



ECM Training Services Course Catalog

October 2018



STCW Basic Courses

Course Name: **First Aid/ CPR (Blended)**
Price: **\$195**

USCG Approved

Course Description: This course is designed to teach personnel the proper actions to take upon encountering an accident or other medical emergency.

Successful completion of this course will satisfy: (a) the training requirements of section A-VI/1 and Table A-VI/1-3 of the STCW Code and 46 CFR 10.205 (I) (3); AND (b) if presented within one year of the date of training, the First Aid & CPR training requirements of 46 CFR 10.205 (h)(1)(ii) and 10.205 (h)(2)(iii) for original issuance of a license.

Course Curriculum:

1. First Aid
2. Drug and Alcohol
3. Medical Care
4. Hypothermia
5. Staying Healthy
6. Prevention of AIDS

Course Name: **Personal Survival Techniques (Blended)**
Price: **\$495**

USCG Approved

Course Description: This course combines classroom and in water training to teach personnel the proper actions and survival techniques to ensure safety during an emergency evacuation/abandonment from a vessel or offshore facility.

Successful completion of this course will satisfy the training requirements of Section A-VI/1 and Table A-VI/1-1 of the STCW Code and 46 CFR 10.205 (I)(1).

Course Curriculum:

1. SOLAS and LSA Code
2. Types of emergencies on Ships
3. Personal Lifesaving Equipment: Utilization and Purpose
4. Life Saving Appliances (LSA)
5. Liferaft Operations
6. Signaling Equipment and Pyrotechnics
7. Value of Training and Drills
8. Rescue Operations and Techniques
9. Helicopter Operations



Course Name: **Personal Safety & Social Responsibility (Online)**
Price: \$195

USCG Approved

Course Description: This course is designed to teach personnel the proper actions to take while executing their shipboard duties to ensure their own personal safety, the safety of fellow crewmembers and to protect the marine environment.

Successful completion of this course will satisfy the training requirements of 46 CFR 10.205 (I)(4) and Section A-VI/1 and Table A-VI/1-4 of the STCW Code.

Course Curriculum:

1. Comply with Emergency Procedures
2. Prevention of Pollution of the Marine Environment
3. Observe Safe Working Practices
4. Effective Communication on Board Ship
5. Human Relationships on Board Ships
6. Personal Well-Being on Board

Course Name: **Basic Fire Fighting (Blended)**
Price: \$575

USCG Approved

Course Description: This course is designed to teach participants the importance of fire prevention, the proper actions to take upon discovering a fire, and how to protect themselves with existing firefighting equipment within their work area.

Successful completion of this course will satisfy: (a) The training requirements of 46 CFR 10.205 (I)(2) and Section A-VI/1 and Table A-VI/1-2 of the STCW Code; AND (b) the basic firefighting training requirements of 46 CFR 10.205 (g) and 10.401 (g)(1) for a license; AND (c) the firefighting training requirements of 46 CFR 13.113(d)(2)(i)(A) or (B), 13.201 (e), 13.301 (e), 13,401 (d), or 13.501 (e) for any tanker man endorsement.

Course Curriculum:

1. Fire Fighting Procedures
2. Fixed Fire Extinguishing System
3. Fire Extinguishing Appliances
4. Fire Detection System and alarms
5. Fire Safety Arrangements
6. Fire Fighting Organization
7. Fire Prevention and Safety



Course Name: **Basic Training (Blended)**

USCG Approved

Price: \$1,100

Course Description: This course covers the four major topics required by the U.S.C.G. The course is thought through a blended program: students will spend 57 hours of blended learning, including

19 hours across 3 days of in-class training.

Seafarer's employed or engaged in any capacity on board ship as part of the ship's complement with designated duties in the operation of the ship shall, before being assigned, must have completed Basic Training. It defines basic training requirements for maritime employees to work and stand watch aboard certain maritime vessels that fall under the requirements prescribed in Regulation VI/I, and Section A-VI/I of STCW 95 and 46 CFR 10.205. Mariners without ongoing service will continue to be required to complete approved or accepted refresher training, or apply for a new endorsement. See 46CFR 11.302(b)-(e) and 12.602(b)-(e).

