

FURUNO

ECDIS TRAINING

Electronic Chart Display and Information System Training



NavSkills

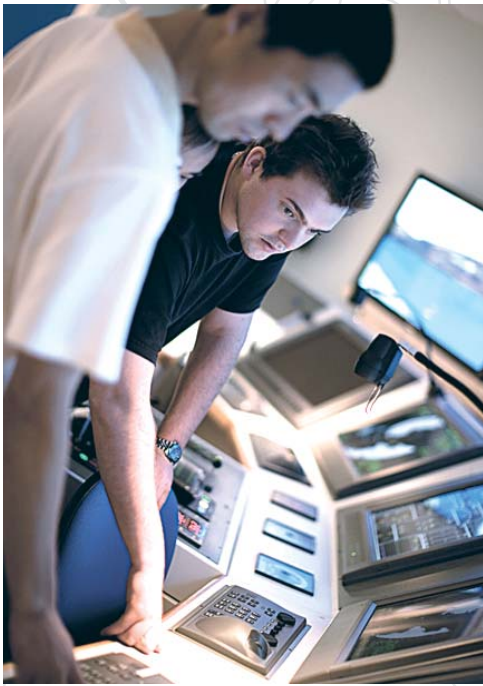
NavSkills CAT

ECDIS CBT

www.furuno.com



What is ECDIS training?

Based on regulations from the International Maritime Organization (IMO) Electronic Chart Display and Information Systems (ECDIS) have become mandatory to install on SOLAS ships. In accordance with Standards of Training, Certification and Watchkeeping for Sea (STCW) conventions, all bridge officers are required to undertake Generic ECDIS training, as well as training for each ECDIS model present on their vessel.



FURUNO ECDIS Training

FURUNO offers a variety of ECDIS training forms, all tailored according to customer needs and requests.

Training formats		Classroom		
		INSTC Denmark	INSTC Singapore	NavSkills Training Center
Features		  <ul style="list-style-type: none"> • Training using real ECDIS and full-mission simulators • Direct lectures from expert instructors • Possible course of training in accordance with the learning level 		
Location		INS Training Center, NavSkills Training Center <small>*For further information please visit our webpage below www.furuno.com/en/merchant/training/contactinfo</small>		
Available ECDIS training type	Generic ECDIS Training	✓ (Approved by ClassDNV)	Not Available	Differs depending on the training center
	Type-Specific ECDIS Training		✓	✓
	Supported ECDIS models	FMD-3200/3300, FMD-3100, FEA-2107/2807		*Contact us for further details
	IMO INS/IBS model course 1.32			
	Track Control System training course	✓	Not Available	Differs depending on the training center
	Courses for shore staff			

ECDIS Training



Generic ECDIS Training

Generic ECDIS training provides the trainees with general knowledge of ECDIS as well as how to operate the system. Upon completion of the training, an IMO Model Course 1.27 compliant certificate is issued.

Type-Specific ECDIS Training

The Type-Specific ECDIS Training course provides trainees with knowledge of FURUNO ECDIS functionality and operation. Upon completion of the training, a certificate that complies with the STCW 2010 convention is issued by FURUNO.

Remote training on PC

NavSkills CAT	ECDIS CBT
 <ul style="list-style-type: none"> • Subscription based service using dedicated workstations • VoIP access to online instructors 	 <ul style="list-style-type: none"> • Type-specific ECDIS training for individual training on PC
Online (Training workstation required)	Local PC (Internet connection not required except for license verification purposes)
Not Available	Not Available
✓ (Approved by ClassNK)	✓
FMD-3200/3300, FMD-3100, FEA-2107/2807	FMD-3200/3300 FMD-3100
Not Available	Not Available

Classroom Training



INSTC™ (Integrated Navigation System Training Center)

FURUNO offers training for professional navigators at one of our two training centers.

In November 2005 INSTC™ Denmark was the first training facility in the world to be established by an equipment manufacturer. Following an increase in demand for certified training, INSTC™ Singapore was established in 2011. Both our INSTC training facilities complies with STCW 2010 code.

INSTC™ Denmark (Copenhagen)

INSTC™ Denmark houses two full-mission simulators (Class S) and two classrooms.

All practical training sessions take place in the full-mission simulators, giving the navigator the opportunity to train in the most realistic environment possible. Theoretical training sessions take place in light, spacious classrooms fully equipped with modern AV-equipment. Each classroom is fitted with eight ECDIS planning stations.

