Environmental Management Strategies

Programme course

6 credits

Miljömanagement

TKMJ15

Valid from: 2017 Spring semester

Determined by
Board of Studies for Mechanical Engineering and Design

Date determined
2017-01-25

Main field of study

Energy and Environmental Engineering, Industrial Engineering and Management, Mechanical Engineering

Course level

First cycle

Advancement level

G1X

Course offered for

- Energy-Environment-Management M Sc in Engineering
- Chemical Analysis Engineering, B Sc in Engineering
- Computer Science and Engineering, M Sc in Engineering
- Industrial Engineering and Management - International, M Sc in Engineering
- Electronics Design Engineering, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
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- Mechanical Engineering, M Sc in Engineering
- Applied Physics and Electrical Engineering, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Applied Physics and Electrical Engineering - International, M Sc in Engineering
- Computer Science and Software Engineering, M Sc in Engineering

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites

Two years of engineering studies. General knowledge concerning industry and environmental issues is advantageous.

Intended learning outcomes

Students shall develop knowledge of essential parts of organizations' environmental and sustainability management, focusing on companies. Further on, the course deals with important societal conditions that affect environmental and sustainability issues and how to handle them. For example, this includes means of control and environmental economics. Above all, the course will help to gain knowledge of strategies and tools that are important concerning environmental and sustainability management, and knowledge of essential conditions and possibilities concerning commercial environmental and sustainability efforts. After having completed this course, the student shall be able to:

- Describe important strategies, concepts, methods and other ”parts” of organizations' environmental and sustainability management, clarify how they are related to one another, and why they are important from a company and societal perspective,
- Describe the environmental and sustainability management as mentioned above, but also how the design and appliance of the parts affects the effectiveness of the environmental and sustainability efforts. This especially goes for common components of systems for management of environmental and sustainability issues within companies,
- Describe important requirements, drivers and barriers for companies', and partially other organizations', environmental and sustainability management, and how these can be handled,
- Apply the knowledge above in making a critical analysis, on an overall level, of companies'/organizations' chosen strategies and other ways of managing issues concerning the environment and sustainability. For example, in this analysis the students shall take environmental impact, internal conditions, and the requirements and possibilities on the market into account, and
- To propose measures for companies/organizations concerning their environmental and sustainability management.

Course content

Corporate Environmental Management: corporate environmental strategies, commercial environmental management, environmental marketing, important concepts and methods in modern environmental and sustainability management, sustainable development,environmental and sustainability governance incl environmental legislation,environmental economics, environmental ethics, environmental management systems, environmental auditing, environmental communication.

Teaching and working methods

The course consists of two parts. Theories regarding corporate environmental and sustainability management are presented at lectures. These theories are then used in a group assignment with the aim to analyze environmental and sustainability strategies of an existing company or other type of organization. The group assignment is presented in a written report and oral presentation. Compulsory supervision and presentation is used to support the group assignment, and to be able to assess the work.

Examination

UPG1	Assignments	2 credits	U, G
TEN2	Written examination	4 credits	U, 3, 4, 5

Grades

Four-grade scale, LiU, U, 3, 4, 5

Other information

Supplementary courses: Industrial Ecology, Resource efficient products, Projektkurs, Biofuels for transportation, and others

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Niclas Svensson

Examiner

Jonas Ammenberg

Course website and other links

Education components

Preliminary scheduled hours: 31 h
Recommended self-study hours: 129 h

Course literature

Ammenberg, J., 2012, Miljömanagement. Studentlitteratur. Lund.
Kompletterande material, exempelvis i form av artiklar, som tillgängliggörs av lärarna.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.