



ECOTRAIN

Target group

Masters and navigating officers, engineering officers and shorebased personnel

Prerequisites

None

Objectives of the course

A trainee successfully completing this course will have acquired knowledge of the basic principles for energy efficient operation of ships. The trainee will also acquire specific knowledge of the rules and regulations concerning Marpol annex VI and SEEMP.

Duration of the ECOTRAIN Course

The duration of the ECOTRAIN course is 3 days. Day 1 and 2 comprises the theoretical part of the course and day 3 comprises the simulator exercises.

Duration of the written examination

Duration of the written examination is ½ hour

Location of the ECOTRAIN course

The ECOTRAIN will be delivered in Aboa Mare Simulation centre, Tietotie 1, Espoo.

Specialized training equipment

A full mission ship simulator will be used during the training.

Contents of the ECOTRAIN course

The complete course comprises the following modules delivered by:

- Module 1: Familiarization to the simulator environment and the bridge equipment used in the training, **Aboa Mare**
- Module 2: Pre-course simulator run, **Aboa Mare**
- Module 3: Rules and regulations, **Germanisher Lloyd**
- Module 4: Exhaust emissions from shipping and life cycle assessment (LCA), **VTT**
- Module 5: Ship design, **DeltaMarin**
- Module 6: Saving fuel in operation, **Wärtsilä**
- Module 7: Energy efficiency solutions, **ABB**
- Module 8: Trim and speed optimization, **Eniram**
- Module 9: Voyage optimization, **NAPA**
- Module 10: Simulator exercise: Optimizing operation for squat and bank effects, **Aboa Mare**
- Module 11: Simulator exercise: Optimizing radius-controlled turns, **Aboa Mare**
- Module 12: Simulator exercise: Optimizing use of autopilot, **Aboa Mare**
- Module 13: Post- course simulator run, **Aboa Mare**
- Module 14: Written examination, **Aboa Mare**

ECOTRAIN course intake limitation

In order to provide maximum efficiency during the course the suggested maximum student intake per ECOTRAIN course is 9 persons

Certificate issuance and verification

All participants satisfactorily completing the ECOTRAIN course and examination will receive the appropriate certificate, issued by GL.

Course compliance

The course is based on the (draft) IMO model course for Energy Efficient Operation of Ships (MEPC62/Inf.10).