

MARITIME - ENGINEERING OFFICER, BACHELOR OF SCIENCE

Course Sequence Guide

Course	Title	Credits
First Year		
Pre-Fall		
MDK 100	Survival at Sea	1
MNG 100	Intro to Vessel Operations	1
Credits		2
Fall		
MNG 104	Engine Systems Graphics	3
MNG 110	Engineering Mechanics	3
ENG 111	English Composition ¹	4
MTH 121	College Algebra ¹	4
Credits		14
Spring		
MNS 100	Naval Science	2
MNG 234	Electronic Fundamentals	4
MNG 314	Diesel Engineering	7
MTH 122	Trigonometry ¹	3
Credits		16
Summer		
MNG 317	Engineering Sea Project I ²	3
Credits		3
Second Year		
Fall		
MNG 250	Fluid Systems	3
MNG 260	Maritime Machining	2
MNG 335	Electric Machines and Controls	4
MNG 336	Electric Mach. & Controls Lab	2
CHM 101	Introductory Chemistry (or higher) ¹	4
Credits		15
Spring		
MNG 105	Shipboard Information Systems	3
MDK 149	Damage Control & Safety	2
MNG 271	Maritime Welding	2
MNG 321	Marine Boilers	3.5
MNG 322	Marine Turbines	2.5
MNG 323	Marine Steam Lab	1
ENG 220 or ENG 112	Technical Writing ¹ or English Composition	3-4
Credits		17-18
Summer		
No Classes		
Credits		0

Third Year

Fall

MNG 318	Engineering Sea Project II ²	6
Credits		6

Spring

MNG 275	Refrigeration	3
MDK 341	Ship Construction	2
GLMA Program Elective ¹		3
GLMA Program Elective ¹		3
Course Elective ¹		3
PHL 202	Contemporary Ethical Dilemmas ¹	3
Credits		17

Summer

MNG 319	Engineering Sea Project III ²	6
Credits		6

Fourth Year

Fall

MDK 250	Stability for the Engineer	1
MDK 330	Medical First Aid Provider	2
MNG 455	Engine Room Resource Mgmt.	2
MNG 466	Engine Room Business	2
MNG 496	License Preparation - Engine	2
GLMA Program Elective ¹		3
Credits		12

Spring

GLMA Program Elective ¹		3
GLMA Program Elective ¹		3
GLMA Program Elective ¹		3
Any Group 1 Social Science Elective		3
Credits		12

Total Credits		120-121
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¹ General education classes

² Sailing projects/internships

Cadets must earn a minimum of 2.0 grade in all Maritime, NMC and transfer classes (BSMT is 120 credit hours).

Additional Requirements/Certifications

- VPDS
- Firefighting
- First Aid/CPR/AED
- In Port Sea Days (30 required)
- Completed Sea Days
- Personal Safety & Social Responsibility Training

Course	Title	Credits
Maritime/Sea Projects Credit Hours		75
NMC Credit Hours		45-46
Total Credits		120-121

Approved Program Electives

(NMC course transfer or equivalent)

21 credit hours required

Course	Title	Credits
ACC 121	Accounting Principles I	4
BUS 231	Professional Communications	3
BUS 261	Business Law I	3
CIT 110	Programming Logic and Design	3
CIT 210	Microsoft Office - Excel	3
CIT 213	Networking Technologies	4
COM 111	Public Speaking	4
DD 110	Basic Metallurgy	3
EET 221	Industrial Controls ¹	3
EET 232	Programmable Logic Controllers ¹	3
WSI 304	Marine Electronics	3
EGR 201	Statics ²	3
EGR 202	Mechanics of Materials ²	3
EGR 203	Dynamics ²	4
MDK 445	Liquid Cargo Stowage	2
MFG 114	Machining II ³	3
MFG 217	CNC Operations - Lathe ³	4
MGT 241	Principles of Management	3
MGT 251	Human Resources Management	3
MNG 260	Maritime Machining	2
MNS 200	Naval Science II	2
MNS 250	Leadership and Ethics	2
RAM 155	Microcontroller Programming	3
Any Group 1 elective courses		

¹ Prerequisite required: EET 221 Industrial Controls, EET 232 Programmable Logic Controllers, and EET 234 PLC Applications II are met by MNG 234 Electronic Fundamentals and may require an instructor signature

² All other courses with a required prerequisite must be met by the course(s) required in the catalog

³ Prerequisite required: MFG 114 Machining II and MFG 217 CNC Operations - Lathe are met by MNG 260 Maritime Machining and may require an instructor signature