

Safety & Health Fundamentals Certificate Program for Maritime

Participants must complete a minimum of 7 OTI Education courses, comprised of required and elective courses that include a minimum of 77 contact hours of training to earn the certificate in *Safety & Health Fundamentals for Maritime*.

- Participants must complete the **3 required** courses listed below for a minimum of **48** contact hours of training.
- Participants must complete a minimum of **4 elective** courses listed below that include a minimum of **29** contact hours of training.

Required Courses		
Course Number and Title	Course Description	Minimum Contact Hours
OSHA #5410 <i>Occupational Safety and Health Standards for the Maritime Industry</i>	This course covers OSHA standards, policies, and procedures in the maritime industry. Using the OSHA Maritime Standards as a guide, special emphasis is placed on those areas in the maritime industry, which are most hazardous. Upon course completion, students will define maritime terms found in the OSHA Maritime Standards, identify hazards in the industry and determine appropriate controls and abatement, locate OSHA Maritime Standards, policies and procedures, and describe the use of the OSHA Maritime Standards and regulations to supplement an ongoing safety and health program.	35
OSHA #7500 <i>Introduction to Safety and Health Management</i>	Using interactive assignments and thought-provoking group projects, students of this one-day workshop come away with a strong understanding of the benefits in implementing a safety and health management system in the workplace.	5.5
OSHA #7505 <i>Introduction to Incident (Accident) Investigation</i>	Introduction to accident investigation provides an introduction to basic accident investigation procedures and describes accident analysis techniques. The goal of the course is to help participants gain the basic skills necessary to conduct an effective accident investigation at their workplace. The target audience is the employer, manager, employee or employee representative who, as part of a firm's safety and health system, would be involved in conducting accident and/or near-miss investigations.	7.5
TOTAL HOURS		48

Elective Courses for Maritime Industry

Course Name and Title	Course Description	Minimum Contact Hours
OSHA #521 <i>OSHA Guide to Industrial Hygiene</i>	This course covers industrial hygiene practices and related OSHA regulations and procedures. Course topics include recognition, evaluation, and control of chemical, physical, biological and ergonomic hazards, Permissible Exposure Limits (PEL), OSHA health standards, respiratory protection, engineering controls, OSHA sampling protocols and strategies, and workplace health program elements. The course features workshops in health hazard recognition, OSHA health standards, and use of sampling equipment. Upon course completion students will have the ability to recognize basic industrial hygiene principles and practices, identify characteristics of common air contaminants, locate PELs, perform basic industrial hygiene calculations, and determine methods for hazard control and abatement.	26
OSHA #2015 <i>Hazardous Materials</i>	This course covers OSHA General Industry Standards and other consensus and proprietary standards that relate to the use of hazardous materials. Course topics include flammable and combustible liquids, compressed gases, LP-gases, and cryogenic liquids. Related processes such as spraying and dipping, and use of electrical equipment in hazardous locations are also discussed. Upon course completion students will have the ability to assess compliance with OSHA hazardous materials standards, determine hazardous (classified) locations, and proper moving, storing, and handling of hazardous materials.	26
OSHA #2055 <i>Cranes in Construction</i>	This course covers the best practices in crane and derrick operation using the OSHA Cranes and Derricks in Construction Rule as a guide. Course topics include hazards associated with crane assembly and disassembly, types of cranes, lifting concepts, rigging and wire rope, signaling, employee qualifications and training, and maintenance, repair, and inspection requirements. Students will participate in workshops to reinforce concepts of safe crane operation.	22.5
OSHA #2225 <i>Respiratory Protection</i>	This course covers the requirements for the establishment, maintenance, and monitoring of a respiratory protection program. Course topics include terminology, OSHA Respiratory Protection Standards, NIOSH certification, respiratory protection programs, and medical evaluation requirements. Program highlights include workshops on respirator selection, qualitative and quantitative fit testing, and the use of respiratory protection and support equipment. Upon course completion students will have the ability to identify and describe the elements of a respiratory protection program, the proper selection, use, and inspection of respiratory protection, protection factors, and evaluate compliance with OSHA Standards.	26

