

CLASS OF 2013
MECHANICAL ENGINEERING MAJOR
THIRD ASSISTANT ENGINEER'S LICENSE OPTION
GOLD COMPANY
CURRICULUM

REVISED 5/26/09
Subject to Change

Total Units: 183

Third Assistant Engineer's/OICEW License Required For Graduation

Writing Proficiency Requirement: All Junior students must demonstrate upper division writing competency as a graduation requirement.

This may be fulfilled by passing either the Graduation Writing Exam, or EGL 300 Advanced Writing.

<u>FALL 2009</u>	
CHE 100 Chemistry I	3.0
CHE 100L Chemistry I Lab	1.0
EGL 100 English Composition	3.0
ENG 110 Introduction to Engineering and Technology*	1.0
ENG 120 Engineering Communications* *	2.0
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	4.0
PE 100 Beginning/Intermediate Swimming	(.5)
Total	19.0

<u>SPRING 2010</u>	
DL 105 Marine Survival▶	1.0
DL 105L Marine Survival Lab▶	1.0
DL 105X USCG Lifeboatman's Exam	0.0
ELEC 20 Critical Thinking Elective	3.0
ELEC 21 Humanities Elective (Lower Division)	3.0
MTH 211 Calculus II	4.0
NSC 100 Naval Science for the MMO	3.0
PHY 200 Engineering Physics I	3.0
PHY 200L Engineering Physics I Lab	1.0
Total	19.0

<u>SPRING CRUISE 2010</u>	
CRU 150 Sea Training I (Engine)▶	8.0
EPO 220 Diesel Engineering I	2.0
Total	10.0

<u>FALL 2010</u>	
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	4.0
PHY 205 Engineering Physics II	4.0
Total	20.0

<u>SPRING 2011</u>	
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	4.0
Total	21.0

<u>SPRING CRUISE 2011</u>	
CRU 250 Sea Training II	8.0
Total	8.0

<u>FALL 2011</u>	
ENG 300 Engineering Numerical Analysis*	4.0
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
FF 200 Basic/Advanced Marine Firefighting▶	0.0
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	20.0

<u>SPRING 2012</u>	
EGL 300 Advanced Writing▶	(3.0)
EPO 310 Plant Operations III	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*	3.0
ME 460L Automatic Feedback Control Lab*	1.0
ME 490 Engineering Design Process*	3.0
STEM 1 Stem Course (See Box)*	3.0
Total	19.0

<u>SPRING CRUISE 2012</u>	
CRU 350 Sea Training III (Engine)▶	8.0
Total	8.0

▶ **STCW Courses (Must Receive a "C-" or Better, or "CR")**
*** Courses in Major (CGPA = 2.0 is Required)**
▣ FF 200 Basic/Advanced Marine Firefighting is also offered in Spring of 2012

<u>FALL 2012</u>	
ELEC 8 American Institutions Elective	3.0
ENG 430 Naval Architecture▶*	3.0
ENG 470 Engineering Management*	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	20.0

<u>SPRING 2013</u>	
ELEC 9 American Institutions Elective	3.0
EPO 217 Shipboard Medical▶	1.0
HUM 310 Engineering Ethics	3.0
ME 342 Refrigeration and Air Conditioning*	3.0
ME 429 Manufacturing Processes Lab▶*	2.0
ME 494 Project Design II*	3.0
STEM 3 Stem Course (See Box)*	4.0
Total	19.0

STEM COURSES

Energy Design Stem

ME 440 Advanced Fluids & Thermodynamics (Spring 2012)*
 ME 442 Heating, Ventilation, and A/C Design (Fall 2012)*
 ME 444 Energy Systems Design (Spring 2013)*

Mechanical Design Stem

ME 434 Advanced Mechanics of Materials (Spring 2012)*
 ME 430 Mechanical Vibrations (Fall 2012)*
 ME 432 Machinery Design (Spring 2013)*