Course Curriculum:

Basic Training (Blended)

First Aid/ CPR

1. First Aid
2. Drug and Alcohol
3. Medical Care
4. Hypothermia
5. Staying Healthy
6. Prevention of AIDS

Personal Survival Techniques

1. SOLAS and LSA Code
2. Types of Emergencies on Ships
3. Personal Lifesaving Equipment: Utilization and Purpose
4. Life Saving Appliances (LSA)
5. Liferaft Operations
6. Signaling Equipment and Pyrotechnics
7. Value of Training and Drills
8. Rescue Operations and Techniques
9. Helicopter Operations

Personal Safety & Social Responsibilities

1. Comply with Emergency Procedures
2. Prevention of Pollution of the Marine Environment
3. Observe Safe Working Practices
4. Effective Communication on Board Ship
5. Human Relationships on Board Ships
6. Personal Well-Being on Board

Basic Fire Fighting

1. Fire Fighting Procedures
2. Fixed Fire Extinguishing System



3. Fire Extinguishing Appliances
4. Fire Detection System and alarms
5. Fire Safety Arrangements
6. Fire Fighting Organization
7. Fire Prevention and Safety

Course Name: **Combined Basic and Advanced Fire Fighting (Blended)** **USCG Approved**
Price: **\$1,000**

Course Description: This course is designed to train seafarers in minimizing risk, maintaining state of readiness, and extinguishing shipboard fires. It combines both classroom and practical fire-field exercises in full turnout gear with live burns. This course is also part of the Basic Safety Training course. A trainee successfully completing this course will, in the event of a fire on board a ship, be able to take command, organize the personnel effectively and control the fire-fighting operations using those techniques in which he has been trained. He will have also acquired knowledge of fire prevention and an ability to inspect and maintain the fire-extinguishing systems and equipment. Upon completion of the classroom-training portion of the course, the delegates move onto the firefighting facility for actual hands-on training.

This course satisfies the following STCW and CFR requirements: ·46 CFR 11.202(b)(2), ·46 CFR 11.205(d), ·46 CFR 11.401(g)(1), ·The requirements of Section A-VI/3 and Table A-VI/3 of the STCW Code; Section A-VI/1 paragraph 2.1.2, ‘Basic Training’ and Table A-VI/1-2. 46 CFR 11.302(a)(2), 46 CFR 12.602(a)(2), 46 CFR 11.201(h)(2) [Basic Only], 46 CFR 11.201(h)(3) , 46 CFR 13.201(c)(3), 13.301(c)(3), 13.401(d), or 13.501(c)(3) for any tankerman endorsement.

Students should register at least 3 weeks before the scheduled class and complete the online program.

Course Curriculum: **Combined Basic and Advanced Fire Fighting (Blended)**

Basic Firefighting

1. Fire Prevention and Safety

Advanced Firefighting

1. Firefighting on Deck
2. Firefighting in Accommodation
3. Firefighting in Machinery Space



CoC and Other Courses

Course Name: **Designated Duty Engineer (Blended)**

USCG Approved

Price: \$3,000

Course Description: A DDE means a qualified engineer, who may be the sole engineer on vessels with a periodically unattended engine room. A designated duty engineer DDE is defined by STCW as the engineer in charge of a watch in a periodically unmanned engine room. Under the United States regulations, the DDE may serve as a Chief Engineer on domestic vessels of not more than 500grt. The unlimited horsepower DDE credential is valid on any waters. For many industries, including Towing, Offshore Supply, Mega Yachts, or other vessels up to 500 grt, this is an ideal license to obtain as a step towards the higher-level assistant and chief engineer licenses.

Any applicant who successfully completed your Designated Duty Engineer (DDE) Unlimited Horsepower (LRNAMC-157) course within 1 year of application will:

- Receive 45 days of sea service credit that can be applied towards the service requirements of 46 CFR 11 .524(b)(1) for a credential as Designated Duty Engineer of Motor Propelled Vessels of Unlimited Horsepower;
OR
- Satisfy the professional examination requirements of 46 CFR 11 .903(a)(34) for a national officer endorsement as Designated Duty Engineer Less Than 4,000 HP Motor. This approval is limited to the original issuance of Designated Duty Engineer Less Than 4,000 HP Motor only. Any other endorsement sought in conjunction with this approval will require the successful completion of the USCG issued examination for that endorsement.

This course does not satisfy any STCW Competency or Training. Application of this course for endorsement may be used for only one transaction.

Course Curriculum:

1. Engineering Knowledge (General) 1
 - A. Thermodynamics
 - B. Applied Chemistry
 - C. Basics of Computers
 - D. Engineering Materials
 - E. Hydraulics
 - F. Instrumentation & Control Engineering
 - G. Gas Cutting and Welding
 - H. Workshop Technology
2. Engineering Knowledge (General) 2
 - A. Air Compressor
 - B. Shipboard Ancillary Systems
 - C. Watchstanding & Emergency Preparedness
 - D. Fresh Water Generator
 - E. Heat Exchangers
 - F. Propeller and Shafting
 - G. Pumps and Valves



