

# CONTROL ENGINEERING MODULE 2

43 CE M2

ELECTROTECHNICAL COURSE



The future of  
world class  
seafarers

## ADVANCED INSTRUMENTATION & AUTOMATION – IMO 7.02

This course is designed for engineer officers and electrical officers involved in the operation, maintenance and repair of various control systems onboard. It deals with advanced principles and applications of instrumentation systems and modern control methods & equipment found onboard.

**COURSE AIMS:** This course aims to provide advanced engineering knowledge and skills in the field of *automatic control & controller tuning, electro-pneumatic, PLC, engine room alarms and safety systems*, thus develop ability and confidence in the safe and efficient operation and maintenance of automatic control and monitoring systems used on ships.

**COVERAGE / PROGRAM FOCUS:** This course essentially deals with the following subject and training areas:

- Controller tuning methods;
- Principles of electro-pneumatic control systems and circuits;
- Basic programming, wiring and troubleshooting of Programmable Logic Controller; and
- Engine room alarms and safety systems.

**METHOD:** Combination of classroom lecture and laboratory works utilizing fully automated pneumatic digital equipment i.e.: Signal Acquisition Unit (SAU), Electro-Pneumatic Training Board, PLC, Electronic & Pneumatic Controllers, and Different sensors. Hands-on exercises are tailored to take full advantage of the practical aspects of the work carried out on board.

**ENTRY REQUIREMENT / TARGET GROUP:** Entry to this course is open to all Engineer Officers and Electricians intending to serve onboard. Preferably, those intending to take the course should have taken Control Engineering Module 1 or any equivalent course based on control and instrumentation.

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

### DURATION:

1 Week

(5 Days: 0830H – 1600H)

### 2012 DATES:

1. Jan 16 – 20
2. Feb 13 – 17
3. Mar 12 – 16
4. May 21 – 25
5. Jul 23 – 27
6. Aug 20 – 24
7. Nov 19 – 23
8. Dec 17 – 21

### COURSE

### CONTRIBUTION:

USD 425.00

(NSA Member)

USD 473.00

(Non-NSA Member)

*Inclusive of course  
materials/handout*



Register

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