



# **BUILD YOUR FUTURE: CROSSWALK**

**MARINE CORPS EQUIVALENCY ALIGNMENT**

**THEY'VE DEFENDED AMERICA, NOW LET'S HELP THEM BUILD IT.**





## GETTING STARTED AND DEFINITIONS

### INTRODUCTION

Did you know that nearly 200,000 soldiers are transitioning each year and have a difficult time translating their acquired skills and experience into marketable civilian jobs/careers? Do you receive quite a few military applications, but are challenged by the language and skill set that individuals possess? Hard Hat Heroes has created a task-based alignment that will close that communication gap between employers and veterans. This document will help construction industry hiring representatives identify the knowledge and skills candidates possess, focus on the specific training they need and ultimately place soldiers more effectively.

### PURPOSE

NCCER wants to give credit to military members for the training they received while in the service. Transitioning military and veterans are able to go to [veterans.byf.org](http://veterans.byf.org) and submit their existing training to receive NCCER credentials and view the areas where they need additional training.

This alignment is provided to assist hiring managers in identifying the existing knowledge and skills a veteran has and to outline the training he or she needs to be fully competent.

### WHAT THIS ALIGNMENT IS ABOUT

Hard Hat Heroes has identified Marine Specialty Codes that have training that align directly with NCCER craft training. These codes are organized into sections and a table is provided for each one defining NCCER's crafts, levels and modules that align to that specific military specialty code.

Each module builds upon one another to accomplish a level completion and this information is tracked through NCCER. An industry-recognized credential is awarded with level completions and each craft usually has three to four levels.

### NCCER DEFINITIONS

NCCER Curriculum is broken down by craft/discipline, is competency-based, modular in format and compliant with Department of Labor Office of Apprenticeship requirements.

#### CRAFT:

Another name for a trade (i.e. carpentry, masonry and welding). NCCER refers to individuals working in a trade as being a craft professional.

#### BOOK

This is an instructional unit which makes up NCCER's curriculum levels. These units are generally referred to as chapters in textbooks. Module completions require successful completion of both a written test and performance test when available.

#### LEVEL:

A number of modules designed and sequenced to form approximately one year of training and/or a minimum of 144 hours of instruction.

#### CREDENTIAL:

A document or certificate with NCCER's stamp of approval stating an individual has completed training in specific craft areas.

visit [veterans.byf.org](http://veterans.byf.org) for more information.



## **FIND YOUR CROSSWALK**

### **Heavy Equipment Mechanic**

1341: Heavy Equipment Mechanic Basic .....	3
1341: Heavy Equipment Mechanic NCO .....	9

### **Engineer Equipment Operator**

1345: Engineer Equipment Operator Basic .....	12
1345: Engineer Equipment Operator NCO .....	16
1349: Engineer Equipment Chief .....	19

### **Engineer Assistant**

1361: Engineering Assistant .....	21
1361: Engineering Chief .....	24

### **Other**

E-1 or Higher: Marine .....	26
E-5 or Higher: Noncommissioned Officer .....	28
O-1 or Higher: Officer .....	30



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: 1341**

Heavy Equipment Mechanic Basic





CRAFT	LEVEL	MODULE	MODULE TITLE
Core	1	00102	Introduction to Construction Math
		00103	Introduction to Hand Tools
		00104	Introduction to Power Tools
		00106	Introduction to Basic Rigging
		00107	Basic Communication Skills
		00108	Basic Employability Skills
		00109	Introduction to Material Handling



CRAFT	LEVEL	MODULE	MODULE TITLE
HVACR	1	03103	Basic Copper and Plastic Piping Practices
		03106	Basic Electricity
HVACR	2	03215	Basic Maintenance
HVACR	3	03313	Fasteners, Hardware, and Wiring Terminations
		03316	Customer Relations
HVACR	4	03401	Construction Drawings and Specifications
		03403	Indoor Air Quality



CRAFT	LEVEL	MODULE	MODULE TITLE
Instrumentation	1	12107-14	Instrument Drawings and Documents, Part One
		12108-14	Gaskets, O-Rings, and Packing
		12109-14	Lubricants, Sealants, and Cleaners
		12111-14	Tubing
		12113-14	Hoses
		12115-14	Instrumentation Safety Practices
Instrumentation	2	12116-14	Electrical Systems for Instrumentation
		12110-15	Temperature, Pressure, Level, and Flow
		12210-15	Instrument Air Filters, Regulators, and Dryers
		12303-15	Clean, Purge, and Test Tubing and Piping Systems



