

Please inform the Registrar's Office if you choose an alternate option.
 Otherwise your Academic Advisement Report will be incorrect.

**STUDENTS ENTERING IN 2021
 MECHANICAL ENGINEERING MAJOR
 GENERAL OPTION
 DIVISIONS 3&4
 CURRICULUM ROADMAP**

8/23/21
 Subject to Change

Total Units: 147

FALL 2021

Arts Elective (Area C1-Lower Div)	3.0
CHE 110 General Chemistry (Area B1)	3.0
CHE 110L General Chemistry Lab (Area B3)	1.0
EGL 100 English Composition (Area A2) "G4"	3.0
ENG 110 Introduction to Engineering and Technology*	1.0
ENG 112 Intro to Technical Communication* (Area A1★) "G4"	1.0
FF 100 Basic Marine Firefighting	0.0
ME 220 Computer Aided Design*	2.0
MTH 210 Calculus I (Area B4) "G4"	4.0
PE 101 Swim Competency Exam	0.0
Total	18.0

FALL 2022

ENG 210 Engineering Computer Programming	2.0
EPO 215 Manufacturing Processes I	1.0
ME 230 Engineering Materials*	3.0
ME 232 Engineering Statics*	3.0
MTH 212 Calculus III (Area B4)	4.0
PHY 205 Engineering Physics II (Area B1)	4.0
Total	17.0

FALL 2023

Arts OR Humanities Elective (Area C-Lower Div)	3.0
Life Science Elective (Area B2)	3.0
ME 332 Mechanics of Materials*	3.0
ME 340 Engineering Fluid Mechanics*	3.0
ME 360 Instrumentation and Measurement Systems*	2.0
ME 360L Instr. and Measurement Systems Lab*	1.0
Total	15.0

FALL 2024

American Institutions I Elective (Area D-Lower Div) OR (Area F)	3.0
Social Science Elective (Area D-Lower Div)	3.0
ME 462 Experimental Methods in ME* (Area A1★) "G4"	1.0
ME 462L Experimental Methods in ME Lab*	1.0
ME 492 Project Design I*	2.0
ME 492L Project Design I Lab*	1.0
Emphasis Specific Course (2nd of 3)*	3.0
Total	14.0

SPRING 2022

DL 105 Marine Survival	1.0
DL 105L Marine Survival Lab	1.0
DL 105X USCG Lifeboatman's Exam	0.0
EGL 220 Critical Thinking	3.0
Critical Thinking Elective (Area A3) "G4"	
EPO 110 Plant Operations I	1.0
EPO 125 Introduction to Marine Engineering	3.0
EPO 125L Introduction to Marine Engineering Lab	1.0
EPO 213 Welding Lab	1.0
MTH 211 Calculus II (Area B4)	4.0
NAU 104 Shipboard Security and Responsibility	1.0
PHY 200 Engineering Physics I (Area B1)	3.0
PHY 200L Engineering Physics I Lab (Area B3)	1.0
Total	20.0

SPRING 2023

Humanities Elective (Area C2-Lower Div)	3.0
ENG 250 Electrical Circuits and Electronics*	3.0
ENG 250L Electrical Circuits and Electronics Lab*	1.0
ME 240 Engineering Thermodynamics*	3.0
ME 330 Engineering Dynamics*	3.0
MTH 215 Differential Equations (Area B4)	3.0
Total	16.0

SPRING 2024

ME 344 Heat Transfer*	3.0
ME 392 Mechanical Design*	3.0
ME 429 Manufacturing Processes Lab*	1.0
ME 436 Mechatronic System Design*	2.0
ME 436L Mechatronic System Design Lab*	1.0
ME 490 Engineering Design Process* (Area A1★) "G4"	3.0
Emphasis Specific Course (1st of 3)*	3.0
Total	16.0

SPRING 2025

Arts/Humanities Upper Div Elective (Area C-Upper Div)	3.0
EGL 300 Advanced Writing♦	(3.0)
ENG 310 Engineering Ethics (Area D-Upper Div)	3.0
GOV 200 American Government	3.0
American Institutions II Elective (Area D-Lower Div)	
ME 494 Project Design II*	2.0
ME 494L Project Design II Lab*	1.0
Emphasis Specific Course (3rd of 3)*	3.0
Total	15.0

SUMMER CRUISE 2022

CRU 150 Sea Training I (Engine)	8.0
EPO 220 Diesel Engineering I	2.0
Total	10.0

SUMMER CO-OP 2023

CEP 250 ME Co-Op I	3.0
Total	3.0

SUMMER CO-OP 2024

CEP 350 ME Co-Op II	3.0
Total	3.0

CSU Writing Proficiency Requirements may be met by passing the Graduate Writing Exam (GWE) or passing EGL 300 Advanced Writing.

- ♦ Meets CSU Graduate Writing Assessment Requirement (GWAR). (Must receive a "C-" or higher)
- "G4" "Golden 4" Courses (Must receive a "C-" or higher)
- ★ GE Area A1 Sequence of Three Courses
- * Courses in Major (CGPA = 2.0 is required)

EMPHASIS SPECIFIC COURSES

Energy Design Emphasis

- 1st – ME 440 Advanced Fluids & Thermodynamics
- 2nd – ME 442 Heating, Ventilation, and A/C Design OR
ENG 300 Power Engineering
- 3rd – ME 444 Energy Systems Design

Mechanical Design Emphasis

- 1st – ME 432 Machinery Design
- 2nd – ME 430 Mechanical Vibrations
- 3rd – ME 460 Automatic Feedback Control