

## Ballast Water Management

Delivery Method: eLearning || Duration: 4 hours || Course Fee: 280 €

Category: Rules and Regulations; Class & Statutory Surveys

Available languages: English

### Certificate

On completion of the training program, the student will be awarded:

- A Certificate of **Ballast Water Management**, issued by Bureau Veritas Solutions Marine & Offshore.

The Certificate of **Ballast Water Management** is obtained after completion of the course and passing the online test.

### Presentation

This training course composed of 2 modules provides an overview of the requirements of the Ballast Water Management International Convention and the technical aspects related to the ballast water treatment equipment.

### Whom the course is for

The course **Ballast Water Management** is aimed at anyone interested in understanding the requirements of the BWM International Convention and the technical aspects related to ballast water treatment systems. This may include: Ship Managers, Technical Superintendents, Ship Masters, Officers and Seafarers; Shipyards Technical Staff; Surveyors; P&I and/or Insurance Inspectors; Naval Architects; Marine Engineers; etc.

### Objectives

On completion of the training, students will be able to:

- Understand the background of the Ballast Water Management Convention, its structure and the most important regulations
- Know the difference between the ballast water exchange and the performance standards
- Understand the role of all stakeholders and actors
- Be familiar with the approval, inspections, commissioning and tests of Ballast Water Management systems
- Understand the survey and certification requirements
- Be familiar with the different technologies used and the installation requirements

## Program

### Module 1 – BWM Regulatory Aspects

- Background
  - Ballast water as a vector of invasive species
  - Alien species impact
  - Most unwanted species
  - Means of prevention
- The Ballast Water Management Convention
  - Timeline
  - Purpose and acceptance
  - Structure of the Convention
  - Guidelines
  - Definitions
  - Application
  - Exemptions and exceptions
  - Entry into force
  - Implementation schedule
- Duties of the main stakeholders
  - Administrations' responsibilities
  - Ship Owners' responsibilities
- Ballast Water Management Standards
  - Ballast water exchange standards (D-1)
  - BWE safety aspects
  - Ballast water performance standards (D-2à
  - Contingency measures
  - Ballast water management system approval
- USCG Position
  - BWM Regulation
  - Exemptions
  - Performance standards
  - Schedule
  - BWM systems for use in US waters

### Module 2 – BWM Technical Aspects

- BWM Surveys
  - Survey schedule and survey types
  - Maintenance of conformance
  - Non-conformance
  - Detainable deficiencies
- International Ballast Water Management Certificate
  - Issuance of the certificate
  - Duration and validity of the certificate
  - Form of the certificate and statement of compliance

- BWM System Approval
  - Approval types and scope
  - Approval processes
  - Basic and final approval
  - Approved systems
- Sampling
  - Sampling requirements for ballast water exchange standards (D-1)
  - Sampling requirements for ballast water performance standards (D-2)
  - Sample quality and analysis protocol
- Ballast water treatment systems technologies
  - Mechanical separation, methods and process
  - Physical disinfection
  - Chemical treatment and biocides
  - Ballast water treatment system typical operation
  - Comparison of the different technologies
- Ballast water treatment systems installation
  - Installation challenges
  - Installation options for different ship types