CRAFT	LEVEL	MODULE	MODULE TITLE
Mobile Crane Operations	1	21102	Basic Principles of Cranes
		21106	Crane Safety and Emergency Procedures

CRAFT	LEVEL	MODULE	MODULE TITLE
Industrial Maintenance Mechanic	1	32101-07	Orientation to the Trade
		32102-07	Tools of the Trade
		32103-07	Fasteners and Anchors
		32108-07	Pumps and Drivers
		32109-07	Valves
		32111-07	Material Handling and Hand Rigging
		32112-07	Mobile and Support Equipment
		32113-07	Lubrication
Industrial Maintenance Mechanic	2	32203-07	Copper and Plastic Piping Practices
		32205-07	Identify, Install, and Maintain Valves
		32207-07	Introduction to Bearings



CRAFT	LEVEL	MODULE	MODULE TITLE
Industrial Maintenance Mechanic	3	32302-08	Precision Measuring Tools
		32303-08	Installing Bearings
		32304-08	Installing Couplings
		32307-08	Installing Belt and Chain Drives
		32308-08	Installing Mechanical Seals
Industrial Maintenance Mechanic	4	32402-09	Advanced Blueprint Reading
		32403-09	Compressors and Pneumatic Systems
		32407-09	Troubleshooting and Repairing Pumps

CRAFT	MODULE	MODULE TITLE
Sustainable Construction	70101	Your Role In the Green Environment
Safety Technology	75219	Hazard Recognition, Environmental Awareness, and Occupational Health



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**Marine Corps: 1341**

Heavy Equipment Mechanic NCO





CRAFT	LEVEL	MODULE	MODULE TITLE
HVACR	1	03101	Introduction to HVACR
HVACR	2	03205	Leak Detection, Evacuation, Recovery and Charging
		03301	Refrigerants and Oils Devices
		03303	Metering Devices
HVACR	3	03210	Troubleshooting Cooling

CRAFT	LEVEL	MODULE	MODULE TITLE
Instrumentation	1	12106-14	Fasteners



CRAFT	LEVEL	MODULE	MODULE TITLE
Industrial Maintenance Mechanic	4	32406-09	Introduction to Supervisory Skills
		32408-09	Troubleshooting and Repairing Gearboxes

CRAFT	LEVEL	MODULE	MODULE TITLE
Basic Rigger	1	38102	Rigging Practices

CRAFT	MODULE	MODULE TITLE
Fundamentals of Crew Leadership	46101	Fundamentals of Crew Leadership



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: 1345**

Engineer Equipment Operator Basic





CRAFT	LEVEL	MODULE	MODULE TITLE
Core	1	00102	Introduction to Construction Math
		00103	Introduction to Hand Tools
		00107	Basic Communication Skills
		00108	Basic Employability Skills
		00109	Introduction to Material Handling



CRAFT	LEVEL	MODULE	MODULE TITLE
Heavy Equipment Operations	1	22101	Orientation to the Trade
		22103	Identification of Heavy Equipment
		22104	Basic Operational Techniques
		22201	Introduction to Earthmoving
Heavy Equipment Operations	2	22205	Loaders
		22206	Rough Terrain Forklifts
Heavy Equipment Operations	3	22302	Dozers
		22303	Backhoes
		22305	Motor Graders



CRAFT	LEVEL	MODULE	MODULE TITLE
Heavy Highway Construction	1	36111	Heavy Highway Construction Equipment

CRAFT	MODULE	MODULE TITLE
Sustainable Construction	70101	Your Role In the Green Environment
Safety Technology	75219	Hazard Recognition, Environmental Awareness, and Occupational Health



