

# ECDIS Type-Specific Courses

## 1. Introduction

Navigational officers are frequently exposed to varying systems and equipment onboard the vessels they operate. This includes the ECDIS, which despite offering the same functionality, is operated surprisingly differently, based on its manufacturer. In turn, this creates a challenge and a potential

risk to safe navigation of the vessel, should the officer be unfamiliar with the exact equipment model on board. This course aims to familiarise the officer with the exact equipment type and ensures that he/she is confident in performing all ECDIS related tasks.



### Duration

Course duration: 16 hours.  
Course access: 21 days.



### Flexible Learning

This course is available online, any time of the day and at your own convenience.



### Certificate Validity

The validity of the certificate issued upon the successful completion of this course is indefinite.\*



### Approvals

These courses carry full approvals of the respective manufacturers and the course methodology is recognized by the Nautical Institute.

\*Except of Wärtsilä NaviSailor 4000 by Transas which is valid for 5 years

## 2. Target Audience

This course is designed for all officers of the bridge team involved in ensuring the safe navigation of the vessel.

## 3. Prerequisites

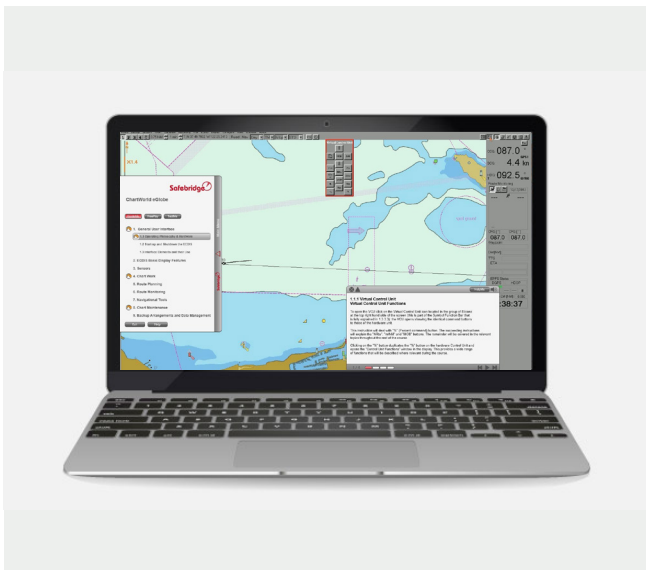
The following are highly recommended in order to fully benefit from this course:

ECDIS Generic knowledge, as per STCW and IMO Model  
Course 1.27

## 4. Learning Objectives

The objectives of this course are to cover type-specific familiarisation of ECDIS tailored to the specific needs of the Navigational Officers. Subject areas covered in the course include an overview of ECDIS carriage requirements, electronic charts, ECDIS navigational functions, ship handling with ECDIS, sensor integration, alert management, as well as the latest changes according to the new IHO and IEC

standards. Combined the content of this course ensures that officers understand the type-specific navigational functions of ECDIS, and are familiar with the features that are common to all ECDIS systems before boarding a vessel, which ultimately translates to safer operations and vessel manoeuvring.



## 5. Course Variants

There are a total of 19 variants of the ECDIS Type-Specific courses covering the following equipment manufacturers:

- JRC JAN 901B/701B/2000
- JRC JAN 9201/7201
- Tokyo Keiki EC-8100/8600
- Wartsila Navi-Sailor 4000 by Transas
- SIMRAD Maris ECDIS900
- SIMRAD E5024
- Kelvin Hughes Manta Digital
- Martek Marine iECDIS
- Wartsila SAM ECDISPILOT
- Consilium Standard ECDIS
- ChartWorld eGlobe G2
- IMTECH SeaGuide
- Consilium Selesmar ECDIS
- Consilium ECDIS G2
- Wartsila SAM CHARTPILOT
- NG Sperry Marine VisionMaster
- Raytheon Anschutz Synapsis ECDIS NX
- Raytheon Anschutz Synapsis ECDIS

## 6. Course Modules

Each ECDIS Type-Specific course is broken down into 10 core modules with the following sub-topics:

### Module 1

#### User Interface

- 1.1 ECDIS Components
- 1.2 Start-up and Shut-down Process
- 1.3 Human Machine Interface
- 1.4 Help Facility

### Module 2

#### ECDIS Basic Features

- 2.1 Basic Display Settings
- 2.2 ENC Presentation
- 2.3 Safety Settings
- 2.4 Orientation and Motion Modes
- 2.5 SPanning and Scaling
- 2.6 Own-ship Features

### Module 3

#### Sensor Management/Monitoring

- 3.1 Sensor Monitoring
- 3.2 Sensor Management
- 3.3 Position Parameters and Sensor Failures

### Module 4

#### Alert Management

- 4.1 Types of Alert

### Module 5

#### Chart Management

- 5.1 Chart Handler Familiarization
- 5.2 Chart Database
- 5.3 ENC Status Report
- 5.4 ENC Supply
- 5.5 Permit and Chart Installation
- 5.6 Chart Updating

### Module 6

#### Digital Passage Planning

- 6.1 Accessing Chart Information
- 6.2 EBL and VRM
- 6.3 Crosschecking of Ship Position
- 6.4 Management of T&P NMs
- 6.5 Manual Chart Updates
- 6.6 User Chart/Marines Objects

### Module 7

#### Voyage Planning

- 7.1 Voyage and Ship Data
- 7.2 ECDIS Setup
- 7.3 Route Planning
- 7.4 Route Check
- 7.4 Route Management

### Module 8

#### Voyage Monitoring

- 8.1 Voyage and Ship Data
- 8.2 ECDIS Setup
- 8.3 Route Planning
- 8.4 Route Check
- 8.5 Route Management

### Module 9

#### Backup Arrangements, Logs & Data

- 9.1 Backup Arrangements
- 9.2 Logs and Data Recording
- 9.3 File Management

### Module 10

#### Navigational Tools and Functions

- 10.1 Conning Information
- 10.2 Anchor Watch
- 10.3 AIS and TT Display
- 10.4 Radar Overlay
- 10.5 Search and Rescue

## 6. Learning Outcomes



### User Interface

The User Interface Module explains the fundamental design features of the ECDIS that may differ significantly between different ECDIS manufacturers.



