

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 1&2
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

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
EPO 110	Plant Operations I▶	1.0
EPO 125	Introduction to Marine Engineering	3.0
EPO 213	Welding Lab▶	1.0
MTH 210	Calculus I (Area B4) "G4"	4.0
PE 101	Swim Competency Exam	0.0
PE 102	Beginning/Intermediate Swimming	(0.5)
Total		20.0

SPRING 2020

Humanities Elective (Area C2-Lower Div)	3.0	
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"		
FF 200	Basic/Advanced Marine Firefighting▶	0.0
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		17.0

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)*