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: 1345**

Engineer Equipment Operator NCO





CRAFT	LEVEL	MODULE	MODULE TITLE
Core	1	00106	Introduction to Basic Rigging

CRAFT	LEVEL	MODULE	MODULE TITLE
Mobile Crane Operations	1	21101	Orientation to the Trade
		21102	Basic Principles of Cranes
		21105	Operating a Crane
		21106	Crane Safety and Emergency Procedures
Mobile Crane Operations	2	21202	Machine Power Flow
		21203	Crane Maintenance and Inspections
		21204	Wire Rope
		21205	Computer Aids/Operator Aids
		21207	On-Site Equipment Movement
		21308	Transporting Requirements
Mobile Crane Operations	3	21301	Load Charts



CRAFT	LEVEL	MODULE	MODULE TITLE
Heavy Equipment Operations	2	22204	Scrapers
		22207	Excavation Math

CRAFT	LEVEL	MODULE	MODULE TITLE
Basic Rigger	1	38102	Rigging Practices

CRAFT	LEVEL	MODULE	MODULE TITLE
Signal Person	1	53101	Crane Communications

CRAFT	MODULE	MODULE TITLE
Fundamentals of Crew Leadership	46101	Fundamentals of Crew Leadership
Mentoring for Craft Professionals	46102-16	Mentoring for Craft Professionals



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: 1349**

Engineer Equipment Chief





CRAFT	LEVEL	MODULE	MODULE TITLE
Project Management	1	44103	Interpersonal Skills
		44106	Construction Planning
		44108	Scheduling
		44109	Resource Control
		44111	Continuous Improvement

CRAFT	LEVEL	MODULE	MODULE TITLE
Project Supervision	1	MT202	Human Relations and Problem Solving
		MT203	Safety
		MT207	Planning and Scheduling



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: 1361**

Engineering Assistant





CRAFT	LEVEL	MODULE	MODULE TITLE
Core	1	00102	Introduction to Construction Math
		00103	Introduction to Hand Tools
		00105	Introduction to Construction Drawings
		00107	Basic Communication Skills
		00108	Basic Employability Skills
		00109	Introduction to Material Handling

CRAFT	LEVEL	MODULE	MODULE TITLE
Heavy Equipment Operations	1	22106	Grades, Part One

CRAFT	LEVEL	MODULE	MODULE TITLE
Heavy Highway Construction	1	36101	Orientation to the Trade



CRAFT	LEVEL	MODULE	MODULE TITLE
Site Layout	1	78101-04	Introduction to Site Layout
		78103-04	Survey Equipment Use and Care One
		78104-04	Blueprint Reading for Surveyors
Site Layout	2	78202-04	Survey Equipment Use and Care Two, EDMs and Total Stations
		78203-04	Control Setup
		78205-04	Data Collection and Basic Computer Skills
		78207-04	Means and Methods

CRAFT	MODULE	MODULE TITLE
Sustainable Construction	70101	Your Role In the Green Environment
Safety Technology	75219	Hazard Recognition, Environmental Awareness, and Occupational Health



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**Marine Corps: 1361**

Engineering Chief





CRAFT	LEVEL	MODULE	MODULE TITLE
Heavy Equipment Operations	2	22209	Interpreting Civil Drawings

CRAFT	LEVEL	MODULE	MODULE TITLE
Site Layout	2	78204-04	Boundary and Topography Surveys
		78206-04	Concrete Properties and Quality Control



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: E-1 or Higher**

Marine





CRAFT	LEVEL	MODULE	MODULE TITLE
Core	1	00102	Introduction to Construction Math
		00107	Basic Communication Skills
		00108	Basic Employability Skills

CRAFT	MODULE	MODULE TITLE
Sustainable Construction	70101	Your Role In the Green Environment
Safety Technology	75219	Hazard Recognition, Environmental Awareness, and Occupational Health



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: E-5 or Higher**

Noncommissioned Officer





CRAFT	MODULE	MODULE TITLE
Fundamentals of Crew Leadership	46101	Fundamentals of Crew Leadership
Mentoring for Craft Professionals	46102-16	Mentoring for Craft Professionals



# **BUILD YOUR FUTURE. BUILD AMERICA.**

**Marine Corps: O-1 or Higher**

Officer





<b>CRAFT</b>	<b>MODULE</b>	<b>MODULE TITLE</b>
Fundamentals of Crew Leadership	46101	Fundamentals of Crew Leadership
Mentoring for Craft Professionals	46102-16	Mentoring for Craft Professionals



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