



MECH Curriculum Flow Chart AY23-24: Class of 27



First Year
23-24

Fall
Winter
Spring

Sophomore
24-25

Fall
Winter
Spring

Junior
25-26

Winter
Spring

Senior
26-27

Fall
Winter
Spring

CHEM 11/L

MECH 15/L
→ 114

MECH 11

MECH 45/L
WS

MATH 11
FWS → P31

MATH 12
FWS → P32

MATH 13
FWS → P33

MATH 14
FWS

AMTH 106
FWS

MECH 103/R
FS

AMTH 118
FW

CTW 1

CTW 2

MECH 121/R

MECH 122/L
FW

MECH 123/L

MECH 160/L

PHYS 31/L
→ MATH11

PHYS 32/L
→ MATH12

PHYS 33/L
→ MATH13

ELEN 50/L
FWS

MECH 140
FS

MECH 141/L

MECH 142/L

MECH 101L
12L ←

MECH 10L

MECH 12L
→ 101L

CENG 41

CENG 43/L

MECH 114
15/L ←

MECH 115

MECH 194

MECH 195

MECH 196

C&I 1

C&I 2

ENGR 1/L
FWS

CORE 1

CORE 2

ENGL 181
FWS

CORE 3

CORE 5

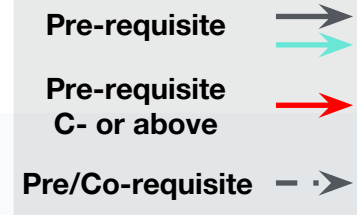
CORE 6

CORE 7

CORE 4



MECH Curriculum Flow Chart AY23-24: 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

MECH 15/L
→ 114

MATH 12
FWS → P32

PHYS 31/L
→ MATH11

CORE 1

Sophomore
24-25

Fall
Winter
Spring

MECH 11

MATH 13
FWS → P33

PHYS 32/L
→ MATH12

CENG 41

CORE 2

MECH 45/L
WS

MATH 14
FWS

MECH 121/R

PHYS 33/L
→ MATH13

CENG 43/L

AMTH 106
FWS

ELEN 50/L
FWS

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

MECH 101L
12L ←

MECH 194

CORE 5

TECH 2

MECH 195

CORE 6

CORE 7

TECH 3

MECH 196

Mechanical Engineering Curriculum Flow Chart

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Information in this document is superseded by the official policies in the Undergraduate Bulletin from the year of the start of the program at Santa Clara University.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 with cyan highlight** 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 and keep their materials to write a pathway reflection and portfolio. 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.

Do's & 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 year. 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 instructor as well as the chair 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. The best time to plant a tree was 20 years ago. The second best time is **NOW**. The department and your advisor are your primary resources for the study abroad advising.
- 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 were 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.

Sophomore	Winter	AMTH106	MECH 121	MECH 45/L	ELEN 50/L	
	Spring	MECH 103/R		MECH 140 <i>FS</i>	CENG 43/L	CORE 2
Junior	Fall	Study Abroad				
	Winter	AMTH 118 <i>FW</i>	MECH 122/L <i>FW</i>	MECH 141/L	MECH 114 15/L ←	
	Spring		MECH 123/L	MECH 142/L	MECH 115	ENGL 181