

WORLD CLASS SHIPBUILDER CURRICULUM

SUBJECT	ACADEMIC TERMS			
	1	2	3	4
TECHNICAL MATHEMATICS	TECHNICAL MATH I M111	TECHNICAL MATH II M112		
DRAFTING, ENGINEERING AND DESIGN	DRAFTING D111			MECHANICS M121
MARINE ENGINEERING AND NAVAL ARCHITECTURE	SHIP CONSTRUCTION I N111		SHIP CONSTRUCTION II N222	
PHYSICAL SCIENCE			PHYSICAL SCIENCE I P221	PHYSICAL SCIENCE II P222
TECHNICAL COMMUNICATIONS		TECHNICAL COMMUNICATIONS I C111		
BUSINESS PROCESSES		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
Introduction to Pipefitting
Blueprint Reading Fundamentals and Procedures
Machinery Installation Theory

ELECTRICIAN

DC Concepts
AC Concepts
Polyphase Systems & Controls
Static Controls
Digital Controls
Programmable Logic Controllers

HEATING & AIR CONDITIONING WORKER

All Electrical Theory Courses
Air Conditioning and Refrigeration I

HEAVY METAL FABRICATOR

Hull Construction Theory I
Hull Construction Theory II

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)

MOLDER

Foundry Processes
Blueprint Reading for Molders

NON-DESTRUCTIVE TESTER

DC Concepts
AC Concepts
NDT Theory

OUTSIDE MACHINIST

Machinery Installation Theory
Hydraulics I (Introduction)

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
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

WELDER

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

WELDING EQUIPMENT REPAIRER

Hull Construction Theory I
All Electrical Theory Classes

PRE-ADVANCED OPTIONAL CURRICULUM

SUBJECT	ACADEMIC SEMESTERS *		
	1	2	3
GENERAL EDUCATION	TNCC STUDENT ORIENTATION S100/SDV 100 (T) STRESS MANAGEMENT H215/HLT 295 (T)		
MATHEMATICS	PRECALCULUS I M163/MTH 163 (T)	PRECALCULUS II M164/MTH 164 (T)	CALCULUS I M173/MTH 173 (T) OR APPLIED BUSINESS CALCULUS M270/MTH 270 (T)
LABORATORY SCIENCE		GENERAL COLLEGE PHYSICS I LAB P199/PHY 199 (T) GENERAL COLLEGE PHYSICS II LECTURE & LAB P202/PHY 202 (T)	
ENGLISH	ENGLISH COMPOSITION I E111/ENG 111 (T)		ENGLISH COMPOSITION II E112/ENG 112 (T)
HISTORY	U.S. HISTORY I H121/HIS 121 (T)		
SOCIAL SCIENCE & HUMANITIES	PRINCIPLES OF ECONOMICS I E201/ECO 201 (T)		ETHICS P220/PHI 220 (T)
BUSINESS PROCESSES		SHIPBUILDING OPERATIONS O233	

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ADVANCED OPTIONAL CURRICULA

ENGINEERING TECHNOLOGY (Mechanical or Electrical)						
SUBJECT	ACADEMIC SEMESTERS					
	4	5	6	7	8	9
DRAFTING, ENGINEERING AND DESIGN	PARAMETRIC SOLID MODELING I D241 / DRF 241 (T)	MATERIALS AND PROCESSES OF INDUSTRY M113/MEC113 (T) MECHANICS I M131/MEC 131 (T)	MECHANICS II M132/MEC 132 (T)		SHIPBUILDING DESIGN PROJECT D243	
MARINE ENGINEERING AND NAVAL ARCHITECTURE			MARINE ENGINEERING N236	NAVAL ARCHITECTURE N237		
LABORATORY SCIENCE						COLLEGE CHEMISTRY I C221/CHM 111 (T)
TECHNICAL COMMUNICATIONS				TECHNICAL COMMUNICATIONS II C232	TECHNICAL COMMUNICATIONS III C243	
ELECTRICAL AND ELECTRONICS TECHNOLOGY	COMPUTER ELECTRONICS I E273/ETR 273 (T)	DIGITAL PRINCIPLES, TERMS, AND APPLICATIONS E279/ETR 279 (T)	PROGRAMMABLE LOGIC CONTROLLERS X316	PRINCIPLES OF LASERS & FIBER OPTICS I E231/ETR 231 (T)	CONTROL CIRCUITS E238/ELE 238 (T)	MICROPROCESSOR APPLICATION I E261/ETR 261 (T)