INSTC™ Denmark offers the following types of ECDIS training:

- **Generic ECDIS training**
IMO ECDIS model course 1.27, approved by the Danish Maritime Authority and DNV SeaSkill™.
- **Type-Specific ECDIS training**
Approved by ClassNK.
Supported models: FEA-2107/2807, FMD-3100, FMD-3200/3300
- **Generic INS/IBS training**
IMO INS/IBS model course 1.32, approved by DNV SeaSkill™.
- **Track Control System training course**
FURUNO TCS operator training course
- **Courses for shore staff**
“Introduction to ECDIS & Electronic Navigation Charts Courses”
The training course provides knowledge and understanding of the rules and requirements to be fulfilled when installing and operating an ECDIS onboard a vessel.
Supported models: FEA-2107/2807, FMD-3100, FMD-3200/3300

INSTC™ Singapore

All practical training sessions take place on a dedicated ECDIS simulator, which allows the trainees to experience the FURUNO ECDIS under various conditions.

INSTC Singapore offers Type-Specific ECDIS training approved by Class NK.

Supported models: FEA-2107/2807, FMD-3100, FMD-3200/3300

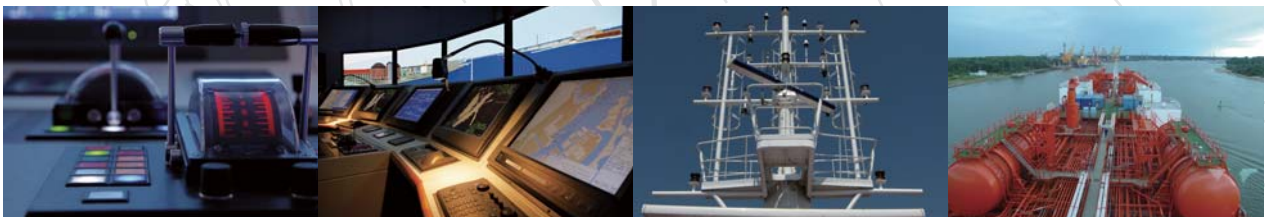
For further information please visit our webpage. www.furuno.com/en/merchant/training/instc

NavSkills (Turnkey Simulator and Crew Training Concept)

NavSkills is a training solution offered to nautical academies and to ship owners.

NavSkills

The NavSkills concept is based on training expertise achieved by FURUNO INSTC™ since 2005 and is designed to comply with the STCW 2010. NavSkills training solutions are turn-key training solutions that include provision of a full-mission simulator with a navigation bridge fitted with genuine FURUNO navigation equipment, education of your instructors, training materials and update service, refresher training of your instructors and much more. An ECDIS simulator package is also available, including training.



NavSkills Training Center

The NavSkills Training Center provides class room training in full compliance with FURUNO's quality standards and requirement to content and duration. The local instructors have been educated and certified by FURUNO to provide type-specific ECDIS training courses and the courses provided are identical to the courses provide by FURUNO's own training centers. FURUNO is continuously expanding the network of training centers around the world.

NavSkills Training centers offer **Type-Specific ECDIS training**

Supported models: FEA-2107/2807, FMD-3100, FMD-3200/3300

*Depending on training center, supported models may vary. For further details, please access to our webpage below.
www.furuno.com/jp/merchant/training/contactinfo

Distant Learning Platforms

NavSkills CAT (Computer Aided Training)

A complete training solution for your local office.

NavSkills CAT

FURUNO NavSkills CAT training solution is a subscription-based service dedicated to ship owners who wish to incorporate Type-Specific ECDIS training into their own in-house training. Models supported are FEA-2107/FEA-2807, FMD-3100 and FMD-3200/3300. Having your navigators take Type-Specific ECDIS training in-house is both cost-efficient, as well as making training accessible to all. Simply sign up for the NavSkills CAT service subscription and you are ready to start as soon as the dedicated workstation has been delivered.

