Mechanical Engineering Undergraduate Curriculum

**FRESHMAN YEAR**
- **FALL**
  - Math 1A
  - CHEM 1A or CHEM 4A
  - E7*
  - Electives (4)
- **SPRING**
  - Math 1B
  - PHYS 7A
  - Electives (4)

**SOPHOMORE YEAR**
- **FALL**
  - Math 53
  - Electives (3)
  - E26
  - Electives (4)
- **SPRING**
  - Math 54
  - PHYS 7B
  - ME 40
  - Electives (4)

**JUNIOR YEAR**
- **FALL**
  - ME 104
  - ME 40
  - ME C85
  - Electives (6)
- **SPRING**
  - EE 16A
  - ME 106
  - ME 109
  - Electives (6)

**SENIOR YEAR**
- **FALL**
  - ME 102A
  - ME 108
  - ME 132
  - Electives (9)
- **SPRING**
  - ME 102B
  - Electives (9)

**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.

**GENERAL TECHNICAL ELECTIVE NOTES**
- 18 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 18 can be from lower div courses. A lower div tech is not required.
- Up to 6 of the 18 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 [http://www.me.berkeley.edu/undergraduate/course-information/undergraduate-technical-electives](http://www.me.berkeley.edu/undergraduate/course-information/undergraduate-technical-electives)

**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 90E
- EPS 50
- EE 16B, 20
- Engin 15, 45*
- Math 55
- MCB 32*
- Physics 7C
- Stat 20, 21

*Lab section not required.

**DESIGN COURSES**
- All of the courses below are considered ME-Sponsored.
  - Engin 128
  - ME 101
  - ME 110
  - ME C117
  - ME 119
  - ME 130
  - ME 135
  - ME 146
  - ME 165
  - ME C176
  - ME 178

**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 177
  - MATH 128A
  - ME 120
  - ME C180

Additional petitionable courses can be found at [http://www.me.berkeley.edu/undergraduate/course-information/undergraduate-technical-electives](http://www.me.berkeley.edu/undergraduate/course-information/undergraduate-technical-electives) (scroll to the bottom)
<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>
<td>-</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>EE 16A</td>
<td>-</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>
</tr>
<tr>
<td>MATH 54</td>
<td>MATH 1B</td>
</tr>
<tr>
<td>ME 102A</td>
<td>Engineering 26 (waived for Junior Transfers), Mechanical Engineering C85, ME 104, ME 132 (can be taken as a co-requisite as the course schedule allows) Electrical Engineering 16A or 40. Reading and Composition courses completed.</td>
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<tr>
<td>ME 102B</td>
<td>E 25, E 26 (junior transfers students are exempt from this requirement), E 27, as well as EE 16A or EE 40.</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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<tr>
<td>ME 107</td>
<td>102A; senior standing</td>
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<tr>
<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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