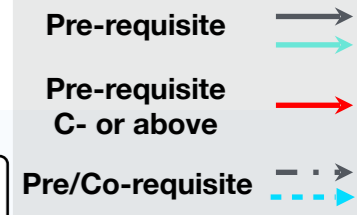




# MECH Curriculum Flowchart AY24-25: Class of 27



First Year  
23-24

Fall  
Winter  
Spring

Sophomore  
24-25

Fall  
Winter  
Spring

Junior  
25-26

Fall  
Winter  
Spring

Senior  
26-27

Fall  
Winter  
Spring

**CHEM 11/L**

**MATH 11**  
FWS P31

**CTW 1**

**MECH 10L**

**C&I 1**

**MECH 15/L**  
FS 114

**MATH 12**  
FWS P32

**CTW 2**

**MECH 12L**  
 101L

**C&I 2**

**MATH 13**  
FWS P33

**PHYS 31/L**  
 MATH11

**PHYS 32/L**  
 MATH12

**ENGR 1/L**  
FWS

**MATH 14**  
FWS

**ECEN 50/L**  
FWS

**PHYS 33/L**  
 MATH13

**CENG 41**

**MECH 11**

**AMTH 106**  
FWS

**MECH 121/R**

**CENG 43/L**  
WS

**MECH 45/L**

**MECH 103/R**  
FS

**MECH 140**  
FS

**CORE 1**

**AMTH 118**  
FW

**MECH 122/L**  
FW

**CORE 2**

**ENGL 181**  
FWS

**MECH 141/L**

**MECH 114**  
 15/L

**CORE 3**

**CORE 4**

**MECH 123/L**

**MECH 142/L**

**MECH 115**

**CORE 5**

**TECH 1**

**MECH 160/L**



**MECH 101L**  
 12L

**MECH 194**

**CORE 6**

**TECH 2**

**MECH 195**

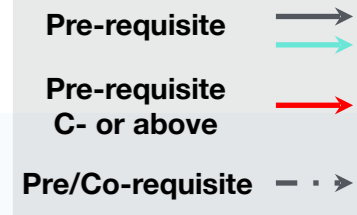
**CORE 7**

**TECH 3**

**MECH 196**



# MECH Curriculum Flowchart AY24-25: Class of 27 (MATH 9)



First Year  
23-24

Fall  
Winter  
Spring

**ENGR1 & 1L**  
*FWS*

**MATH 9/L**

**CTW 1**

**C&I 1**

**MECH 10L**

**CHEM 11/L**

**MATH 11**  
*FWS* P31

**CTW 2**

**C&I 2**

**MECH 12L**  
 101L

**MATH 12**  
*FWS* P32

**PHYS 31/L**  
 MATH11

**CORE 1**

**CORE 2**

Sophomore  
24-25

Fall  
Winter  
Spring

**MECH 15/L**  
*FS* 114

**MATH 13**  
*FWS* P33

**PHYS 32/L**  
 MATH12

**CENG 41**

**MECH 11**

**MATH 14**  
*FWS*

**MECH 121/R**

**PHYS 33/L**  
 MATH13

**MECH 45/L**

**AMTH 106**  
*FWS*

**ECEN 50/L**  
*FWS*

**CENG 43/L**  
*WS*

Junior  
25-26

Fall  
Winter  
Spring

**MECH 103/R**  
*FS*

**MECH 122/L**  
*FW*

**MECH 140**  
*FS*

**ENGL 181**  
*FWS*

**AMTH 118**  
*FW*

**MECH 141/L**

**MECH 114**  
 15/L

**CORE 3**

**MECH 123/L**

**MECH 142/L**

**MECH 115**

**CORE 4**

Senior  
26-27

Fall  
Winter  
Spring

**TECH 1**

**MECH 160/L**

or

**MECH 101L**  
 12L

**MECH 194**

**CORE 5**

**TECH 2**

**MECH 195**

**CORE 6**

**CORE 7**

**TECH 3**

**MECH 196**

# Mechanical Engineering Curriculum Flowchart

## Additional Notes

Information in this document is superseded by the official policies in the [Undergraduate Bulletin](#) from the year of the start of the program at Santa Clara University.

