

## WORLD CLASS SHIPBUILDER CURRICULUM

SUBJECT	ACADEMIC TERMS			
	1	2	3	4
<b>TECHNICAL MATHEMATICS</b>	TECHNICAL MATH I M111	TECHNICAL MATH II M112		
<b>DRAFTING, ENGINEERING AND DESIGN</b>		DRAFTING D111		MECHANICS M121
<b>MARINE ENGINEERING AND NAVAL ARCHITECTURE</b>		SHIP CONSTRUCTION I N111	SHIP CONSTRUCTION II N222	
<b>PHYSICAL SCIENCE</b>			PHYSICAL SCIENCE I P221	PHYSICAL SCIENCE II P222
<b>TECHNICAL COMMUNICATIONS</b>	TECHNICAL COMMUNICATIONS I C111			
<b>BUSINESS PROCESSES</b>	INTRODUCTION TO COMPUTERS C211		BUSINESS OPERATIONS AND LEADERSHIP B122	PROBLEM SOLVING B112

## TRADE RELATED EDUCATION CURRICULUM

### COATINGS SPECIALIST

Paint and Surface Preparation  
Blueprint Reading for Painters

### DIMENSIONAL CONTROL TECHNICIAN

Industrial Measurement I  
Industrial Measurement II  
Introduction to Pipefitting  
Blueprint Reading Fundamentals and Procedures  
Machinery Installation Theory

### ELECTRICIAN

Applied Theory I: DC Concepts  
Applied Theory II: AC Concepts  
Applied Theory III: Polyphase Systems and Controls  
Electronics I  
Electronics II  
Programmable Logic Controllers

### HEATING & AIR CONDITIONING WORKER

All Electrical Theory Courses  
Air Conditioning and Refrigeration I

### HEAVY METAL FABRICATOR

Hull Construction Theory I  
Fundamentals of Fabrication

### INSULATOR

Paint and Surface Preparation  
Blueprint Reading for Painters  
Theory of Insulation

### MACHINIST

Machinist Shop Theory  
Numerical Control Programming

### MILLWRIGHT

Machinist Shop Theory  
Hydraulics I (Introduction)

### MODELING & SIMULATION

Introduction to Modeling and Simulation  
Modeling and Simulation Applied

### MOLDER

Foundry Processes  
Blueprint Reading for Molders

### NON-DESTRUCTIVE TESTER

Applied Theory I: DC Concepts  
Applied Theory II: AC Concepts  
Applied Theory III: Polyphase Systems and Controls  
NDT Theory

### OUTSIDE MACHINIST

Machinery Installation Theory  
Hydraulics I (Introduction)  
Ship Systems

### PATTERNMAKER

Foundry Processes  
Blueprint Reading for Molders

### PIPEFITTER

Introduction to Pipefitting  
Blueprint Reading Fundamentals and Procedures  
Sketching and Bending Fundamentals  
Piping Systems

### RIGGER

Stagebuilding, Blocking, and Shoring Theory  
Lifting and Handling Equipment Theory  
Mooring and Ventilation Theory

### SHEET METAL WORKER

Blueprint and Group Sheet Reading  
Materials, Machine Processes, and Tapping  
Sheet Metal Layout  
Advanced Print Reading

### SHIPFITTER

Hull Construction Theory I  
Hull Construction Theory II-CVN Drawings  
Hull Construction Theory II-VCS Drawings  
Hull Construction Theory III

### WELDER

Hull Construction Theory I  
Shielded Metal Arc Welding  
Gas-Metal Arc Welding  
Introduction to Non-Destructive Testing

### WELDING EQUIPMENT REPAIRER

All Electrical Theory Classes

## PRE-ADVANCED OPTIONAL CURRICULUM

SUBJECT	ACADEMIC SEMESTERS *		
	1	2	3
<b>GENERAL EDUCATION</b>	COLLEGE SUCCESS SKILLS S100 / SDV 100 (T)		WORKPLACE STRESS MANAGEMENT H210 / HLT 210 (T)
<b>MATHEMATICS</b>	PRECALCULUS I M163 / MTH 163 (T)	PRECALCULUS II M165 / MTH 164 (T)	CALCULUS W/ ANALYTIC GEOMETRY I M173 / MTH 173 (T) OR APPLIED CALCULUS M270 / MTH 270 (T)
<b>ENGLISH</b>	COLLEGE COMPOSITION I E111 / ENG 111 (T)		
<b>SOCIAL SCIENCE AND HUMANITIES</b>	PRINCIPLES OF MACROECONOMICS E201 / ECO 201 (T)	UNITED STATES HISTORY I H121 / HIS 121 (T)	INTRODUCTION TO LITERATURE E126 / ENG 125 (T)
<b>BUSINESS PROCESSES</b>			SHIPBUILDING OPERATIONS O233

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## ADVANCED OPTIONAL CURRICULA

<b>TECHNICAL STUDIES *</b>				
SUBJECT	ACADEMIC SEMESTERS **			
	1	2	3	4
<b>GENERAL EDUCATION</b>	WORKPLACE STRESS MANAGEMENT H210 / HLT 210 (T)			
	COLLEGE SUCCESS SKILLS S100 / SDV 100 (T)			
<b>SOCIAL SCIENCE AND HUMANITIES</b>	PRINCIPLES OF MACROECONOMICS E201 / ECO 201 (T)		UNITED STATES HISTORY I H121 / HIS 121 (T)	
			ETHICS P220 / PHI 220 (T)	
<b>BUSINESS PROCESSES</b>		WORLD CLASS MANUFACTURING I I181 / IND 181 (T)	TOTAL QUALITY MANAGEMENT B209 / BUS 209 (T)	SHIPBUILDING OPERATIONS O233
<b>COMMUNICATIONS</b>	COLLEGE COMPOSITION I E111 / ENG 111 (T)			TECHNICAL COMMUNICATIONS II C232
<b>SCIENCE AND TECHNOLOGY</b>		MATERIALS AND PROCESSES OF INDUSTRY M113 / MEC113 (T)		A.C. & D.C. CIRCUIT FUNDAMENTALS E150 / ELE 150 (T)