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BUSINESS ADMINISTRATION				
SUBJECT	ACADEMIC SEMESTERS			
	4	5	6	7
SOCIAL SCIENCE	PRINCIPLES OF ECONOMICS II E202/ECO 202 (T)	UNITED STATES HISTORY II H122/HIS 122 (T)		
ACCOUNTING		PRINCIPLES OF ACCOUNTING I A211/ACC 211 (T)	PRINCIPLES OF ACCOUNTING II A212/ACC 212 (T)	
HUMANITIES				SURVEY OF AMERICAN LITERATURE E241/ENG 241 (T)
BUSINESS	PRODUCTION PLANNING B215	TOTAL QUALITY MANAGEMENT B209/BUS 209 (T)	HIGH PERFORMANCE WORK TEAMS B117/BUS 117 (T)	PROBABILITY & STATISTICS FOR BUSINESS & ECONOMICS B216/BUS 216 (T)
TECHNICAL COMMUNICATIONS				TECHNICAL COMMUNICATIONS III C243

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ENGINEERING (Mechanical or Electrical)

SUBJECT	ACADEMIC SEMESTERS *					
	4	5	6	7	8	9
ENGINEERING	INTRODUCTION TO ENGINEERING E120/EGR 120 (T)	ENGINEERING MECHANICS - STATICS E140/EGR 140 (T)	INTRODUCTION TO ENGINEERING METHODS E125/EGR 125 (T)	MECHANICS OF MATERIALS E246/EGR 246 (T)		ENGINEERING MECHANICS - DYNAMICS E245/EGR 245 (T)
		ENGINEERING GRAPHICS E110/EGR 110 (T)		MECHANICS OF MATERIALS LAB E247/EGR 247 (T)		OR FUNDAMENTALS OF COMPUTER ENGINEERING E270/EGR 270 (T)
MATHEMATICS	CALCULUS II M174/MTH 174 (T)	ORDINARY DIFFERENTIAL EQUATIONS M279/MTH 279 (T)	VECTOR CALCULUS M277/MTH 277 (T)			
MARINE ENGINEERING AND NAVAL ARCHITECTURE					INTRODUCTION TO MARINE ENGINEERING AND NAVAL ARCHITECTURE N250	SHIPBUILDING DESIGN PROJECT D243
LABORATORY SCIENCE			UNIVERSITY PHYSICS I LECTURE & LAB P241/PHY 241 (T)	UNIVERSITY PHYSICS II LECTURE & LAB P242/PHY 242 (T)	COLLEGE CHEMISTRY I C221/CHM 111 (T)	COLLEGE CHEMISTRY II C222/CHM 112 (T)
TECHNICAL COMMUNICATIONS	TECHNICAL COMMUNICATIONS II C232				TECHNICAL COMMUNICATIONS III C243	
HUMANITIES				SURVEY OF AMERICAN LITERATURE I E241/ENG 241 (T)		

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MODELING AND SIMULATION ENGINEERING **(Proposed)**

SUBJECT	ACADEMIC SEMESTERS *					
	4	5	6	7	8	9
ENGINEERING AND COMPUTER SCIENCE	INTRODUCTION TO ENGINEERING E120/EGR 120 (T)		COMPUTER SCIENCE I C201/CSC 201 (T)	UNIX I I171/ITN 171 (T)	PROGRAMMING WITH C++ C210/CSC 210 (T)	
MATHEMATICS	CALCULUS II M174/MTH 174 (T)	ORDINARY DIFFERENTIAL EQUATIONS M279/MTH 279 (T)				
MODELING & SIMULATION		INTRODUCTION TO MODELING & SIMULATION MSIM 201	DISCRETE EVENT SIMULATION MSIM 205			
LABORATORY SCIENCE	COLLEGE CHEMISTRY I C221/CHM 111 (T)	COLLEGE CHEMISTRY II C222/CHM 112 (T)		UNIVERSITY PHYSICS I LECTURE & LAB P241/PHY 241 (T)	UNIVERSITY PHYSICS II LECTURE & LAB P242/PHY 242 (T)	
TECHNICAL COMMUNICATIONS			TECHNICAL COMMUNICATIONS II C232			TECHNICAL COMMUNICATIONS III C243
HUMANITIES						SURVEY OF AMERICAN LITERATURE I E241/ENG 241 (T)

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