- H. Steering Gear
- I. Deck Machinery
- 3. Refrigeration
 - A. Refrigeration & Air Conditioning
- 4. Safety
 - A. IMO Conventions and Maritime Law
 - B. Emergency Response
 - C. Firefighting
 - D. Lifesaving Appliances
 - E. MARPOL
- 5. Ship Construction and Stability
 - A. Ship Construction
 - B. Ship Stability
- 6. Motor Plants
 - A. Auxiliary Boiler Plant
 - B. Auxiliary Engine
 - C. Centrifuges
 - D. Fuel Oil Management
 - E. Lubrication & Lube Oil Management
- 7. Main Engine Mathematics
 - A. Mathematics 1
 - B. Mathematics 2
- 8. Electricity
 - A. Basic Electronics for Marine Engineers
 - B. Marine Electrical Engineering 1
 - C. Marine Electrical Engineering 2
 - D. Fundamentals of Electrical Engineering

Course Name: **Crewmember Program for Towing Vessels- Subchapter M** **USCG Approved**
Price: \$750

Course Description: The new Subchapter M regulations will affect thousands of vessels across the maritime industry. All companies operating towing vessels must have a Certificate of Inspection from the USCG starting with 25% of their fleet by July 22, 2019 to 100% of their fleet being inspected by July 19, 2022.

In anticipation of the Subchapter M regulations coming into effect, we have prepared the **Tug and Barge Crew Member Training Program** which is self-paced and completely on-line. The program is designed with the training requirements set forth by the USCG under 46 CFR Subchapter M including all of Part 140–Operations, 141.240 & 142.245.

Course Curriculum:

- 1. SUB-M and Towing Safety Management
- 2. Safety of Navigation on Tugs
- 3. Towing Vessel Operations
- 4. Lifesaving and Firefighting on Tugs



STCW Courses

Course Name: **Tank Ship Familiarization (Liquefied Gases)**

Price: 1,500

Course Description: Tank Ship Familiarization (Liquefied Gases) is intended to provide specialized training for personnel responsible for operating liquefied natural gas carriers (LNGC). The candidate will be provided with instruction, information, and experience relevant to their assigned duties.

Candidates who successfully complete this course will satisfy the training requirements of 46 CFR 13.201(c)(4) for an endorsement as Tankerman-PIC LG and 13.201(c)(4) for an endorsement as Tankerman-PIC (Barge) LG; and the requirements of 46 CFR 13.607(a)(2), 46 CFR 13.607(b)(2), 46 CFR 13.607(c)(2) and STCW, as amended ;2010, Table A-V/1-2-2 for an STCW endorsement for Advanced Liquefied Gas Tanker Cargo Operations. The course will also satisfy training requirements for endorsements as Tankerman-Assistant LG, Tankerman-Engineer LG, and STCW, as amended 2010, Table A-V/1-2-1 for an STCW endorsement for Basic Liquefied Gas Tanker Cargo Operations.

Course Curriculum:

1. Shipboard Procedures to Prevent Pollution
2. Emergency Procedures and Emergency Shutdown
3. Basic knowledge of Liquefied Gas Tankers
4. Physical Properties of Liquefied Gases
5. Knowledge of Cargo Operations
6. Liquefied Gas Tanker Safety Culture and Safety Management
7. Hazards associated with Tanker Operations
8. Knowledge of Hazard Controls
9. Function and Proper use of Gas-Measuring Equipment
10. Measures to be taken in the event of Spillage
11. Proper use of Safety Equipment and Protective Devices
12. Safe Working Practices on a Liquefied Tankship
13. Knowledge of First Aid on a Liquefied Tankship
14. Fire Safety and Firefighting Operations
15. IGC Code, Ship Designs and Regulations

Course Name: **Tank Ship Liquefied Gases**

Price: \$1,500

USCG Approved

Course Description: The Tank Ship Liquefied Gases course is for officers and ratings who may not have sailed on board Liquefied Natural Gas (LNG) tanker ships.

Any candidate successfully completing the “USCG-GASCO: Specialized Training Program for LNG Tanker Operations” course will satisfy:



- The requirements of 46 CFR 13607(a)(2), 46 CFR 13607(b)(2), 46 CFR 13607(c)(2) and STCW, as amended 2010, Table A-V/1-2-2 for an STCW endorsement for Advanced Liquefied Gas Tanker Cargo Operations; and
- The training requirements of 46 CFR 13201(c)(4) for an endorsement as Tankerman-PIC LG and 13201(c)(4) for an endorsement as Tankerman-PIC (Barge) LG; and
- The course will also satisfy training requirements for endorsements as Tankerman-Assistant LG, Tankerman-Engineer LG, and STCW, as amended 2010, Table A-V/1-2-1 for an STCW endorsement for Basic Liquefied Gas Tanker Cargo Operations.

Course Curriculum:

1. Chemistry and Physics
2. Health, Safety and Environment
3. Hazards and Controls
4. Liquefied Gas Tanker Design and Cargo Containment
5. Cargo Handling Systems
6. Equipment and Support systems
7. Cargo Operations
8. Emergency Procedures
9. Rules and Regulations

Course Name: **Tank Ship Familiarization (Dangerous Liquids)**

November 2018 - ESTIMATED DATE OF COMPLETION

Price: \$900

Course Description: Successful completion of this course should enable candidates to serve on oil tankers in a capacity other than master, chief engineer officer, chief mate or second engineer officer, and to perform specific duties and responsibilities related to those duties in connection with cargo equipment and cargo operations.

