



**NORWEGIAN TRAINING CENTER-MANILA**

of

**NORWEGIAN MARITIME FOUNDATION OF THE PHILIPPINES, INC.**



## 72 PROGRAMMABLE LOGIC CONTROL (PLC) for Marine Application

### 2010 DATES:

- Jan 18 – 22
- Feb 08 – 12
- Mar 01 – 05
- Mar 22 – 26
- Apr 12 – 16
- May 03 – 07
- May 24 – 28
- Jun 14 – 18
- Jul 05 – 09
- Jul 26 – 30
- Aug 16 – 20
- Sept 06 – 10
- Sept 27 – Oct 01

### DURATION:

**1 Week**

(5 Days: 0830H – 1630H)

### COURSE CONTRIBUTION:

**USD 415.00**

(NSA Member)

**USD 462.00**

(Non-NSA Member)

*Inclusive of course materials/handout*

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.

# Register

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