



ENERGY – TECHNOLOGY AND MANAGEMENT



AAMS

Aarhus Maskinmesterskole
Aarhus School of Marine and Technical Engineering

" OPEN-MINDED

We can always enter the school's office or contact the teachers, the principal or the student counsellors and get an answer to a question – and always in a friendly tone. I appreciate that very much.

Simon Svendsen
Student, Aarhus School of
Marine and Technical Engineering

" INNOVATIVE

I feel that we are continually seeking new solutions and opportunities in what we are doing, combined with a desire for new thinking.

Anders Hanberg Sørensen
Principal, Aarhus School of Marine and Technical Engineering

" COMMITTED

We work independently on tasks and projects. The teachers are in dialogue with us about academic issues and solutions. I find that I am on an equal footing with the teacher.

Kristian Kjær Andersen
Student, Aarhus School of Marine and Technical Engineering

STUDYING IN AARHUS

Aarhus is the second largest city in Denmark with a population of app. 300,000. Aarhus is a student city – one out of five of the city's inhabitants is a student – that makes Aarhus the youngest city in Denmark. At the same time Aarhus is a very old city with an old city centre filled with cafes and restaurants.

Aarhus School of Marine and Technical Engineering is situated on the harbour front in new building, Navitas. The docklands of Aarhus are being turned into a whole new residential, educational and commercial area, with several new buildings of modern architectural designs.

Aarhus also offers a wide range of cultural attractions, and there are plenty of opportunities for doing sports in the woodlands or in the waters surrounding Aarhus.

OUR STUDENTS

Background

The Marine and Technical Engineering Programme is a Professional Bachelor Programme. For students with an upper secondary educational background, training commences with a workshop course, where the student acquires a range of practical skills. For students with a practical vocational background, training commences with an admission course, which includes an upper secondary supplementary education.



HOUSING

We assist our international students in finding a place to stay in Aarhus. Aarhus School of Marine and Technical Engineering has access to rooms in a new dormitory on the docklands of Aarhus close to the school. Both Danish and international students live in the dormitory which provides an ideal environment for students.

ADMISSION

Students with a High school diploma followed by at least one year of university studies in the natural sciences, engineering, management or economics can apply for admission.

To apply for admission you must fill in the application form available on our website and attach the required documents. You will find the application deadlines on our website.

ENERGY –

TECHNOLOGY AND MANAGEMENT

Our elective subject is open for both Danish and international students. The aim of the elective is to provide technical insight into various types of energy technologies and an overall understanding of energy management and energy management systems. Furthermore, the aim is to bring together international and Danish students in a discussion of present and future energy supply.

PART 1 – 15 ECTS

Culture and Energy Policy

This course gives an introduction to Danish culture and cultural analysis in general and looks at various aspects of intercultural cooperation. Furthermore, the course provides a general framework for discussing energy and energy consumption. It also looks at energy strategy and policy in different countries.

Combined Heat and Power (CHP)

This course gives an understanding of the principles of Combined Heat and Power and insight into different fuels and combustion methods. Furthermore, it is analysed how heat storage and heat pumps can increase the efficiency of a CHP plant when combined with renewable energy sources.

Bio Energy

This course provides an understanding of technologies related to energy production from biomass. The various reactor types and the basic biological, chemical and microbiological processes are investigated. Furthermore, the significant aspects for the environment by establishing and operating biogas plants are discussed.

Oil and Gas Production

This course deals with major topics within oil and gas production. Theoretical as well as practical insights are given into drilling technology, offshore production facilities, gas conditioning and processing, and liquefied natural gas handling.

Our one-semester exchange programme is placed at the 8th semester of the education, just before the concluding bachelor semester for the Danish students. It runs from either February to June (spring semester) or August to December (autumn semester) and amounts to 30 ECTS (European Credit Transfer System). The elective is carried out in English.

PART 2 – 15 ECTS

Energy Efficiency

This course gives an introduction to optimization of electrical and thermal energy consumption. Methodologies for identifying and implementing energy optimizations in buildings and industrial plants are introduced and trained, as well as Energy Management Systems according to ISO 50001.

Renewable Energy Systems

This course introduces a number of renewable energy sources, their technology and potential. By means of computer simulation it is analyzed how the utilization of different energy sources and energy conversion technologies influences the energy system of a society.

District Heating (DH)

This course introduces the general socioeconomic advantages of District Heating. Furthermore, the layout of district heating systems is discussed. In more detail the parameters that ensure efficient district heating supply and consumption are analyzed.

Optimization of an Energy system

This course deals with problems associated with introducing renewable energy sources in an existing energy system. By modeling the system in advanced software it is analysed how excess electricity production and CO₂ emissions can be minimized. The course is organized as a group project work with emphasis on cooperation and scientific methodology.



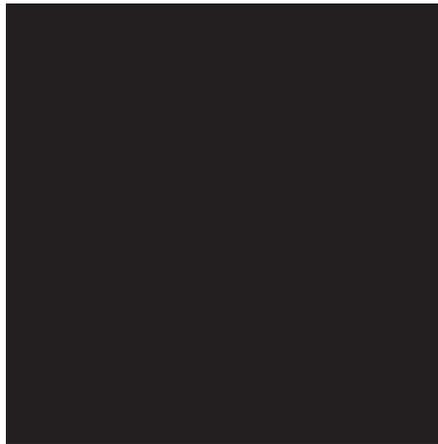
Collaboration and Partners

Aarhus School of Marine and Technical Engineering wants to share knowledge and experience with the business world. A partnership is valuable for both parties. The business partner can use it for recruitment and employer branding, as our students will get to know the company. The school can gain access to valuable business knowhow and thereby strengthen the link between theory and practice that forms the basis of our education.

About Us

We have been a part of Aarhus life since 1896 and we are the largest Marine Engineering School in Denmark with approx. 1,000 students.

The school is situated in the city centre at the harbour front within easy reach of other educational institutions and industry partners.



The Graduate

In his/her professional life the AAMS graduate is often in charge of establishing, initiating and coordinating a profitable collaboration between diverse and often highly specialized professional groups – both at sea and on land. The modern Marine and Technical Engineer is thus a technical manager who is able to initiate and implement change in technical and technological organizations.



International Office

Our international office offers a wide range of services for incoming students and we can assist you in matters concerning the application and admission process, housing, how to register in Denmark etc.

If you have any questions or need more information, please contact:

International coordinator

Ms Anna Kathrine Jørgensen
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+45 4122 7175



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