The course satisfies the requirements of 46 CFR 13.409 for an original endorsement as Tankerman-Assistant (DL); AND satisfy the training requirements of 46 CFR 10.227(d)(8)(i)(C) for renewal of a merchant mariner credential endorsed as Tankerman-PIC (Dangerous Liquids); AND satisfies the basic training requirements of Section A-V/1-1 and Table A-V/1-1-1 of the STCW Code and provides the knowledge to support the training outcomes related to the specification of minimum standard of competence in basic training for oil and chemical tanker cargo operations.

Course Curriculum:

1. Basic Knowledge of Oil and Chemical Tankers
2. Basics of Liquid Cargo Operations
3. Knowledge of the Physical Properties of Oil and Chemicals
4. Tanker Safety Culture and Safety Management
5. Hazards associated with Tanker Operations
6. Hazard Controls
7. Understanding a Material Safety Data Sheet (MSDS)



8. Function and use of Gas-Measuring and Similar Equipment
9. Proper use of Safety Equipment and Protective Devices
10. Safe Working Practices and Procedures for Oil and Chemical Tankers
11. Knowledge of First Aid with reference to a Material Safety Data Sheet
12. Knowledge of Emergency Procedures, including Emergency Shutdown
13. Effects of Oil/Chemical Pollution on Human and Marine Life
14. Shipboard Procedures to prevent Pollution
15. Measures to be taken in the event of Spillage

Course Name: **Tank Ship Dangerous Liquids**

November 2018 - ESTIMATED DATE OF COMPLETION

Price: \$1,000

Course Description: This course prepares trainees for candidates as the Person-In-Charge of Tanker and / or Barge Operations, including loading and discharging procedures, tank preparation, pollution prevention and hazard control. This course also satisfies the Tankerman Assistant requirements for those that do not have the required Loads and Discharges.

Any candidate who successfully completes the Dangerous Liquids course will satisfy: the training requirements of 46 CFR 13.201(c)(4) for an endorsement as Tankerman-PIC DL and 13.301(c)(4) for an endorsement as Tankerman-PIC (Barge) DL; the requirements of 46 CFR 13.603(a)(2), 46 CFR 13.603(b)(2), 46 CFR 13.603(c)(2) and STCW Code Table A-V/1-1-2 for an STCW endorsement for Advanced Oil Tanker Cargo Operations; and the requirements of 46 CFR 13.605(a)(2), 46 CFR 13.605(b)(2), 46 CFR 13.605(c)(2) and STCW Code Table A-V/1-1-3.

Course Curriculum:

1. Physical and Chemical Properties of Oil and Chemical Cargoes
2. Tank and Cargo-Handling Systems
3. Tanker Safety Culture and Safety-Management System
4. Gas-Detection Systems, Instruments and Equipment
5. Cargo Operation Plans, Procedures and Sequences
6. Cargo Measurements and Calculations
7. Stability and Stress with Loading and Discharging of Cargo
8. Material Safety Data Sheet (MSDS), Hazards and Controls
9. Oil/Chemical Tanker Emergency Actions and Procedures
10. Safe Working Practices, Risk Assessment and Personal Shipboard Safety
11. Vessel Response Plans and Supervision Of Personnel with Cargo Responsibilities
12. MARPOL and Relevant IMO Instruments, Guidelines and Port Regulations



Course Name: **Security Training for Vessel Personnel with Designated Security Duties (VPDSD)**

December 2018 - ESTIMATED DATE OF COMPLETION

Price: \$250

Course Description: All ships today must have a vessel security plan (VSP). Candidates who successfully complete the VPDSD course should be able to demonstrate sufficient knowledge to undertake the duties assigned under the VSP.

Any candidate who has successfully completed the Vessel Personnel with Designated Security Duties (VPDSD) course will satisfy the requirements for security-related training, Paragraphs 6-8 of Section A-VI/6 and Table A-VI/6-2 of the STCW Code, as amended, AND satisfy the training requirements of 33 CFR 104.220.

