

# 72 PLCMA PROGRAMMABLE LOGIC CONTROLLERS FOR MARINE APPLICATION



*The future of  
world class  
seafarers*

This course is intended for marine engine officers and electrical officers. It is designed to provide basic understanding of the design technicalities and principles of operation of a PLC which cover writing, implementation and creation of simple programs. In effect, it shall enable participants to translate, design, test, troubleshoot and document simple control tasks into fully operational PLC applications used in maritime industries.

**COURSE AIMS:** At the end of the course, participants should be able to replicate control task into fully operational PLC programs – test and commission these program using an electro-pneumatic control system. Moreover, it shall enable participants to utilize the man-machine interface of the PLC using RS 485 protocol.

**COVERAGE / PROGRAM FOCUS:** Lectures on the following subject areas and hands-on exercises relevant to marine applications using Electro-pneumatic control system:

- PLC components
- Basic design of a PLC
- Automation using a PLC
- Defining appropriate control system for a given task
- Input, Output, Digital/Analog
- Time depending control using-Timers
- Counting dependent controls using Counter
- Programming devices
- Boolean operation
- Ladder programming
- Man-machine interface
- Commissioning and troubleshooting
- Communication, back up & documentation

**METHOD:** Lectures will be complemented with “hands on” simulation of the laboratory activities & practical exercises using electro-pneumatic equipment and professional laboratory facilities.

**ENTRY REQUIREMENT / TARGET GROUP:** Entry to this course is open to all Marine Engine / Electrical Officers on Offshore Units and onboard Merchant Vessels.

Those intending to take the course should have basic knowledge of computer operations and completed Control Engineering Module 1 & 2 or possess good background on Pneumatic & Electro-pneumatics.

**COURSE CERTIFICATE:** A Certificate of Completion is given to each participant who satisfactorily fulfills the Course.

**DURATION:**

1 Week

(5 Days: 0830H – 1630H)

**SCHEDULE:**

This course shall be conducted only upon request with minimum of five (5) participants.

**COURSE CONTRIBUTION:**

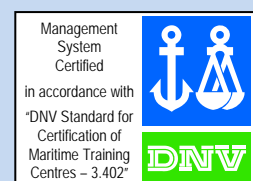
USD 415.00

(NSA Member)

USD 462.00

(Non-NSA Member)

*Inclusive of course materials/handout*



**Register**

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