ENGR 1/L

FWS

1. Students must meet prerequisites in order to take courses that are connected with arrows. Co-requisite courses can be taken in the same quarter, if they are available.
2. Courses denoted with **F**, **W**, and/or **S** are offered in fall, winter, and/or spring. However, if you wish to take any class in an alternative quarter, you **MUST** check with your advisor or appropriate department to verify that the class will be offered in the quarter. It is safe to assume that most major courses are offered only once a year. We often offer MECH121 & MECH10L over the summer, but they can be canceled if enrollment is not large enough.
3. You will need to earn the minimum performance of **C- for Courses in red** in order to take subsequent MECH courses. If you do not satisfy this requirement, you will need to retake those courses. The major courses that have this requirement are connected with **red arrows**.
4. ELEN 50/L is recommended to be taken before MECH 123/L.
5. The prerequisites of MECH160/L are MECH123/L **“or”** MECH142/L.
6. Graduation requirements include completing 192 units, satisfaction of the university core and department requirements, and **2.0** GPA, **overall** and in the **major** including math/science.
7. Ethics statement: The Department of Mechanical Engineering values academic integrity as described in the University policy. The learning derived from a course is based on student integrity and faculty support of a just learning environment. The faculty strive to enforce the policy and are open to any questions and discussion from the students. For deeper discussion and useful tips, it is suggested that all students read the information found at <https://www.scu.edu/academic-integrity/>

## Core

The Santa Clara Core Curriculum consists of two phases of academic work designed to foster developmental learning and curricular coherence – Foundations and Explorations – and a third phase – Integrations – designed to help students make a connections among courses in the Core and between the Core and the major: For Core 1-7 and Technical Writing the student needs to satisfy the following requirements. For more details: <https://www.scu.edu/provost/core/>

1. Religion, Theology, and Culture 1, 2, 3 (three classes, one at each level). Engineering students are encouraged to take ENGR 16.
2. Social Science
3. Diversity
4. Cultures & Ideas 3
5. ELSJ, can be satisfied with an ELSJ milestone
6. Ethics. Engineering students are encouraged to take ENGR 19.
7. Technical Writing, ENGL 181, is to be taken in the junior year.
8. Civic Engagement, Arts, and other requirements are satisfied through classes already required (e.g., ENGR1 & Senior Design); RTC 1 is recommended to be taken in first open core slot.
9. Pathways: clusters of courses with a common theme to promote integrative and intentional learning. Students should make reflective and intentional choices to study a theme from multiple disciplinary or methodological perspectives and to perceive connections. Engineering students need to take 3 pathway courses. For more details: <https://www.scu.edu/provost/core/integrations/pathways/>
10. Students must consult with one of the University advisors in the Drahnann Center before making any changes in their enrollment in the C&I and CTW sequences.

## Dos & Don'ts

1. **Do not withdraw any course before talking to your academic advisor. Arrange a meeting with your academic advisor when you earn an F.** Send your **unavailable** time slots so that they can arrange a meeting with you. The purpose of the meeting is to advise you on the modified plans while attempting to keep your graduation within 4 years. Withdrawing does not necessarily lead to more than 4 years, but lack of communication is likely to lead to additional quarters or years.
2. The MECH curriculum is based on a strong foundation of math and science. The content that you learned in your first two years will appear repeatedly in upper-division MECH courses. Please exploit existing resources, such as office hours, tutoring, and the math learning center, in order to enhance your learning outcomes.
3. If a course is closed before your enrollment period starts, please reach out to the Department Manager of the department that offers the course. Include your grade for prerequisites courses and a screenshot of your tentative weekly schedule. Meanwhile, please try to find another course that fits your schedule.
4. Whenever you have concerns or questions, please reach out to your academic advisor or the department chair. We are here to help you!

# Study Abroad (In Fall of Junior Year)

- If you are interested in the study abroad program, please talk to your advisor in your first year or as soon as possible. You may find more general information about the program through the SCU Study Abroad [Website](#).
- Recently, we are having difficulty in finding study abroad programs who offer equivalent courses to our MECH122, MECH140, and/or AMTH118. We do not want to limit your study abroad experience due to lack of available programs. The following flowchart shows an example of how to participate in the study abroad program without further delaying your progress toward BSME.
- The key is to finish **AMTH106** by Winter of your sophomore year. Utilize the Summer after your first year to meet this goal. If you are unable to meet this target, it does not mean you cannot study abroad, but options can be limited.
- In order to make your study abroad experience possible, you may experience busier quarters in your sophomore and/or junior year. Nevertheless, it is once in a lifetime experience, and definitely worth the challenges.

