Please inform the Registrar's Office if you choose an alternate option. **STUDENTS ENTERING IN 2018** **REVISED 11/21/19**
Otherwise your Academic Advisement Report will be incorrect. **MECHANICAL ENGINEERING MAJOR** **Subject to Change**

THIRD ASSISTANT ENGINEER'S LICENSE OPTION
DIVISIONS 1&2
CURRICULUM

Total Units: 162

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

FALL 2018

CHE	110	General Chemistry (Area B1)	3.0
CHE	110L	General Chemistry Lab (Area B3)	1.0
EGL	100	English Composition (Area A2)	3.0
EGL	120	Technical Communication❋ (Area A1)	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)	4.0
PE	101	Swim Competency Exam	0.0
PE	102	Beginning/Intermediate Swimming	(0.5)
		Total	**20.0**

FALL 2019

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**

FALL 2020

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**

FALL 2021

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❋	3.0
STEM	2	Stem Course (See Box)❋	3.0
		Total	**17.0**

SPRING 2019

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)			
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**

SPRING 2020

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**

SPRING 2021

EGL	300	Advanced Writing	(3.0)
EPO	**310**	**Plant Operations III▶**	**1.0**
EPO	**343**	**Refrigeration & A/C▶**	**1.0**
FF	**200**	**Basic/Advanced Marine Firefighting▶**	**0.0**
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**

SPRING 2022

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❋	3.0
STEM	3	Stem Course (See Box)❋	3.0
		Total	**16.0**

SUMMER CRUISE 2019

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

SUMMER CRUISE 2020

CRU	250	Sea Training II	8.0
		Total	**8.0**

SUMMER CRUISE 2021

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

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.

▶ 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 2021)❋
2 - ME 442 Heating, Ventilation and A/C Design (Fall 2021)❋
3 - ME 444 Energy Systems Design (Spring 2022)❋

Mechanical Design Stem
1 - ME 436 Mechatronic System Design (Spring 2021)❋
2 - ME 430 Mechanical Vibrations (Fall 2021)❋
3 - ME 432 Machinery Design (Spring 2022)❋