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<b>ENGINEERING TECHNOLOGY (Mechanical or Electrical) *</b>					
SUBJECT	ACADEMIC SEMESTERS **				
	4	5	6	7	8
<b>DRAFTING, DESIGN, AND MECHANICAL TECHNOLOGY</b>	ADVANCED TECHNICAL DRAFTING I C211 / CAD 211 (T) – MET ONLY			MATERIALS AND PROCESSES OF INDUSTRY M113 / MEC113 (T) – MET ONLY	SHIPBUILDING DESIGN PROJECT D243
				MECHANICS I M131 / MEC 131 (T) – MET ONLY	MECHANICS II M132 / MEC 132 (T) – MET ONLY
<b>MARINE ENGINEERING AND NAVAL ARCHITECTURE</b>		MARINE ENGINEERING N236	NAVAL ARCHITECTURE N237		
<b>LABORATORY SCIENCE</b>	GEN COLLEGE PHYSICS II P202 / PHY 202 (T)				COLLEGE CHEMISTRY I C221 / CHM 111 (T)
<b>TECHNICAL COMMUNICATIONS</b>		TECHNICAL COMMUNICATIONS II C232	TECHNICAL COMMUNICATIONS III C243		
<b>ELECTRICAL AND ELECTRONICS TECHNOLOGY</b>			DIGITAL PRINCIPLES, TERMS, AND APPLICATIONS E279 / ETR 279 (T) – EET ONLY	MICROPROCESSOR APPLICATION I E261 / ETR 261 (T) – EET ONLY	PRINCIPLES OF LASERS & FIBER OPTICS I E231 / ETR 231 (T) –EET ONLY

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<b>BUSINESS ADMINISTRATION *</b>					
<b>SUBJECT</b>	<b>ACADEMIC SEMESTERS **</b>				
	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>SOCIAL SCIENCE</b>		UNITED STATES HISTORY II H122 / HIS 122 (T)			PRINCIPLES OF MICROECONOMICS E202 / ECO 202 (T)
<b>ACCOUNTING</b>		PRINCIPLES OF ACCOUNTING I A211 / ACC 211 (T)	PRINCIPLES OF ACCOUNTING II A212 / ACC 212 (T)		
<b>LABORATORY SCIENCE</b>	GEN COLLEGE PHYSICS II P202 / PHY 202 (T)				
<b>BUSINESS</b>	PROBABILITY & STATISTICS FOR BUSINESS & ECONOMICS B216 / BUS 216 (T)		PRODUCTION PLANNING B215		TOTAL QUALITY MANAGEMENT B209 / BUS 209 (T)
<b>COMPOSITION, TECHNICAL COMMUNICATIONS, AND HUMANITIES</b>		COLLEGE COMPOSITION II E112 / ENG 112 (T)	ETHICS P220 / PHI 220 (T)	TECHNICAL COMMUNICATIONS III C243	

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<b>ENGINEERING (Mechanical, Electrical, or Mod &amp; Sim) *</b>							
<b>SUBJECT</b>	<b>ACADEMIC SEMESTERS **</b>						
	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>ENGINEERING</b>	INTRODUCTION TO ENGINEERING E120 / EGR 120 (T)	ENGINEERING GRAPHICS E110 / EGR 110 (T)	INTRODUCTION TO ENGINEERING METHODS E125 / EGR 125 (T)	ENGINEERING MECHANICS - STATICS E140 / EGR 140 (T) – ME & EE ONLY	ENGINEERING MECHANICS - DYNAMICS E245 / EGR 245 (T) – ME ONLY	MECHANICS OF MATERIALS E246 / EGR 246 (T) & E247 / EGR 247 (T) – ME ONLY	CIRCUIT THEORY II E272 / EGR 272 - EE ONLY
					CIRCUIT THEORY I E271 / EGR 271 (T) – EE & MS ONLY	FUNDAMENTALS OF COMPUTER ENGINEERING E270 / EGR 270 (T) – EE ONLY	
<b>MATHEMATICS</b>	CALCULUS W/ ANALYTIC GEOMETRY II M174 / MTH 174 (T)	VECTOR CALCULUS M277 / MTH 277 (T) - ME & EE ONLY	ORDINARY DIFFERENTIAL EQUATIONS M279 / MTH 279 (T)				
<b>MARINE ENGINEERING AND NAVAL ARCHITECTURE</b>						INTRODUCTION TO MARINE ENGINEERING AND NAVAL ARCHITECTURE N250 - ME & EE ONLY	SHIPBUILDING DESIGN PROJECT D243 - ME & EE ONLY
<b>LABORATORY SCIENCE</b>		COLLEGE CHEMISTRY I C221 / CHM 111 (T)	COLLEGE CHEMISTRY II C222 / CHM 112 (T)		UNIVERSITY PHYSICS I P241 / PHY 241 (T)	UNIVERSITY PHYSICS II P242 / PHY 242 (T)	
<b>TECHNICAL COMMUNICATIONS &amp; HUMANITIES</b>				ETHICS P220 / PHI 220 (T)	TECHNICAL COMMUNICATION II C232		TECHNICAL COMMUNICATION III C243
<b>COMPUTER SCIENCE</b>		PROGRAMMING WITH C++ C210 / CSC 210 – MS ONLY					

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