



AL2161 Environmental Management II, Advanced Course 7.5 credits

Miljömanagement II, fördjupningskurs

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

The course syllabus is valid from Autumn 2024 according to decision of Director of First and Second Cycle Education: A-2024-0651, 3.2.2. Decision date: 2024-03-15.

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Environmental Engineering, Mechanical Engineering

Specific prerequisites

Admitted to Master's Programme, Sustainable Technology (TSUTM) and completed course AL2160 or equivalent knowledge in basic environmental management.

Others: Degree of Bachelor or Degree of Bachelor of Science in Engineering or other corresponding technical, natural or other science degree at first cycle academic education of at least 180 higher education credits or equivalent and completed course AL2160 or equivalent knowledge in environment and sustainable development.

Courses from upper secondary school corresponding to the courses Eng B/6 according to the Swedish upper secondary school system or equivalent.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The overall aim with the course is to give knowledge, and skills regarding approaches for management for sustainable development and change in companies and other organizations due to an increased focus on sustainability. The course also provides training in application of some of the tools used to plan, monitor and evaluate environmental and sustainability management in organizations.

After concluding this course the student should be able to:

- Analyse and compare how strategies and methods such as environmental management systems are used to improve organizations' contributions to sustainable development, considering a life-cycle perspective as well as the economic and institutional context of the organization
- Identify, analyze and evaluate sustainability aspects and propose indicators for formulation of targets and action plans for the sustainable development of a company or organization
- Collect, analyze and present data on environmental impacts and resource flows, in order to monitor and evaluate the environmental performance of organizations
- Design, plan and perform a group project on environmental and sustainability management of an organization, while considering the project description and the intentions of a client.
- Write project reports according to instructions in the course documentation, present and discuss the reports to the company or organization that has been studied in the project and at seminars for the course participants.

Course contents

Motivations and forces driving the implementation and development of environmental and sustainability management systems in companies and organisations. Current management systems aiming at implementing and sustaining a systematic, efficient and sustainable operation of a company. In the framework of a project designed in collaboration with external stakeholders, different issues of corporate environmental management such as planning and implementation of management systems, climate change performance, sustainable supply chain management and use-phase aspects may be studied. Comparison of current management standards for environment, such as EMAS and ISO14001, quality, ISO 9001:2000,

health and safety – OSHAS 18001 for developing integrated management systems for sustainability. The course also addresses the tools for sustainability monitoring and planning, such as Environmental and Quality Auditing and Corporate Sustainability Reporting. The course is mainly a project course implementing theory and methods of environmental and sustainability management on companies and organisations.

Examination

- PRO2 - Project, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

In order to receive a passing grade (E) for the course, the reports and presentations of exercise and project must be approved. The final grade is calculated as a weighted average of the grades of the two parts.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.