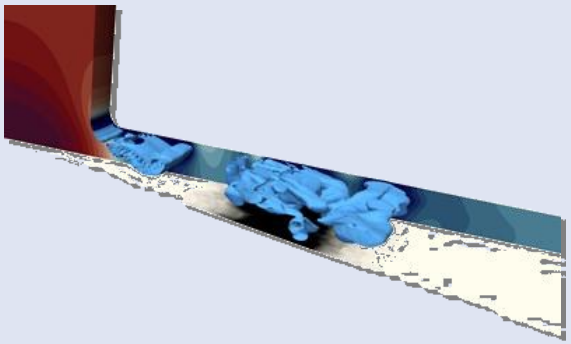
Language requirements

To get direct admission for an ISE study course Mechanical Engineering, applicants must be able to demonstrate English language skills corresponding to Level B1 of the Common European Framework of Reference for Languages (CEFR). At the time of application, it is mandatory for the applicant to give proof of English language level B1.

Applications to study a discipline within the academic program ISE may initially be submitted without any knowledge of the German language and admission to a German course will be granted provided that all the other requirements are fulfilled. After obtaining the B1 German certificate at a language school of his choice, the student will be accepted for the ISE study course Mechanical Engineering.

Entry requirements

Bachelor's degree in an appropriate subject area (e.g. mechanical engineering, ocean engineering, naval architecture) with adequate length of studies and



Contact

We would be pleased to advise you on studying at our University - in person or by telephone.

Please contact us for appointments:
Tel.: 0203 379 - 1173
Fax: 0203 379 - 2779
ISMT@uni-due.de
http://www.uni-due.de/ISMT

Address:
University of Duisburg-Essen
Institute of Ship Technology, Ocean Engineering
and Transport Systems
Bismarckstraße 69 – Building BK
47057 Duisburg
Germany

We look forward to welcoming you at the University of Duisburg - Essen!

UNIVERSITÄT DUISBURG ESSEN

Open-Minded

Master of Science Mechanical Engineering (ISE) Ship and Offshore Technology profile

at the University of Duisburg-Essen

Ship and Offshore Technology at the University of Duisburg-Essen

Have you just completed your bachelor's degree or an equivalent degree in mechanical engineering or an equivalent academic program? Are you thinking of gaining specialist knowledge and an additional qualification in an innovative research field?

Germany is home to Europe's largest supplier industry for offshore, with mechanical engineering companies implementing innovative solutions for a globalised market. The switch to renewable energy has led to increased research and development in the field of green energy, alternative drive systems, and the end-to-end optimization of maritime systems. All this activity has created one of the largest supplier industries for the wind offshore and ship technology. The Ship and Offshore Technology profile caters to the resulting need for highly qualified engineers in this area.

As part of the International Studies of Engineering (ISE) academic program, the Ship and Offshore Technology profile builds on the basic principles of mechanical engineering by focusing on the maritime and offshore technology sectors. Encompassing hydrodynamics, construction, structural analysis and numerical and experimental method, it provides the knowledge and skills required for addressing technical maritime and offshore issues in a mechanical engineering context.

Structure of the master's degree course

4 semesters (extract):

Amongst others, the following courses are available:

- Combustion Science
- Control Theory
- Design and Safety of Maritime Systems
- Computer-Aided Engineering (CAE)
- Advanced Sensors
- Computational Fluid Dynamics for Incompressible Flows
- Dynamics of Maritime Systems, Ship and Offshore Structures

Electives (extract):

- Renewable Energy Technology
- Welding Technical Manufacturing Method
- Wave Theory and Wave Loads
- Design of Submarines
- Ship Manoeuvring
- Fluid Machines
- Finite-Element-Methods II

Your career prospects

The high-tech mechanical engineering industry is one of Germany's largest sectors, and a reliable source of employment for the future. In today's increasingly globalised marketplace, graduates with a master's degree in mechanical engineering have a global and wide-ranging choice of careers. Job opportunities can be found in the automotive sector, in aerospace and electrical engineering as well as with engineering service providers such as classification societies, and with wind offshore service providers. Master's degree holders can also expect to find work in universities, research institutes and in the public sector.

Facilities

The Institute of Ship Technology, Ocean Engineering and Transport Systems has modern high-performance computers and up-to-date software for structure analyses and flow simulations. Students work with software packages which are used in industry as well, giving them valuable insights into industrial practice and increasing their career prospects.

Experimental investigations can be carried out at the institute's own laboratory. Throughout their studies, students may also be given the opportunity to participate as student assistants in research projects.