

€ TRAINING

Conference: Diploma in Maritime Fire
Prevention, Firefighting and Fire Safety





Conference: Diploma in Maritime Fire Prevention, Firefighting and Fire Safety

Introduction

With this Maritime Fire Prevention, Fire Fighting and Fire Safety Diploma you will gain an in-depth knowledge of not only firefighting operations but also the preventative measures required to manage the risk from fires on ships. The modules will raise your awareness of the risks associated with fire as well as develop your knowledge of the combustion process. It will also give you an understanding of the existing legislative requirements around SOLAS, the International Fire Safety Systems Code and the process of fire risk assessment. Finally, it will share some practical firefighting strategies and tactics and the actions you should take as part of your post-fire procedures.

Program Objectives

At the end of this program the participants will be able to:

- Have an overall background over maritime firefighting
- Be aware of the chemistry of combustion and methods to extinguish fire
- Become familiar with Escape & Operational Requirements SOLAS
- Understand the International Fire Safety Systems
- Assess Fire Risk and precautions
- Conduct Post Fire Procedures

Targeted Audience

The program is suitable for those working or aspiring to work in the ship and passenger safety sector including personnel undertaking firefighting activities and safety management both at sea and ashore.

Program Outline

Unit 1: Introduction to Maritime Firefighting

- Introduction to fire
- History of firefighting at sea
- Notable incidents
- Legislation
- Ship fire risk analysis
- International State Port Control Inspections

Unit 2: Chemistry of Combustion

- Theory of combustion
- Ignition temperature
- Classification of fires
- Products of combustion
- Transmission of heat
- Methods of extinguishing fire
- Extinguishing media
- Backdraught & flashover

Unit 3: Prevention and Suppression of Fire & Explosion SOLAS

International Convention for the Safety of Life at Sea Solas

- General
- Prevention of Fire and Explosion
- Suppression of Fire

Unit 4: Escape & Operational Requirements SOLAS

- Escape
- Operational requirements
- Alternative design and arrangements
- Engineered Solutions

Unit 5: Special Requirements SOLAS

- Helicopter facilities
- Carriage of dangerous goods
- Protection of vehicle, special category and ro-ro spaces
- Casualty threshold, safe return to port and safe areas
- Design criteria for systems to remain operational after a fire casualty
- Safety Centre on passenger ships

Unit 6: International Fire Safety Systems FSS Code Part 1

- The International Code for Fire Safety Systems FSS code
- Personnel protection
- Fire extinguishers
- Fixed gas fire-extinguishing systems
- Fixed foam fire-extinguishing systems
- Fixed pressure water-spraying and water-mist fire-extinguishing systems
- Automatic sprinkler, fire detection and fire alarm systems
- Fixed fire detection and fire alarm systems
- Maintenance and Inspection of Fire Protection Systems and Appliances

Unit 7: International Fire Safety Systems FSS Code Part 2

- Fixed Fire Detection And Fire Alarm Systems
- Sample extraction smoke detection systems
- Low-location lighting systems
- Fixed emergency fire pumps
- Arrangement of means of escape
- Fixed deck foam systems
- Inert gas systems
- Fixed Hydrocarbon Gas Detection Systems

Unit 8: Fire Risk Assessment

- Controlling the risks in relation to fire
- Identify the hazards

- Identify people at risk
- Evaluate, remove, reduce and protect from risk
- Record, plan, inform, instruct and train
- Review
- Risk assessment process
- Further guidance on fire risk assessment and fire precautions
- Further guidance on escape routes
- Further guidance on recording, planning, informing, instructing and training

Unit 9: Firefighting Operations

- Pre-planning
- Command & control
- Information gathering
- Risk assessment
- Strategy & tactics
- Fire party organization
- Firefighting techniques
- Search procedures
- Stability
- Ventilation
- External assistance

Unit 10: Post Fire Procedures

- First aid
- Recovery
- Liaison with external organizations
- Incident Review
- Fire Investigation
- Case studies
- Future challenges