



## UNDERGRADUATE TRAINEESHIP

### What is a Marine and Technical Engineer?

The role of a Marine and Technical Engineer is varied but overall he/she will assume responsibility for the operation and maintenance of technical facilities and installations. The Marine and Technical Engineer's task is to ensure that these facilities and installations operate at an optimal level in respect of safety, operating economies and the environment.

With this in mind, the Marine and Technical Engineering Programme has been designed to equip the student to perform these functions at a senior level aboard ships and at shore-based establishments.

### About the Marine and Technical Engineering Programme

The Marine and Technical Engineering Programme is a Professional Bachelor Programme with a duration of between 3 - 4½ years, depending on the student's background. For students with an upper secondary educational background, training lasts 4½ years and 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 introduction course, which includes an upper secondary supplementary education. Students, who have both an upper secondary and a vocational background, commence training without undergoing the workshop or introduction course.

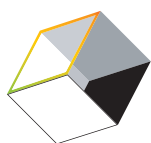
The training to become a Marine and Technical Engineer incorporates a range of compulsory subjects such as:

- thermal plant and machinery
- electrical and electronic machinery, plant and equipment
- process analysis and automation
- management - economics, leadership and safety.

In addition, the training includes electives, where students specialize in one of the following areas:

- Energy – Technology and Management
- Process Technology
- STCW Courses
- Project Management
- Management of contracting and electrical engineering

The student completes all these subjects before the final semester.



# AAMS

Aarhus Maskinmesterskole  
Aarhus School of Marine and Technical Engineering



## Agreements and Finance

The traineeship can be completed in public and private companies on shore, at sea on merchant ships or abroad. The company and/or the vessel must be approved for traineeship by the school. Traineeship at sea should, in order to be counted as sailing time for the obtaining of a Certificate of Competency, be undertaken on vessels with a propulsion power of over 750 kW and under the guidance of an engineering officer.

When the school has approved a company for traineeship, an agreement is established between the student and company. The agreement details what tasks the student will undertake during his trainee period.

In forming the agreement, it is understood that the nature of the work the student is to perform, is relevant to the Marine and Technical Engineering Programme. The work can consist of both development orientated tasks as well as tasks of a more routine nature, and the student would participate in the company's general and everyday routines.

The company can in the contract include provisions of any confidentiality statements. The student is responsible for compliance with confidentiality statements.

It would be natural, but not a condition, to base the Bachelor Project on an issue from the company.

The student is eligible for SU (The Danish students' Grants and Loan Scheme) throughout the bachelor semester, which therefore is unpaid. The company may however choose to pay the student a salary.

## Further Information

If you need more information about undergraduate placements and Bachelor Projects, or if you want to negotiate a placement please contact

International Coordinator  
Trine Schmelling  
E-mail: trs@aams.dk  
Mobil +45 40 83 89 13



## The Bachelor Semester

The last six months of training, the bachelor semester, is comprised of two study units, each of which constitutes half of the semester:

- undergraduate traineeship
- Bachelor Project

Both study units are generally carried out in collaboration with a public or private company.

## The Traineeship

The traineeship can be undertaken in any type of business that is relevant to the Marine and Technical Engineering profession. The student must develop his ability at working in a development orientated and problem solving manner with tasks that are relevant to the profession of a Marine and Technical Engineer. The trainee can be assigned to tasks involving all elements from across the Marine and Technical Engineering Programme; practical as well as theoretical. The tasks can for example include operation and maintenance of all types of plant and machinery, as well as optimization of processes in all types of technical installations. The student can also be assigned to design tasks, management and planning etc., with special emphasis on optimization, operation, safety and environment.

The undergraduate traineeship must include at least 50 full working days.

## The Project

As part of the Bachelor Project, the student learns to take a development orientated approach to planning and implementation of a project. The project must address an issue that is central to the Marine and Technical Engineering profession.

The student must at bachelor level acquire a special insight into a topic, area or problem. He/she must identify a relevant real life issue, collect and analyse data material and link it to relevant theory for the development and optimization of a work practice.

The Bachelor Project can for example include the analysis of the operation and maintenance of plant, machinery and processes, with suggestions for optimization in regards to energy, safety and environment. The Bachelor Project can also focus on organizational and managerial issues and processes.

The Bachelor Project must be documented in a report, which forms the basis for an oral examination.



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