</td>
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<tr>
<td>ENG 7</td>
<td>MATH 1B (co-requisite)</td>
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<tr>
<td>ME 100</td>
<td>ENG 7 or CS 10 or equivalent background in computer programming (including CS 61A, DS 8) MATH 1A or equivalent background in Calculus, Physics 7A or equivalent</td>
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<tr>
<td>MATH 1A</td>
<td>3 1/2 yrs HS math, including trigonometry &amp; analytic geometry + satisfactory grade in one of the following: CEEB MAT test, an AP test, the UC/CSU math diagnostic test, or 32.</td>
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<tr>
<td>MATH 1B</td>
<td>MATH 1A</td>
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<tr>
<td>MATH 53</td>
<td>MATH 1B</td>
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<tr>
<td>MATH 54</td>
<td>MATH 1B</td>
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<tr>
<td>ME 100</td>
<td>ENG 7 or CS 10 or CS 61A or DS 8, MATH 1A, PHYSICS 7A</td>
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<tr>
<td>ME 102B</td>
<td>ENG 25, ENG 26 (junior transfers students are exempt from this requirement), E 27, as well as ME 100/EE 40/EE 49</td>
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<td>ME 103</td>
<td>ME C85, ME40, ME 100/EE 100/EE 49/EE 16A/EE 49, &amp; ME 109</td>
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<tr>
<td>ME 104</td>
<td>ENG 7, ME C85</td>
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<tr>
<td>ME 106</td>
<td>ME C85, 104 (co-requisite)</td>
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<td>ME 108</td>
<td>ME C85</td>
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<td>ME 109</td>
<td>ME 40, 106</td>
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<td>ME 132</td>
<td>MATH 53, 54, PHYSICS 7A-7B</td>
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<td>ME 40</td>
<td>CHEM 1A, ENG 7, MATH 1B, PHYSICS 7B</td>
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<td>ME C85</td>
<td>MATH 53, 54 (concurrent); PHYSICS 7A</td>
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<tr>
<td>PHYSICS 7A</td>
<td>HS physics; MATH 1A; MATH 1B (concurrent)</td>
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<tr>
<td>PHYSICS 7B</td>
<td>7A, MATH 1A-1B, MATH 53 (may be taken concurrently)</td>
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