*»You want to study at Flensburg University of Applied Sciences? Make your appointment with us. We look forward to meeting you.«*

**Marc Laatzke, Course Guidance**

## Course Guidance


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### Office hours

Mon 9 a.m. – 12 p.m., 1:30 p.m. – 3:30 p.m.
Wed & Thu 9 a.m. – 12 p.m.

### Course Guidance

Please check our website to find out who your contact person is.

**Hochschule Flensburg**
University of Applied Sciences

# SOE

## Marine Engineering – **Ship Operation Engineering** *Bachelor of Engineering*

# Marine Engineering, major: Ship Operation Engineering

Modern ships are very complex systems. Ship operation engineering includes everything – from the propulsion to the steering, the energy supply on board and air conditioning as well as sanitary facilities and the environmentally friendly disposal of waste water. And in your studies you will learn about all of these.

But your qualifications will also make you an interesting candidate for plant operation jobs on land. Your expertise will be sought after in maritime and non-maritime industry sectors.

Whatever is the right career for you – this degree programme will equip you with the subject-specific and legal qualifications necessary.

## Overview

| | |
|---|---|
| *Admission requirements* | German *Abitur*, *Fachhochschulreife* or an equal qualification |
| *Duration* | 6 or 8 semesters (see curriculum) |
| *Starts* | in winter and summer |
| *Degree* | Bachelor of Engineering (B.Eng.) |

# Curriculum

| 1st semester | 2nd semester | 3rd semester | 4th semester | 5th semester | 6th semester | 7th semester | 8th semester |
|---|---|---|---|---|---|---|---|
| Practical training at sea 1 (26 weeks) | Mathematics 1 *4 hpw (5 CP)* | Mathematics 2.1 *4 hpw (5 CP)* | Mathematics 2.2 *4 hpw (5 CP)* | Machine Elements *4 hpw (5 CP)* | Combustion Engines 2 *6 hpw (7 CP)* | Electrical Systems *4 hpw (4 CP)* | Practical training at sea 1 (26 weeks) |
| or | Physics *4 hpw (5 CP)* | Computer Science *4 hpw (5 CP)* | Thermo-dynamics 2 *4 hpw (5 CP)* | Control Engineering *4 hpw (5 CP)* | Process Control *4 hpw (4 CP)* | Monitoring Ship Operation *4 hpw (4 CP)* | or |
| Ship Mechanic´s training | Electrical Engineering 1 Test & Measurement *4 hpw (5 CP)* | Electrical Engineering 2 *4 hpw (5 CP)* | Maintenance *4 hpw (3 CP)* | Machines 1 *4 hpw (4 CP)* | Health and Medical Care *4 hpw (4 CP)* | Machine Dynamics *2 hpw (3 CP)* | Ship Mechanic´s training |
| or | Engineering Mechanics 1.1 *4 hpw (5 CP)* | Engineering Mechanics 1.2 *4 hpw (5 CP)* | Petrol, Oil and Lubricants *4 hpw (4 CP)* | Combustion Engines *4 hpw (4 CP)* | Machines 2 *3 hpw (4 CP)* | Shafts/ Couplings/ Gears *2 hpw (2 CP)* | or |
| Assistant Engineer Officer's training | Materials Engineering 1 *4 hpw (5 CP)* | Thermo-dynamics 1 *2 hpw (3 CP)* | HR Management and Leadership *4 hpw (5 CP)* | Electrical Machines 2 *4 hpw (5 CP)* | Installation Engineering *3 hpw (3 CP)* | Process Control Lab *2 hpw (2 CP)* | Assistant Engineer Officer's training |
| *(30 CP each)* | English 1 *2 hpw (2 CP)* | Materials Engineering 2 *2 hpw (3 CP)* | Service on Tankers *2 hpw (3 CP)* | Fluids Mechanics *2 hpw (3 CP)* | Maritime Safety *2 hpw (3 CP)* | Medium Voltage *2 hpw (2 CP)* | *(30 CP each)* |
| | | English 2 *2 hpw (2 CP)* | Shipping Law *2 hpw (2 CP)* | Shipbuilding Basics *2 hpw (3 CP)* | Steam Systems 2 *2 hpw (3 CP)* | Bachelor´s Thesis *(2 months max.) and Colloquium (12 CP)* | |
| | Business Administration Basics *2 hpw (3 CP)* | Legal Basics *2 hpw (2 CP)* | Electrical Machines *2 hpw (3 CP)* | Steam Systems 1 *2 hpw (2 CP)* | Hazardous Substances *2 hpw (2 CP)* | | |

## Career prospects

Most of our graduates work in seafaring, transport or logistics. As Engineer Officer of the Watch, Engineer Officer and engineers they are responsible for the operation and maintenance of the technical systems and equipment of a ship. Leading teams is also part of their job.