

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

STUDENTS ENTERING IN 2019
MECHANICAL ENGINEERING MAJOR
THIRD ASSISTANT ENGINEER'S LICENSE OPTION
DIVISIONS 3&4
CURRICULUM

REVISED 11/21/19
Subject to Change

Total Units: 162

THIRD ASSISTANT ENGINEER'S LICENSE COURSES ARE BOLDED. ADDITIONAL UNITS MUST BE ADDED TO TOTAL FOR EACH SEMESTER.

FALL 2019

Humanities Elective (Area C2-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
EGL 120 Technical Communication* (Area A1) "G4"	3.0
ENG 110 Introduction to Engineering and Technology*	1.0
FF 200 Basic/Advanced Marine Firefighting▶	0.0
MTH 210 Calculus I (Area B4) "G4"	4.0
PE 101 Swim Competency Exam	0.0
PE 102 Beginning/Intermediate Swimming	(0.5)
Total	18.0

SPRING 2020

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 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	19.0

SUMMER CRUISE 2020

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

FALL 2020

ENG 210 Engineering Computer Programming	2.0
EPO 210 Plant Operations II▶	1.0
EPO 215 Manufacturing Processes I▶	1.0
ME 220 Computer Aided Engineering▶*	2.0
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	19.0

SPRING 2021

ENG 250 Electrical Circuits and Electronics▶*	3.0
ENG 250L Electrical Circuits and Electronics Lab▶*	1.0
EPO 214 Boilers▶	3.0
EPO 230 Steam Plant System Operations▶	1.0
ME 240 Engineering Thermodynamics*	3.0
ME 330 Engineering Dynamics*	3.0
ME 332 Mechanics of Materials*	3.0
MTH 215 Differential Equations (Area B4)	4.0
Total	17.0

SUMMER CRUISE 2021

CRU 250 Sea Training II	8.0
Total	8.0

FALL 2021

Life Science Elective (Area B2)	3.0
EPO 235 Steam Plant Watch Team Management▶	1.0
EPO 312 Turbines▶	3.0
EPO 322 Diesel Engineering II/Simulator	1.0
EPO 322L Diesel Engineering II/Simulator Lab▶	1.0
ME 340 Engineering Fluid Mechanics*	3.0
ME 350 Electromechanical Machinery*	3.0
ME 350L Electromechanical Machinery Lab▶*	1.0
ME 360 Instrumentation and Measurement Systems*	2.0
ME 360L Instr. and Measurement Systems Lab*	1.0
Total	13.0

SPRING 2022

EGL 300 Advanced Writing	(3.0)
EPO 310 Plant Operations III▶	1.0
EPO 343 Refrigeration & A/C▶	1.0
ME 339 Material/Mechanical Lab*	2.0
ME 344 Heat Transfer*	3.0
ME 392 Mechanical Design*	3.0
ME 460 Automatic Feedback Control▶*	2.0
ME 460L Automatic Feedback Control Lab▶*	1.0
ME 490 Engineering Design Process*	3.0
STEM 1 Stem Course (See Box)*	3.0
Total	17.0

SUMMER CRUISE 2022

CRU 350 Sea Training III (Engine)▶	8.0
Total	8.0

FALL 2022

American Institutions I Elective (Area D-Lower Div)	3.0
Social Science Elective (Area D-Lower Div)	3.0
ENG 430 Naval Architecture▶*	3.0
ME 349 Fluid/Thermal Lab*	2.0
ME 394 Fluid/Thermal Design*	3.0
ME 492 Project Design I*	2.0
ME 492L Project Design I Lab*	1.0
STEM 2 Stem Course (See Box)*	3.0
Total	17.0

SPRING 2023

Humanities Elective (Area C-Upper Div)	3.0
EPO 217 Shipboard Medical▶	1.0
GOV 200 American Government	3.0
[American Institutions II Elective] (Area D-Lower Div)	
HUM 310 Engineering Ethics (Area C2-Upper Div)	3.0
ME 429 Manufacturing Processes Lab*	1.0
ME 494 Project Design II*	2.0
ME 494L Project Design II Lab*	1.0
STEM 3 Stem Course (See Box)*	3.0
Total	16.0

**THIRD ASSISTANT ENGINEER'S/OICEW LICENSE
 REQUIRED FOR GRADUATION**

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

"G4" "Golden 4" Courses (Must receive a "C-" or higher)
 ▶ STCW Courses (Must receive a "C-" or higher, or "CR")
 * Courses in Major (CGPA = 2.0 is required)

STEM COURSES

Energy Design Stem
 1 - ME 440 Advanced Fluids & Thermodynamics (Spring 2022)*
 2 - ME 442 Heating, Ventilation and A/C Design (Fall 2022)*
 3 - ME 444 Energy Systems Design (Spring 2023)*

Mechanical Design Stem
 1 - ME 436 Mechatronic System Design (Spring 2022)*
 2 - ME 430 Mechanical Vibrations (Fall 2022)*
 3 - ME 432 Machinery Design (Spring 2023)*