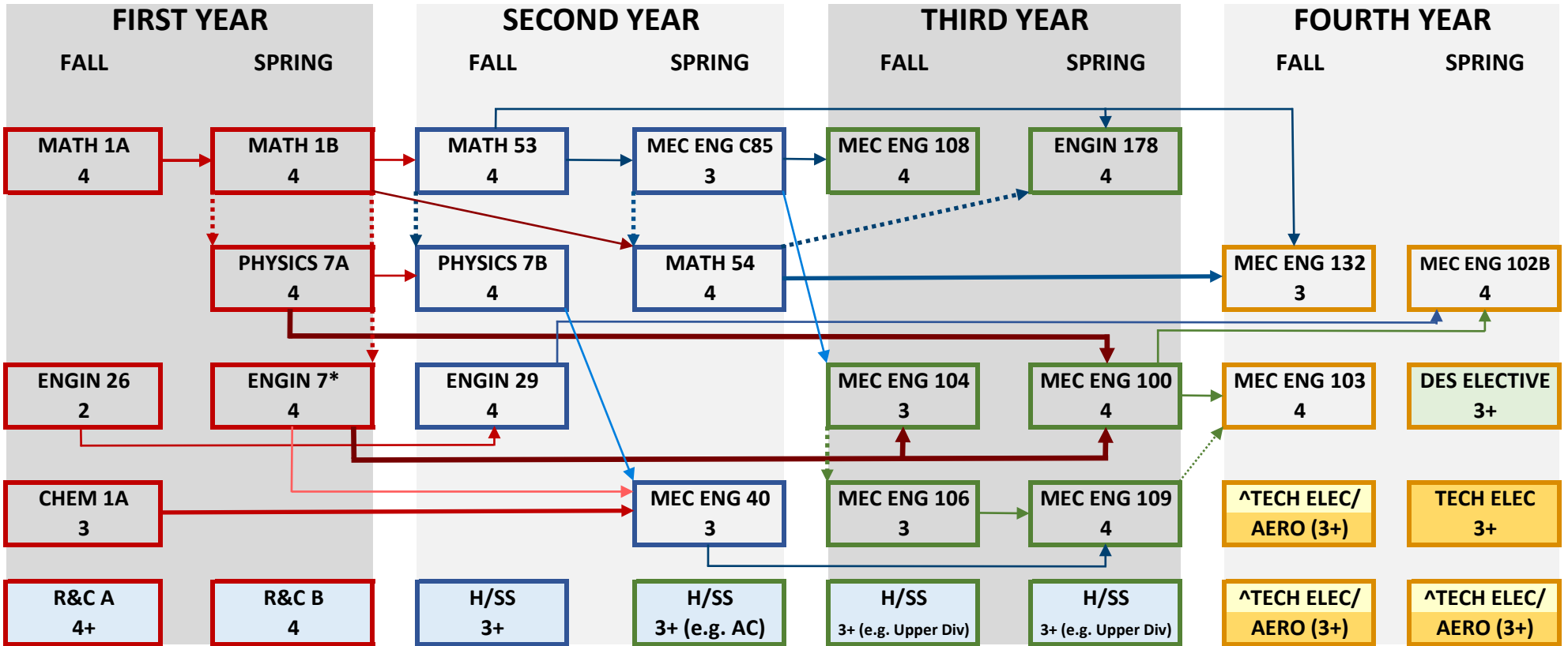


# MECHANICAL ENGINEERING CURRICULUM FLOWCHART



## GENERAL NOTES

\*If prereqs are met, students are encouraged to take ENGIN 7 in frosh fall.

\*\*For students who entered in 2021. Does not apply to students who entered before this.

- 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 students have taken the lower div courses.

## TECHNICAL ELECTIVE NOTES

- 15 units of tech elective are required.
  - 9 of the 15 must be ME-sponsored.
  - 1 Course must be from the Design list.
  - 1 Course must be from the QS list.
  - 12 units must be upper div. A lower div course can count for up to 3 units but a lower div course is not required.
  - Up to 6 of the 15 units may be taken from outside the dept; the rest must be ME-sponsored.
  - MEC ENG 191K is not a tech course. It is an H/SS.
- For a list of possible courses, please see <https://me.berkeley.edu/undergraduate/technical>

## ^FOR AEROSPACE CONCENTRATION

- TE MEC ENG 163: Aerodynamics
  - TE MEC ENG 136: Intro to Control of UAVs, satisfies QS requirement
  - TE MEC ENG 127: ME Composite Materials. The Aerospace minor requires additional coursework.
- <https://me.berkeley.edu/undergraduate/aerospace-minor/>