Course Curriculum:

1. Knowledge of Current Security Threats and Patterns
2. Recognition and Detection of Weapons, Dangerous Substances and Devices
3. Recognition of Characteristics and Behavioral Patterns of Persons who are Likely to Threaten Security
4. Techniques used to Circumvent Security Measures
5. Crowd Management and Control Techniques
6. Security Related Communications
7. Knowledge of Emergency Procedures and Contingency Plans
8. Operation of Security Equipment and Systems
9. Testing, Calibration and At-Sea Maintenance of Security Equipment and Systems
10. Inspection, Control, and Monitoring Techniques
11. Methods of Physical Searches of Persons, Personal Effects, Baggage, Cargo, and Vessel Stores
12. The Meaning and the Requirements of the different MARSEC Levels
13. Familiarity with aspects of the TWIC Program and how to carry them out

Course Name: **Vessel Security Officer (VSO)**

December 2018 - ESTIMATED DATE OF COMPLETION

Price: \$500

Course Description: Each ship must have its designated and trained Security officer. Any candidate who satisfactorily completes the Vessel Security Officer course will satisfy the training requirements of 33 CFR 104.215(d)(1)(iv) and STCW Code Section A-VI/5 for an STCW endorsement as Vessel Security Officer.

This syllabus covers the requirements of the STCW Code as amended Chapter VI, Section A-VI/5. Candidates who successfully complete this course should be able to undertake the duties and responsibilities of a designated Vessel Security Officer as defined in 33 CFR Part 104.



Course Curriculum:

1. Maritime Security Policy
2. Security Responsibilities
3. Ship Security Assessment
4. Security equipment and systems
5. Ship Security Plan
6. Threat Identification, Recognition, and Response
7. Ship Security Actions
8. Emergency Preparedness, Drills, and Exercises
9. Security Administration
10. Security Training

Course Name: **Basic Training for Polar Operations (Polar Code)**

November 2018 - ESTIMATED DATE OF COMPLETION

Price: \$1,200

Course Description: This course meets the STCW mandatory minimum requirements for training and qualification of masters and officers on board ships operating in polar waters.

The course advertises the requirements of Basic Training in Polar Water, STCW table A-V/4-1. Candidates who have completed this course “are deemed to have fulfilled the STCW requirements and can work on vessels certified in accordance with the Polar Code”. The Coast Guard has issued CG-MMC Policy Letter 02-18 “Guidelines for Qualifications of Personnel for Issuing STCW Endorsements for Basic and Advanced Polar Code Operations,” (83 FR 121, June 22, 2018).

Course Curriculum:

1. Safe Operation of Vessels Operating in Polar Waters
2. Ice Characteristics and Areas with different Types of Ice
3. Vessel Performance in Ice and Low Air Temperature
4. Ability to Operate and Maneuver a Vessel in Ice
5. Compliance with Legislative Requirements
6. Crew Preparation, Working Conditions and Safety
7. Compliance with Pollution Prevention Requirements

Course Name: **Advanced Training for Polar Operations (Polar Code)**

Mid 2019 - ESTIMATED DATE OF COMPLETION

Price: \$1,500

Course Description: This course is designed to provide an advanced training for those mariners involved in working on vessels in polar waters as senior navigating officers.

It meets the standards of Table A-V/4-2 of the STCW Code. Candidates who have completed this course “are deemed to have fulfilled the STCW requirements and can work on vessels certified in accordance with the Polar Code.” The Coast Guard has issued CG-MMC Policy Letter 02-18



“Guidelines for Qualifications of Personnel for Issuing STCW Endorsements for Basic and Advanced Polar Code Operations,”
(83 FR 121, June 22, 2018).

Course Curriculum: Prerequisite Course: Basic Training for Polar Operations (Polar Code)

1. Plan and Conduct a Voyage including Reporting in Polar Waters
2. Safe Operation of Vessels Operating in Polar Waters
3. Knowledge of Equipment Limitations
4. Safety of the ship's crew and passengers

Course Name: **Engine Room Resource Management (ERM)**

Late 2019 - ESTIMATED DATE OF COMPLETION

Price: \$1,000

Course Description: ERM will help in avoiding human errors and thus the cause of failures. This course is designed to provide an officer in charge of an engineering watch an understanding of the proper utilization and considerations given to resources available in a maritime engine department.

Any candidate who successfully completes the Engine Room Resource Management course will satisfy the:

- Engine Room Resource Management training requirements in 46 CFR 11.325(a)(3)(i) and (b)(1); 46 CFR 11.327(a)(3)(i) and (b)(1); 46 CFR 11.329(a)(4)(iv); 46 CFR 11.331(a)(3)(i) and (b)(1); and 46 CFR 11.333(a)(3)(i); and (b)(1); AND
- Leadership and Teamworking Skills requirements of 46 CFR 11.329(c); AND
- Specific tasks from NVIC 17-14 Officer in Charge of an Engineering Watch: 1.1.F; 1.4.A; 3.1.A; 16.1.A; 16.2.A; 16.3.A; 16.4.A.
- Candidates who have successfully completed this course need not present completed “Task Control Sheets” for these assessments in application for STCW certification.