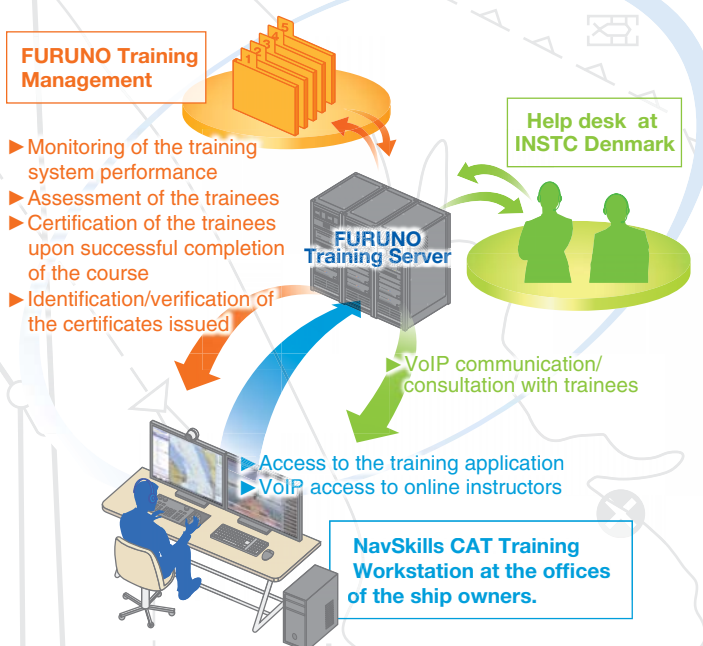
NavSkills CAT offers **Type-Specific ECDIS training**
Approved by ClassNK

Supported models: FEA-2107/2807, FMD-3100, FMD-3200/3300

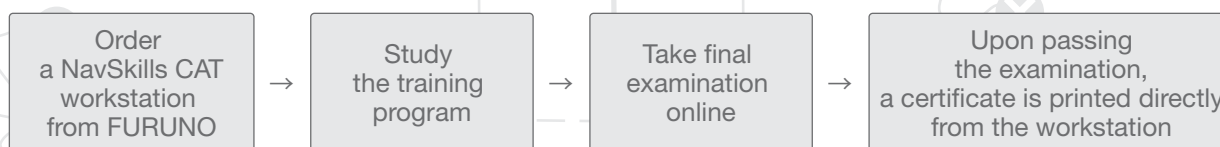
NavSkills CAT certificates are printed upon completion of the course.

The contents and quality of the training program is identical to the classroom training provided by INSTC Denmark, INSTC Singapore and FURUNO NavSkills Training Centers. Additionally, trainees have access to the very latest FURUNO training programs online from the comfort of their office.

FURUNO NavSkills CAT system overview



Training Flow



For further information please visit our webpage. www.furuno.com/en/merchant/training/navskills_cat

ECDIS CBT (FURUNO Computer Based Type-Specific ECDIS Training)

ECDIS training from the comfort of your own home or on the go.

ECDIS CBT

ECDIS CBT (Computer Based Training) is a training solution where trainees are able to take FURUNO Type-Specific ECDIS training on their own PCs. Since ECDIS CBT does not require constant Internet access, trainees are free to study ECDIS CBT when and wherever they may choose. The ECDIS CBT program can also be used for refresher training.

ECDIS CBT offers [Type-Specific ECDIS training](#).

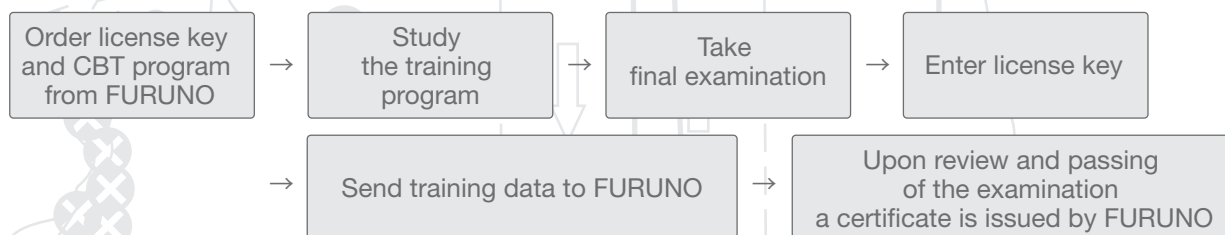
Supported models: FMD-3100, FMD-3200/3300

ECDIS CBT certificates are issued directly by FURUNO ELECTRIC CO., LTD. upon completion of the course*

*After sending training data, it will take about two weeks for issuance of the certificate.



Training Flow





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