## LOWER DIV OPTIONS

ASTRO 7A, 7B  
 BIO ENG 10  
 BIOLOGY 1A & 1AL, 1B  
 CHEM 1B, 3A\*, 3B\*, 4B  
 CIV ENG 11, 60, 70, 93  
 COMPSCI C8, 61A, 61B, 61C, 70  
 DES INV 15, 90E  
 EPS 50  
 EECS 16B  
 ENGIN 11, 40  
 INTEGBI 32  
 MATH 55  
 MATSCI 45\*  
 MCELLBI 32  
 PHYSICS 7C  
 STAT 20, 21  
 \*Lab section not required.

## DESIGN COURSES

*Courses below are ME-sponsored.*  
 ENGIN 128  
 MEC ENG 101, MEC ENG 110,  
 MEC ENG C117, MEC ENG 119,  
 MEC ENG 130, MEC ENG 135, MEC  
 ENG 139, MEC ENG 146, MEC ENG  
 165, MEC ENG C176, MEC ENG  
 C178, MEC ENG 179

*More options available here:*  
<https://me.berkeley.edu/undergraduate/technical-electives/#design>

## 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.*

ENGIN 117  
 ENGIN 150  
 ENGIN 177  
 MEC ENG 120  
 MEC ENG 131  
 MEC ENG 136  
 MEC ENG C134  
 MEC ENG 139  
 MEC ENG C180

Additional non-ME-sponsored courses can be found at:  
<https://me.berkeley.edu/undergraduate/technical-electives/#quantsci>

**COURSE #**  
**# OF UNITS** → = PREREQ  
 ..... → = COREQ

# MECHANICAL ENGINEERING CURRICULUM FLOWCHART

## PREREQUISITES NOTES

<b>CHEM 1A</b>	High school chemistry recommended
<b>ENGIN 7</b>	MATH 1B (may be taken concurrently)
<b>ENGIN 26</b>	None
<b>ENGIN 29</b>	ENGIN 26 or equivalent experience in three-dimensional solid modeling (e.g. Solidworks, Fusion 360) is recommended
<b>ENGIN 178</b>	ENGIN 7, MATH 1A, MATH 1B, and MATH 53; and MATH 54 (may be taken concurrently)
<b>MATH 1A</b>	3.5 years of high school math, including trigonometry and analytic geometry. Students with exam credits (such as AP credit) should consider choosing a course more advanced than 1A
<b>MATH 1B</b>	MATH 1A or MATH N1A
<b>MATH 53</b>	MATH 1B or MATH N1B
<b>MATH 54</b>	MATH 1B, MATH N1B, MATH 10B, or MATH N10B
<b>PHYSICS 7A</b>	High school physics; Math 1A; and Math 1B (which may be taken concurrently)
<b>PHYSICS 7B</b>	PHYSICS 7A, MATH 1A, MATH 1B, and MATH 53 (may be taken concurrently)
<b>MEC ENG 40</b>	CHEM 1A, ENGIN 7, MATH 1B, and PHYSICS 7B
<b>MEC ENG C85</b>	MATH 53 and MATH 54 (may be taken concurrently); PHYSICS 7A
<b>MEC ENG 100</b>	ENGIN 7, COMPSCI 10, COMPSCI 61A, COMPSCI C8, or equivalent background in computer programming; MATH 1A or equivalent background in calculus; PHYSICS 7A or equivalent background in physics
<b>MEC ENG 102B</b>	ENGIN 25, ENGIN 26, ENGIN 27; and EECS 16A or MEC ENG 100. Please note that junior transfer students are exempt from ENGIN 26
<b>MEC ENG 103</b>	MEC ENG 40; MEC ENG C85 / CIV ENG C30; MEC ENG 100; MEC ENG 106 (can be taken concurrently), and MEC ENG 109 (can be taken concurrently)
<b>MEC ENG 104</b>	MEC ENG C85 and ENGIN 7
<b>MEC ENG 106</b>	MEC ENG C85 / CIV ENG C30 and MEC ENG 104 (104 may be taken concurrently)
<b>MEC ENG 108</b>	MEC ENG C85 / CIV ENG C30
<b>MEC ENG 109</b>	MEC ENG 40 and MEC ENG 106
<b>MEC ENG 132</b>	MATH 53, MATH 54, PHYSICS 7A, and PHYSICS 7B

Note: The most current prereqs are located at <http://guide.berkeley.edu/courses/>