Course Curriculum:

1. Introduction and Objectives
2. Knowledge of the Company Policies and Organizational Structures
3. Cultural Diversity and Communications
4. Planning and Coordination
5. Allocation, Assignment and Prioritization of Resources
6. Effective Communication Onboard and Ashore
7. Assertiveness and Leadership, including Motivation
8. Situational Awareness and Risk Assessment
9. Identify and Consider Generated Options
10. Selecting the Course of Action
11. Evaluation of Outcome Effectiveness



Course Name: **Ballast Water Management (BWM)**

December 2018 - ESTIMATED DATE OF COMPLETION

Price: \$350

Course Description: This course is designed to provide sufficient knowledge and understanding of the ballast water management regulations and operational compliances, required under the US laws and the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) adopted in February of 2004 that entered into force in September of 2017.

Successful completion of the course will make the candidate understand the impact of uncontrolled ballast water admissions into restricted waters and the systems and technologies that are available to control that. The candidates will also learn the operational aspects of recordkeeping and maintenance of the BWMS, when onboard.

Course Curriculum:

1. BWMC 2004
2. Ballast Water Management Plan
3. Ballast Water Reporting Requirements
4. Ballast Water System and Energy Efficiency
5. BW Treatment Technologies
6. Ballast Water Treatment methods on board
7. Selection of BWTT systems on board
8. BW Compliance monitoring and testing
9. Updates on USCG BWM Requirements
10. The BWM- current issues and challenges
11. U.S. Requirements
12. Referencing US-BWM regulations- Important Extracts

Course Name: **High Voltage Safety**

Late 2019 - ESTIMATED DATE OF COMPLETION

Price: \$1,000

Course Description: This course has been designed to satisfy the HV requirements laid out in the Standards of Training, Certification and Watchkeeping (STCW), Manila Amendments, and is approved by the United States Coast Guard.

Any candidate who successfully completes our High Voltage Safety course will satisfy:

- The High-Voltage Power Systems training requirements of 46 CFR 11.335(a)(4)(vi) for STCW endorsement as an Electro-Technical Officer (ETO);
- The High-Voltage Power Systems training requirements of 46 CFR 12.611(a)(4)(ii) for STCW endorsements as an Electro-Technical Rating (ETR);
- The equivalent of the specific tasks found in the National Assessment Guidelines of the Electro-Technical Officer NVIC 23-14. 1.1.A; 8.1.A and 17.1.D AND



- The equivalent of the specific TASK found in the National Assessment Guidelines of the Electro-Technical Rating NVIC 24-14. 1.1A; 2.1.A; and 8.2.A.

Course Curriculum:

1. Safety Rules on Marine HV Environment according to Current Regulations and Recommendations (STCW, SOLAS, HSE etc.)
2. Marine HV Safety Aspects and Safe Working Procedures
3. Special Considerations for Shipboard/Offshore Electrical Installations
4. Dangers of Electricity and Arc-Faults in Switch Gears
5. Personal Protective Equipment
6. Marine Electrical, Propulsion and Distribution Systems
7. Protection System of Electrical Installations
8. Accident Analysis Workshop

Course Name: **MARPOL Basics**

December 2018 - ESTIMATED DATE OF COMPLETION

Price: \$350

Course Description: **MARPOL Basics** teaches Officers, Superintendents, Port Captains and Crew what the regulations are and how to comply with them. The course is designed to help the community of seafarers to be updated with the latest regulatory demands. It lays emphasis on the correct methods to meet the requirements and prevent abuse of the experience sharing brings about a total coverage to the issue of marine pollution.

Course Curriculum:

1. Marine Environment: Law of the sea (UNCLOS), UNCLOS on Marine Pollution
2. MARPOL Annexes: Annex I, Annex II, Annex III, Annex IV, Annex V, Annex VI
3. MARPOL 73/78
4. Delivery of MARPOL Waste
5. MARPOL Equipment
6. Sources and Effects of Marine Pollution
7. Reporting of Pollution Incidents
8. Marine Pollution Regulations in US
9. OPA 90
10. SOPEP, Vessel Response Plan and VGP
11. Tank Vessel on Board Spill Equipment
12. Non-tank Vessel on Board Spill Equipment
13. Garbage Waste Management Plan
14. Other Conventions on Pollution Prevention
15. Liability Claims for Marine Pollutions
16. IOPC and other funds
17. Pollution Casualties and Criminalization of Seafarers



Course Name: **Train the Trainer**

Late 2019 - ESTIMATED DATE OF COMPLETION

Price: \$1,250

Course Description: Completion of this course will be required for onboard Assessors. The USCG Approved Train the Trainer Course is based on the IMO Model Course 6.09. Trainees successfully completing this course should be capable of undertaking the responsibilities expected of instructors and/or assessors within their field of expertise. They will be aware of the training requirements and provisions of STCW as amended. They will also be familiar with the concepts considered when formulating a training program.

