Mechanical Engineering Undergraduate Curriculum

**FRESHMAN YEAR**

**FALL**  
MATH 1A 4
CHEM 1A/L or CHEM 4A/L 4
E25 2
R&C A 4

**SPRING**  
MATH 1B 4
PHYS 7A 4
E26 2
R&C B 4

**SOPHOMORE YEAR**

**FALL**  
MATH 53 4  
PHYS 7B 4
E7* 4
E27 2
H/SS 3-4

**SPRING**  
MATH 54 4  
ME 40 3
ME C85 3

**JUNIOR YEAR**

**FALL**  
ME 104 3  
ME 106 3
ME 108 4

**SPRING**  
ME 100 4  
ME 109 3
ME 132 3

**SENIOR YEAR**

**FALL**  
ME 103** 4
ME TECH ELEC 3-4

**SPRING**  
ME 102B 4
ME TECH ELEC 3-4

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**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.
- **Prereq or Co-Req**

**GENERAL TECHNICAL ELECTIVE NOTES**

- 15 Units of tech elective are required.
- 9 of 15 units must be ME-sponsored.
- 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.
- For a list of possible courses, please see [https://me.berkeley.edu/undergraduate/technical-electives/#lowerdiv](https://me.berkeley.edu/undergraduate/technical-electives/#lowerdiv)

**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  
MSE 45*  
MCB 32*  
Physics 7C  
Stat 20, 21  
*Lab section not required.

**DESIGN COURSES**

All of the courses below are considered ME-Sponsored.

ENG 128  
ME 101  
ME 110  
ME C117  
ME 119  
ME 130  
ME 135  
ME 146  
ME 165  
ME C176  
ME C178  
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.

ENG 117  
ENG 150  
ENG 177  
ME 120  
ME 136  
ME C180  
ME C134  
ME 131

Additional courses outside MechE can be found at [https://me.berkeley.edu/undergraduate/technical-electives/#quantsci](https://me.berkeley.edu/undergraduate/technical-electives/#quantsci)

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**Revised 11/7/2019**
<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>
<td>-</td>
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<tr>
<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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<tr>
<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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<tr>
<td>ME 132</td>
<td>MATH 53, 54, PHYSICS 7A-7B</td>
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<tr>
<td>ME 40</td>
<td>CHEM 1A, ENG 7, MATH 1B, PHYSICS 7B</td>
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<tr>
<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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