

ABB Marine Academy course description

H892 – Master Advant OCS Automation training for maintenance

Course goal

The goal of this course is to learn how to perform regular maintenance, engineering activities and troubleshooting on Advant/Master Automation systems, installed in Cruise applications, O&G installations and Land-Based Factories.

Learning objectives

After this course, students will be able to understand the philosophy of Advant/Master system, fully use main AS500 engineering functionalities, in order to maximize productivity, troubleshoot common issues, reducing decision time, perform engineering activities for runtime operations and optimize the process.

Contents

- Advant IAMCS philosophy, products overview
- Systems layout and hardware configurations and setup
- AC400 PLC programming
- Base concepts of CPU programming (libraries, tasks, variables, user-defined programs, I/O)
- AMPL Function Block programming
- System maintenance
- Shutdown/start-up procedures for board replacement
- Engineering, diagnosis and troubleshooting
- MB300 and AF100 connectivity
- Application download to AC400 PLCs
- AS500 Process Graphics
- Trending and historical data
- System backup/restore



Methods

Workshop and Lecture sessions.

Level

Medium and Advanced.

Student profile

Marine, O&G, Land-Based Factories Operators, Engineers and Superintendents.

Electro-technical personnel at support and operational level.

Prerequisites

Basic knowledge or experience in working with Advant/Master OCS Systems is advisable.

Duration

5 days

Venue

Genoa, Italy
Rotterdam, Netherlands

Additional information

Minimum 6, maximum 8 participants.

H892 - Advant Master Automation

Course outline

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Day 1

- Introduction
- I/O Signal Theory and S800 product line
- Network & Field communications
- Workshop: setup of an I/O remote station

Day 2

- Advant Controller 400 Series and AC70 overview
- AMPL Database elements and PC Programs engineering
- AC400 Backup and Restore
- Workshop: DB & PC programming

Day 3

- AS500 overview and hardware faults prevent
- UNIX OS Fundamentals
- xTerminals
- Workshop: use of IT tools (xWin32, FTP, Remote Connection)

Day 4

- AdvaCommand suite
- Graphic building
- Process Sectioning and External Alarm management
- Shutdown/Startup procedures

Day 5

- TTDLog and History Management
- Full System Backup
- Debriefing
- Final certification of attendees