Any candidate who has successfully this course will satisfy the Train the Trainer and Assessor training requirements of 46 CFR 10.402(b)(2)(iii)(A), 10.405(a) and CFR 10.407(c)(5)(i). This course is also approved as satisfying the requirements for instructors and assessors as stated in Section A-I/6, paragraph 7, of the STCW Code, as amended 2010 and the guidance regarding Qualified Instructors as stated in NVIC 03-14, and Qualified Assessors as stated in NVIC 19-14.

Course Curriculum:

1. Identification of training needs
2. Learning processes
3. Course design
4. Teaching methods
5. Recognition of individual capacity
6. Identification of performance standards
7. Presentation techniques and use of media
8. Measurement of progress towards training objectives and of adequate performance
9. Favorable and unfavorable conditions for learning
10. The role of incentive and motivation in learning
11. The use of feedback for performance improvement

Course Name: **Leadership & Managerial Skills**

December 2018 - ESTIMATED DATE OF COMPLETION

Price: \$1,000

Course Description: This course is constructed as outlined in Subpart D of Part 10, Title 46, Code of Federal Regulations. Any candidate who successfully completes the course will satisfy, the Leadership and Managerial Skills training requirements for STCW Endorsements of Master or Chief Mate on Vessels of 3,000 GT or more (Management Level) as well as, STCW Endorsements for Chief Engineer Officer and Second Engineer Officer on Ships powered by Main Propulsion Machinery Of 3,000 kW/4,000 HP Propulsion Power or more (Management Level).

Course Curriculum:

Leadership and Management:



Decision Making, Planning, Task and Workload Management, Effective Resource Management Onboard, Effective Communications, Teamwork, Assertiveness, Leadership and Motivation, Obtaining and Maintaining Situational Leadership

Leadership in the Maritime Environment:

Personnel Management and Administration, Operations, Drills and Training, Maintenance and Drydocking, International Maritime Conventions and Recommendations and National Legislation, Safety and Environmental Leadership in the Maritime Industry, Development, Implementation and Oversight of Standard Operating Procedures



Professional Development & Advancement Courses

Course Name: **Ship Superintendent- General**

Price: 2,000

Course Description: This program is a comprehensive training portfolio consisting of seven courses for a Ship Superintendent. The courses provide the necessary management skills to supervise and support ship operations, as well as upkeep and maintenance from ashore.

Course Curriculum:

Corporate and Social Responsibility:

Industry Organizations, Role of Superintendent, Personnel Management

Financial Management for Ships:

Budget and Cost Control, Purchase, Sale, Takeover and Delivery, Reporting and Record Keeping, Purchasing

Health, Safety and Environment:

Risk Management and ISPS Code, Health and Environment, Emergency Response, Ship Recycling

Maritime Insurance and Law:

International Conventions , ISM Code-MS, Classification Society, Registration of Ships, Marine Insurance

Project Management and Quality Assurance:

Project Management, Quality Assurance, Information Technology

Ship Certification and Surveys:

Ship Inspections, Certification and Survey of Ships, Port State Control

Ship Performance, Drydocking, and Repairs:

Monitoring Of Ships Performance, Drydocking and Repairs, Corrosion Protection and Painting Systems

Course Name: **Ship Superintendent –Marine**

Price: \$590

Course Description: ECMTS offers two targeted online courses providing knowledge and skills training for Marine Ship Superintendents. Courses instruct on broad-based marine construction , operations control including planning and scheduling and nautical equipment.

Course Curriculum:

Chartering and Cargo Carriage:

Chartering Your Ship, Pre Charter, On Charter, Post Charter, Resources, Planning the Carriage,



Loading and Unloading Procedures, Monitoring Cargo Maintenance , Cargo Damage and Claims, Resources , Extra Reference Material

Control of Operations and Nautical Equipment:

Monitoring and Control, Resources , Regulations, Maintenance , Fitting and Commissioning , Resources, Extra Reference Material

Course Name: **Ship Superintendent- Technical**

Price: \$590

Course Description: Our Ship Superintendent – Technical online skills and training courses offer advanced training for Port Engineers who will be tasked with coordinating fleet repair and maintenance. They provide instruction on machinery and equipment inspection and maintenance , as well as use of the tools and equipment available today to ensure successful performance on the job.

Course Curriculum:

Hull:

Ship Structure, Inspection, Resources

Machinery:

Machinery, Resources

Maintenance:

Safety Culture, Resources

Control Systems:

Why Control Systems? Control System Operations, Control System Failures , Resources

Technical Equipment:

What is Technical Equipment? Safe Working Load, Requirements , Responsibilities , Resources

Materials:

Hull, Machinery, Repair Specification, Resources

Course Name: **Breakbulk Shipping**

Price: \$750

Course Description: Breakbulk cargo is defined as general cargo or goods that do not fit in or utilize standard shipping containers or cargo bins. Instead, breakbulk cargo is transported individually, often times on a skid or pallet or in a crate. Examples of breakbulk cargo include construction equipment, manufacturing materials, oversized vehicles, boats, cranes, turbine blades, ship propellers, generators, large engines and more.

