

GREAT LAKES MARITIME ACADEMY

4 YEAR ENGINEERING OFFICER CURRICULUM GUIDE

Bachelor of Science in Maritime Technology

FIRST YEAR		
FALL		
MNG 104	Engine System Graphics STCW	3
MNG 110	Engineering Mechanics STCW	3
ENG 111	English Composition	4
MTH 121	College Algebra	4
		14
SPRING		
MNS 100	Naval Science	2
MNG 234	Electronic Fundamentals STCW	4
MNG 314	Diesel Engineering STCW	7
MTH 122	Trigonometry	3
		16
SUMMER		
MNG 317	Sea Project I STCW	3
MDK 100	Survival at Sea STCW	1
MNG 100	Intro to Vessel Operations	1
		5

SECOND YEAR		
FALL		
MNG 250	Fluid Systems STCW	3
MNG 260	Maritime Machining	2
MNG 335	Electric Mach & Controls STCW	4
MNG 336	Electric M & C Lab STCW	2
CHM 101	Intro to Chemistry	4
		15

SECOND YEAR - cont'd		
SPRING		
MNG 105	Shipboard Information Systems	3
MDK 149	Damage Control & Safety STCW	2
MNG 271	Maritime Welding	2
MNG 321	Marine Boilers STCW	3.5
MNG 322	Marine Turbines STCW	2.5
MNG 323	Marine Steam Lab STCW	1
ENG	ENG 220 or ENG 112	3
		17
SUMMER		
No Classes		

THIRD YEAR		
FALL		
MNG 318	Sea Project II STCW	6
SPRING		
MNG 275	Refrigeration STCW	3
MDK 341	Ship Construction STCW	2
GLMA	Program Elective	3
GLMA	Program Elective	3
GLMA	Program Elective	3
PHL 202	Cont. Ethical Dilemmas	3
		17
SUMMER		
MNG 319	Sea Project III STCW	6

FOURTH YEAR		
FALL		
MDK 250	Stability for Engineer	1
MDK 330	Medical First Aid Provider	2
MNG 455	Eng Rm Resource Mgmt	2
MNG 466	Engine Room Business	2
MNG 496	License Prep	2
GLMA	Program Elective	3
		12
SPRING		
PLS 101	Intro to American Pol	3
GLMA	Program Elective	3
GLMA	Program Elective	3
GLMA	Program Elective	3
		12

Maritime/Sea Projects Credit Hours	75
NMC Credit Hours	45
BSMT requires 120 credit hours. Courses in green are available for transfer. Some may also be tested out of through standardized tests.	120

Add'l Requirements/Certifications
First Aid/CPR/AED
Firefighting
Personal Safety & Social Responsibility
VPDSD
In Port Sea Days (30 required)
Completed Sea Days (240 required)

Key: **Blue** = Sailing/Internships, **Black** = Maritime/STCW courses, **Green** = General education courses.

Subject to change. Revised 7-13-2022

List of approved program electives (NMC course transfer or equivalent)

21 credit hours required

ACC 121 - Accounting Principles I	HST 211 - Native American History	MTH 141 - Calculus I*
BUS 231 - Professional Communications	HST 212 - African-American History	MTH 142 - Calculus II*
BUS 261 - Business Law I	HST 213 - American Women's History	PHL 105 - Critical Thinking
CIT 110 - Programming Logic and Design	HST 225 - American Civil War	PHL 201 - Ethics
CIT 210 - Microsoft Office – Excel	HST 228 - The Vietnam War	PHL 203 - Environmental Ethics
CIT 213 - Networking Technologies	HST 230 - A History of Michigan	PHY 105 - Physics of the World Around Us
CIT 233 - Project Management	HST 235 - 20th Century Europe	PHY 121 - General Physics I*
COM 101 - Introduction to Communication	HUM 101 - Introduction to Humanities	PHY 122 - General Physics II*
COM 111 - Public Speaking	HUM 102 - Introduction to Humanities	PLS 132 - Comparative Politics
DD 110 - Basic Metallurgy	HUM 116 - World Cultures	PLS 211 - International Relations
EET 221 - Industrial Controls*	MDK 445 - Liquid Cargo Stowage	PLS 233 - U.S. Foreign Policy
EET 232 - Programmable Logic Controllers*	MFG 114 - Machining II*	PSY 101 - Introduction to Psychology
EET 304 - Marine Electronics*	MFG 217 - CNC Operations – Lathe*	PSY 223 - Intro to Social Psychology*
EGR 201 - Statics*	MFG 304 - Marine Hydraulics	PSY 231 - Psychology of Adjustment*
EGR 202 - Mechanics of Materials*	MGT 241 - Principles of Management	RAM 155 - Microcontroller Programming
EGR 203 - Dynamics*	MGT 251 - Human Resources Management	SOC 101 - Introduction to Sociology
HST 101 - Western Civilization to 1500AD	MNS 200 - Naval Science II	SOC 211 - Marriage and the Family
HST 102 - Western Civilization from 1500	MNS 250 - Leadership and Ethics	SOC 231 - Deviance and Criminal Behavior
HST 111 - U S History to 1865	MTH 116 - Intro to Computer Science	
HST 112 - U S History Since 1865	MTH 131 - Intro to Prob & Stats*	

*Prerequisite required:

MFG 114 and 217 are met by MNG 260 and may require an instructor signature

EET 221, 232, and 234 are met by MNG 234 and may require an instructor signature

All other courses with a required prerequisite must be met by the course(s) required in the catalog