

A man in a dark blue puffer jacket is crouching by a pond, holding a white water sampling device. The background is a lush green field with tall grasses and reeds. The text is overlaid on the image.

Internship AP Degree in Environmental Technology

The Environmental Technology study programme is a 2-year higher education, Academy Profession (AP) degree programme, that provides qualifications for working with environmental technology and communication issues, e.g. as an environmental officer in a public or private company.



Cphbusiness

Framework conditions

After the 3rd semester of the Environmental Technology study programme, the student is required to do an internship. This internship is carried out at a company for approximately 3 months, full-time. The internship is eligible under The Danish State Educational Grant and Loan Scheme (SU), which means that the student is state-supported financially and therefore the company is not required to provide a salary. The internship can be in one or more private or public companies. During a company internship, the student must work on company assignments, and in that way fulfill the learning objectives of the internship.

Internship requirements

The internship has to be set up so that the intern will work within one or more of the study programme's educational content elements: Understanding of nature and the environment, environmental chemistry and microbiology, environmental testing and measurement, laboratory analysis, treatment methods and processes, solid waste, environmental performance improvements and corporate environmental management (internal/external).

Furthermore, the internship has to be set up, so that the student is able to fulfill the following learning objectives:

Knowledge

The student is able to:

- gain knowledge about professional tasks related to the environmental technology subject area.
- be able to understand the application of methods and tools within the environmental technology subject area.

Skills

The student is able to:

- assess, solve and communicate relevant practical environmental issues contained within the education agreement with the internship company.
- describe the communication culture of the internship company.
- communicate with employees in different functional areas of the organization on environmental issues.

Competencies

The student is able to:

- cooperate with others across the profession and organization with respect to solving environmental issues.
- manage relevant situations and issues within the environmental technology subject area in a professional manner.

Internship tasks

Examples of tasks the intern could participate in:

- Public environmental oversight.
- Compliance with chemical legislation.
- Environmental testing and measurement.
- Optimization of wastewater treatment plant operations.
- Optimization of biogas plants.
- Energy savings and optimization.
- Handling and remediation of contaminated soil.
- Waste sorting and recycling.
- Environmental and occupational health and safety management in accordance with ISO 14001 and OHSAS 18001.

The Internship Projects

The intern completes the study programme with a final project based on a practical problem. Most interns write their final project for the company they interned with in continuation of the internship period. The final project is a good opportunity for the company to, for example shed light on a particular problem, have an environmental analysis carried out, or gain extra resources for a current project.

Division of Responsibilities

The internship company has to appoint a contact person for the student during the internship period. This contact person must prepare an education agreement together with the student, that states the tasks the student will be assigned to during the internship. Cphbusiness will then approve the tasks if they live up to the learning objectives of the internship. The education agreement should be prepared before the internship commences.

The student have to make a written report about the internship that states how the learning objectives for the internship were met.

Cphbusiness appoints a supervisor of the internship, who will also serve as the examiner for the written internship report. If possible, the supervisor will visit the internship company during the internship period.



Content and Themes in the Study Programme

1st semester

- Natural systems and environmental impacts: Pollution in the aquatic environment, pollution field testing and laboratory analysis.
- Public administration, waste and resources: Environmental administration in municipalities, waste and resource policies, municipal solid waste management, biogas processes and optimization and business strategies for waste management and waste prevention.
- Business understanding, economics and communication: Business understanding, environmental impacts of companies, environmental management, environmental economics and authority communication.

2nd semester

- Energy and climate: Climate change and its causes, energy and climate change policies, calculation of a company's impacts on climate change, methods for reducing energy consumption and CO₂ emissions, indoor climate.
- Chemicals: Environmentally hazardous substances and their environmental and health characteristics, chemical legislation, environmental risk assessment, classification and hazard labelling, Material Safety Data Sheets, occupational safety and health instruction, chemicals management and chemical substitution.
- Environmental testing, pollution and treatment 1: Environmental testing and analysis of contaminated water, soil and air emissions, classification of soil pollution, V1 and V2 mapping, GIS. Principles and methods for treatment of polluted soil and air.

3rd semester

- Environmental testing, pollution and treatment 2: Environmental testing and analysis of noise and wastewater, design of wastewater treatment plants, monitoring methods and quality standards for emissions of treated water and sludge.
- Companies and regulation: Environmental permits and environmental reporting, including the use of Best Available Technologies (BAT). Case handling in the environmental permitting process.
- Optional area of focus: Business understanding and public administration or environmental testing and treatment

4th. semester

- Internship and final exam project

The Internship Process

Phase 1

- The internship company and the student define a number of tasks for the internship period.
- The student's internship company and the tasks are registered electronically.

Phase 2

- Cphbusiness approves the internship tasks electronically.
- The internship company approves the internship electronically afterwards.
- The student is informed that the internship has been approved by all parties.

Phase 3

- The student commences the internship.
- The supervisor visits the internship company during the internship period.
- The supervisor assesses the internship report.