### ECDIS Basic Features

This Module explains the procedure of adjusting the display to your requirements. This process is essential to ensure that all relevant information and alerts are captured, and cluttering of visual and audible information is avoided.



### Chart Work

The Chart Work chapter teaches the trainee how traditional paper chart tasks are performed on the Electronic Chart Display and Information System.



### Alert Management

The Alert Management provides thorough knowledge of the management, handling, and interpretation of alarms, cautions and warnings. Proper handling of alerts is crucial to the safety of navigation.



### Sensors

The ECDIS displays the vessel's position, speed, and course in real-time on the chart, based on information received from navigational sensors. Understanding the sensors as well as the provided data and its limitation is taught in this Module.



### Route Planning

The Route Planning module will enable the user to plan routes, complying with the general requirements for voyage plans, as well as specific instructions given in the safety management systems of shipping companies and charterers.



### Route Monitoring

Route Monitoring familiarizes the user with the ECDIS specific route monitoring feature and how to monitor the voyage and all related data safely.



### Chart Maintenance

The Chart Maintenance Module explains the process of chart ordering, chart installation and the updating of charts considering that charts and updates may be received via the internet or ship's mail.



### Backup Arrangements & Data Management

The Backup Arrangement and Data Management requirements that need to be met when using the ECDIS as the primary means of navigation are described in detail throughout this Module.



### Navigational Tools & Functions

Besides the required features that an ECDIS can provide, there is a variety of additional functions and information that can be displayed on the ECDIS. This chapter explains features like radar information overlay, wave analysis, NAVTEXT messages, or tidal information is available on the ECDIS.

## 8. Product Data Sheet: ECDIS Type-Specific Course

Manufacturer	Course Name	Equipment Covered	Certificate Validity Period
<b>ChartWorld</b>	ChartWorld eGlobe G2	eGlobe G2 ECDIS	Indefinite
<b>Consilium</b>	Consilium ECDIS G2	Consilium ECDIS G2	Indefinite
	Consilium ECDIS („Selesmar“ ECDIS)	ECDIS Selesmar	Indefinite
	Consilium S-ECDIS (Standard ECDIS)	Standard ECDIS	Indefinite
<b>IMTECH</b>	Imtech SeaGuide	Imtech SeaGuide ECDIS Imtech ECDIS 2000	Indefinite
<b>JRC</b>	JRC JAN-701/901/2000	JAN-701 / 701B JAN-901M / 901B JAN-2000	Indefinite
	JRC JAN-7201/9201	JAN-7201 JAN-9201 7201 / 9201 - S 7201 / 9201 - C 7201 / 9201 - N 7201 / 9201 - D	Indefinite
<b>Kelvin Hughes</b>	Kelvin Hughes Manta Digital ECDIS	ZM/2300 ZM/2144	Indefinite
<b>Martek Marine</b>	Martek Marine iECDIS	Martek Marine iECDIS	Indefinite
	Raytheon Anschütz Synapsis ECDIS	Synapsis ECDIS ECDIS 24	Indefinite
	Raytheon Annschütz Synapsis ECDIS NX	Synapsis ECDIS NX	Indefinite
<b>Navico</b>	Simrad Maris ECDIS 900	Simrad MARIS ECDIS900 MK5 Simrad MARIS ECDIS900 MK15	Indefinite Indefinite
	Simrad E5024	Simrad E5024	Indefinite
<b>Northrop Grumman Sperry Marine</b>	NG Sperry Marine VisionMaster	VisionMaster FT ECDIS Chart Radar (ECDIS functions) Total Watch (ECDIS functions) ECDIS-E VisionMaster Net (ECDIS Functions)	Indefinite

Manufacturer	Course Name	Equipment Covered	Certificate Validity Period
WÄRTSILÄ	Wartsila SAM ECDISPILOT Platinum	ECDISPILOT Platinum ECDISPILOT Basic MULTIPILOT Platinum NACOS Platinum	Indefinite
	Wartsila CHARTPILOT	CHARTPILOT 1100 NACOS xx-5 CHARTPILOT 9330 NACOS xx-4 MULTIPILOT 1100 NACOS xx-5 MULTIPILOT 1000 NACOS xx-4	Indefinite
<b>Wärtsilä Voyage</b>	Wärtsilä NaviSailor 4000 by Transas	Transas Navi-Sailor 4000 Wärtsilä NaviSailor 4000 by Transas	5 years
<b>Tokyo Keiki</b>	Tokyo Keiki EC-8100/8600	Tokyo Keiki EC-8100/8600 Tokyo Keiki EC-8100K/8600K Tokyo Keiki EC-8000/8500 Tokyo Keiki EC-8000K/8500K	Indefinite