

# Introduction to DP Systems

Delivery Method: eLearning || Duration: 1,5 hours || Course Fee: 280 €

Category: Naval Architecture & Marine Engineering

Available languages: English

## Certificate

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

- A Certificate of **Introduction to DP Systems**, issued by Bureau Veritas Solutions Marine & Offshore.

The Certificate of **Introduction to DP Systems** is obtained after completing the course and passing the online test.

## Presentation

This training course provides a general introduction to dynamic positioning systems, which are computer-controlled systems that automatically maintain the vessel's position and heading by using their propellers and thrusters.

## Who the course is for

The course **Introduction to DP Systems** is aimed at anyone interested in understanding the design and operational principles of Dynamic Positioning Systems and their main components. This may include Ship Managers, Technical Superintendents, Ship Masters, Officers and Seafarers; Offshore Units Operators and Technical Staff, Shipyards Technical Staff; Surveyors; P&I and/or Insurance Inspectors; Etc..

## Objectives

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

- Get familiar with dynamic positioning systems.
- Know the main components of dynamic positioning systems, equipment used and installation.
- Know the Class requirements in terms of surveys and tests of dynamic positioning systems

## Program

- History
- Characteristics and scope of DP systems
- Applications
- Equipment class
- Classification notations
- System configuration: power system, thruster system, control system, position reference systems, computer system, display system
- Redundancy
  - Redundant systems
  - System failures
  - Redundancy concept
  - Terms
  - Single fault tolerance
  - FMEA
- Design environment
- Essential non-DP systems
- Performance analysis
- Operational requirements
- System components
  - Power system
  - Thruster system
  - DP control system
  - Position reference system: acoustical, taut-wire and other reference systems
- Scope of DP surveys
  - Inspections at works
  - Surveys during construction, tests and trials
  - Surveys during operation: Annual and Renewal surveys, operational test, Occasional surveys