**Course goal**
The goal of this course is to train the participants to operate and maintain a vessel propulsion control system by using the training simulator, based on vessel configuration.

**Learning objectives**
Upon completion of this course, students will be able to understand the function of the electrical propulsion control system and operate the maintenance station.

**Contents**
**General topics**
- Introduction to ABB Marine Services
- Electrical propulsion system overview

**Operation**
- Navigate the maintenance station
- Local and remote control
- Operational modes and control modes
- Protection functions
- Blackout protection
- Operational limitations
- Start interlocks

**Software Introduction**
- Control system monitoring
- System structure

**Fault-tracing and troubleshooting**
- Alarm and event handling

**Methods**
This is an instructor-led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is comprised of hands-on lab activities.

**Prerequisites**
The participants should have fundamental knowledge of vessel operation and have basic knowledge of Windows XP. Completion of ACS6000 SD/AD marine drive course or similar knowledge is advisable.

**Duration**
4 days

**Venue**
Singapore

**Additional information**
Minimum 4, maximum 6 participants
On-site training is available on request
H862 - LNG Electrical propulsion system course

Course outline

Day 1
- Introduction
- Propulsion control system overview
- Maintenance station navigation
- Local and remote control
- Control functions
  - Control functions exercises (maneuver mode and sea mode)

Day 2
- Control functions exercises (crash stop, braking, master follower)
- Equipment protection exercises (alarms, power limitation, trip
  and safety override)

Day 3
- Blackout protection
  - Blackout protection exercises (available power calculations, generator
    load/trip, network supply frequency, diesel engine power ramp)
- Operational limitations
- Speed and power limitation exercises
- Start interlocks

Day 4
- Alarm and event handling
- Propulsion control system components
- Propulsion control system alarm message exercise
- System interface

This course has been certified in accordance with “DNV Standard for Certification of Learning Programmes - 3.201”