Elective Courses for Maritime Industry

Course Name and Title	Course Description	Minimum Contact Hours
OSHA #2255 <i>Principles of Ergonomics</i>	This course covers the use of ergonomic principles to recognize, evaluate, and control workplace conditions that cause or contribute to musculoskeletal and nerve disorders. Course topics include work physiology, anthropometry, musculoskeletal disorders, use of video display terminals, and risk factors such as vibration, temperature, material handling, repetition, and lifting and patient transfers in health care. Course emphasis is on industrial case studies covering analysis and design of workstations and equipment workshops in manual lifting, and coverage of current OSHA compliance policies and guidelines. Upon course completion, students will have the ability to recognize work-related musculoskeletal and nerve disorders, assess employer's ergonomic programs, and conduct ergonomic evaluations.	18
OSHA #3085 Principles of Scaffolding	This course covers the requirements for safe construction and use of scaffolding using OSHA's construction scaffold standards as a guide. Course topics include hazards associated with scaffold design, assembly, disassembly and use, types of scaffolds, determining scaffold capacity, employee qualifications and training and maintenance, repair and inspection requirements. Students will participate in workshops to reinforce concepts of safe scaffolding. Upon course completion students will have the ability to identify the types of scaffolds and their components, determine safe assembly, use, and disassembly and recognize common violations of OSHA standards.	22
OSHA #3095 <i>Electrical Standards</i>	This course covers OSHA electrical standards and the hazards associated with electrical installations and equipment. Course topics include; single- and three-phase systems, cord- and plug-connected and fixed equipment, grounding, ground fault circuit interrupters, and safety-related work practices. Emphasis is placed on electrical hazard recognition and OSHA standards, policies, and procedures and applicable portions of the National Electrical Code (NEC). Students will participate in workshops on the safe and correct use of electrical testing equipment. Upon course completion, students will be able to understand the severity of electrical current on the human body, detect electrical hazards and determine applicable OSHA standard, recognize actual and potential electrical hazards and determine hazard abatement, understand proper use of electrical testing equipment.	26

Elective Courses for Maritime Industry

Course Name and Title	Course Description	Minimum Contact Hours
<i>OSHA #3115 Fall Protection</i>	This course provides an overview of state-of-the-art technology for fall protection and current OSHA requirements. Topics covered include the principles of fall protection, the components of fall arrest systems, the limitations of fall arrest equipment, and OSHA policies regarding fall protection. Course features a one-day field exercise demonstrating fall protection equipment.	18
<i>OSHA #7005 Public Warehousing and Storage</i>	This course covers the hazards and injuries likely to occur in public warehousing and storage operations, including encounters with powered industrial trucks, material handling, lifting and ergonomics, hazard communication, walking and working surfaces, and life safety including fire protection and evacuation. This course is intended for warehouse workers, supervisors, and employers responsible for developing safe work practices and procedures in a warehouse setting.	7
<i>OSHA #7105 Evacuation and Emergency Planning</i>	Evacuation and emergency planning focuses on OSHA requirements for emergency action plans and fire protection plans. Preparing for emergencies is a basic principle of workplace safety and health. Participants will learn: (1) reasons for emergency action plans and fire prevention plans and when they are required for a workplace; (2) elements of a good evacuation plan; and (3) features of design and maintenance of good exit routes. The optional session for this course will focus on assessment of risk for terrorist attack and how to utilize OSHA's two matrices: (1) evacuation planning and (2) fire and explosion, as tools in planning for emergencies.	4
<i>OSHA #7115 Lockout/Tagout</i>	This course covers the role and responsibility of the employer to develop and implement an energy control program, or lock-out/tag-out (LOTO) for the protection of workers while performing servicing and maintenance activities on machinery and equipment. Course topics include types of hazardous energy, detecting hazardous conditions, implementing control measures as they relate to the control of hazardous energy, developing and implementing energy control programs including written isolation procedures, training of authorized and affected employees, and periodic inspection of energy control procedures using the OSHA Control of Hazardous Energy Standard.	7.5

