

Marine Technology

Basic information

Code: ENG3080

Extent: 25 ECTS

Language: English

Organizing department: T212 Department of Mechanical Engineering

Teacher in charge: Pentti Kujala

Target group: Students from other Master's Programmes at Aalto and [FITech Universities](#)

Application process: No

Quotas and restrictions: No

Prerequisites: Bachelor's degree. Student must take into account any course prerequisites. Please notice obligatory courses: Principles of Naval Architecture 5 ECTS and Ship Systems 5 ECTS.

Content and structure of the minor

The Marine Technology Minor offers students good overall knowledge of the engineering aspects related to marine environment. The main contents is to introduce design aspects related to environment, marine structures, transport and related systems and sub-systems. The studies cover design, manufacturing and operational aspects. The studies are build around expertise of each student by utilization of portfolio- and project-based teaching methods.

Learning outcomes

Upon completion of the Minor in Marine Technology, the student will comprehend the fundamental economical, technological and design phenomena related to engineering to marine environment. The student learns the methods for assessment of this phenomena and knows in which fields of science these are developed further and field experts exist. Student can also describe the position and relation of own expertise in the framework of engineering for maritime environment.

Further information is available from Professor Jani Romanoff (jani.romanoff@aalto.fi).

The student should choose five courses from the following list.

| Code | Name | ECTS | Period |
|---------------------------|--|------|--------|
| Obligatory courses: | | | |
| MEC-E1004 | Principles of Naval Architecture | 5 | I-II |
| MEC-E2005 | Ship Systems | 5 | III |
| Elective courses: | | | |
| MEC-E2003 | Passenger Ships | 5 | II |
| MEC-E2004 | Ship Dynamics | 5 | IV-V |
| MEC-E2007 | Ship Structures and Construction | 5 | IV-V |
| MEC-E2009 | Marine Risks and Safety | 5 | I |
| MEC-E4001 | Winter Navigation | 5 | III |
| MEC-E1500 | Special Assignment in Mechanical Engineering | 1-10 | I-V |