Transportation of heavy lift, project cargo and non-containerized cargo is a sector of shipping that requires specialized knowledge. As a rapidly growing, important area of maritime



business, Breakbulk Shipping calls for new entrants with the appropriate skills and existing professionals who can achieve a global benchmark of industry knowledge.

Course Curriculum:

Breakbulk Transportation Process:

World Trade Patterns, Transportation Modes

Breakbulk Cargo:

Breakbulk Cargo Handling, Cargo Operations, Safe Carriage, Cargo Monitoring, Cargo Control, Cargo Care

Breakbulk Chartering:

Vessel Operations, Chartering Process, Stakeholders, Customer Interaction, Documentation

Course Name: **LNG as Marine Fuel**

Price: \$1,500

Course Description: Liquefied Natural Gas (LNG) is a clean and eco-friendly fuel. It has good heating ability (calorific value) and offers greater fuel efficiency when used for domestic or industrial purposes. “MARPOL’s Annex VI will require that the Sulphur content of marine fuels be reduced to 0.5% by 2020. This will require vessels to use much more expensive low Sulphur fuel oils.

A potential long-term alternative solution is using LNG as a marine fuel. LNG contains no Sulphur and its combustion process produces very low NO_x compared to all diesel fuels. Given the abundant availability of LNG in the market, ship owners and operators are looking to LNG fueled vessels as the long-term solution to reducing their carbon footprint and complying with MARPOL’s growing emission standards under Annex VI. As existing vessels are converted over to LNG fueled vessels and new vessels are built as LNG fueled vessels, there will be a greater demand for on board engineers with the training and knowledge in operating engines using LNG as a fuel.” Hence, qualified crew members are highly sought after and well-rewarded. ECMTS offers LNG as Fuel Program which comes with On-line Skills and Training Program that provides a solid knowledge base for those looking to enter the field.

Course Curriculum:

LNGF Basics:

Conversion and Newbuilding for LNGF, Basics of LNG, Chemistry and Physics, Transportation and Behavior of LNG, Scrubbers for non-LNGF ships, LNGF Refresher Interactives

LNGF Bunkering:

Bunkering Facilities, LNG Bunkering Challenges, Bunkering Options, Bunkering System Components, Emergency Shut Down System ESDS, Bunkering Operations, Safety of Bunkering Operation, LNG Bunkering Considerations, Custody Transfer

LNGF Containment and Ancillaries:

LNG Storage and Containment, Ancillary systems



LNGF Main Engine and Equipment / Control Systems:

LNGF Training, logistics and Commercial: Logistics and Commercial, Training Need

Course Name: **LNG Cargo Operations**

Price: \$1,500

Course Description: Liquefied Natural Gas (LNG) is a clean, eco-friendly fuel which has good heating ability (calorific value) and offers greater fuel efficiency when used for domestic or industrial purposes. The worldwide share of LNG trade has increased from 6% in 1970 to over 30% today. This boom has led to rapid expansion in the LNG trade and the number of LNG ships carrying this cargo. Highly skilled and highly trained crew members are in demand.

Course Curriculum:

LNG Basics:

Physics and Chemistry, Principles of Design, Principles of Operations Cargo Containment, Propulsion System

LNG Equipment:

Inert Gas Generation Plant, Nitrogen Generation Plant, Gas Compressors, Gas Heaters, Vaporizers, Cargo Pumps, Vacuum Pumps, Relief Valves, Reliquefaction Plant

LNG Ancillary Systems:

Cofferdam Heating System, Portable Gas Detectors, Fixed Gas Detection Systems, Level Gauging Systems, Custody Transfer System, Distributed Control System, Certified Safe Electrical Equipment

LNG Cargo Operations:

Cargo Practice, Post Delivery, Normal Voyage, Pre-Docking, On Moss Carriers, Emergency Procedures Ship to Ship Transfer, Emergency Mooring Release

Course Name: **Maritime Logistics**

Price: \$750

Course Description: Maritime logistics is the process of moving cargo from its point of origin to its final destination, such as from an overseas manufacturer to a consumer's store shelves. This process has created a wealth of career opportunities and an immediate need for a qualified workforce.

This program covers the latest practices in maritime transportation and supply chain management. The complexity of decision-making in logistics and transportation involving its many stakeholders and processes are a part of this interesting program.

Course Curriculum:

1. World Trade Patterns
2. International trade and multi-modal transportation
3. Supply Chain
4. Intermodal and multimodal transportation
5. Ship Types
6. Ship's Operation
7. Ports and Terminals
8. Logistics of Breakbulk Cargo
9. Petroleum Logistics
10. Container Shipping and Systems
11. Documentation
12. Information Management
13. Maritime Security
14. Integrated Case Study