Elective Courses for Maritime Industry

Course Name and Title	Course Description	Minimum Contact Hours
OSHA #7120 <i>Introduction to Combustible Dust Hazards</i>	This course covers the hazards posed by combustible dust within general industry. Course topics include recognizing the hazards and risks associated with combustible dust, control of electrical installation hazards, and developing controls and strategies to prevent or mitigate combustible dust fires and explosions. Upon course completion the student will have the ability to utilize strategies that assure employee safety while using or producing materials that generate combustible dust and the ability to use OSHA Standards, National Fire Protection Association (NFPA) Standards, and other applicable consensus standards that impact industries which generate combustible dust.	6.5
OSHA #7205 <i>Health Hazard Awareness</i>	This course provides an introduction to common health hazards that are encountered in the workplace. These health hazards will include exposure to chemicals, asbestos, silica and lead. The course will feature these topics: identification of hazard; sources of exposure; health hazard information; evaluation of exposure; and engineering and work practice controls. The course materials will include an instructor and student manual; workshops and group activities; and PowerPoint presentations. The course is designed as an awareness course for employers and employees.	6
OSHA #7215 <i>Silica in Construction, Maritime, and General Industries</i>	This course covers the development and implementation of controls and strategies to prevent or mitigate silica exposures in construction, maritime, and general industries. Course topics include describing the requirements of OSHA's Respirable Crystalline Silica standards and recognizing the hazards and risks, assessment options, and exposure control measures associated with silica exposure.	7
OSHA #7845 <i>Recordkeeping Rule Seminar</i>	This course covers OSHA requirements for maintaining and posting records of occupational injuries and illnesses, and reporting specific cases to OSHA. Participants who successfully complete this course will be able to identify OSHA requirements for recordkeeping, posting, reporting, and to complete new OSHA forms 300, 300A, and 301.	4

Elective Courses for Maritime Industry

Course Name and Title	Course Description	Minimum Contact Hours
<p>OSHA #2264 <i>Permit-Required Confined Space Entry</i></p> <p>OR</p> <p>OSHA #7300 <i>Understanding OSHA's Permit-Required Confined Space Standard</i></p>	<p>This course is designed to enable students to recognize, evaluate, prevent, and abate safety and health hazards associated with confined space entry. Technical topics include the recognition of confined space hazards, basic information about instrumentation used to evaluate atmospheric hazards, and ventilation techniques. This course features workshops on permit entry classification and program evaluation.</p> <p>This course covers the requirements of the OSHA Permit-Required Confined Space Standard. Course topics include safety and health hazards associated with confined space entry, and the evaluation, prevention, and abatement of these hazards. The course covers OSHA requirements; it does not feature workshops (instrumentation, control methods and testing) which are included in the OSHA #2264 Permit-Required Confined Space Entry. This course is designed for small employers or a designated representative (line supervisor or manager) with the responsibility to develop a permit-required confined space program. Upon course completion students will have a basic understanding of confined space hazards, evaluating and abatement of the hazards, and determining when a confined space shall be classified as a permit-required confined space.</p>	<p>20</p> <p>7</p>
<p>OSHA #2045 <i>Machinery & Machine Guarding Standards</i></p> <p>OR</p> <p>OSHA #7100 <i>Introduction to Machinery and Machine Safeguarding</i></p>	<p>This course covers the various types of common machinery, machine safe guards, and related OSHA regulations and procedures. Guidance is provided on the hazards associated with various types of machinery and the determination of proper machine safe guards. Course topics include machinery processes, mechanical motions, points of operation, control of hazardous energy sources (lockout/tagout), guarding of portable powered tools, and common OSHA machine guarding violations.</p> <p>The main focus of this course is to increase the participant's knowledge and skill in proper machine safeguarding techniques, and to highlight the benefits of guarding various types of machinery. It is the employer's responsibility to identify and select the safeguard necessary to protect employees and others in the work area, as well as provide appropriate training in safe work practices. Knowing when and how to properly safeguard machinery can reduce or eliminate the potential for accidents and injuries.</p>	<p>26</p> <p>4</p>