Environmental management

ECTS credits
3 credits

In brief

Course langage: English

Presentation

Prerequisites

The student is expected to know the basics of economics as covered in the 1A course.

Learning objectives

Environmental management is part of a sustainable development perspective. The UE integrates the technical, regulatory, behavioral and economic components at the company level and positions the role and missions of the engineer. It is strongly linked to the EU on the circular economy. As far as the regulatory aspects are concerned, we are particularly interested in corporate social responsibility (CSR) and the ISO 14000 standard, which are the pillars of environmental management. Economic issues are addressed from the perspective of economics applied to environmental economics and sustainable development (in order to, for example, analyze economic mechanisms, understand the evolution of a society in the face of resource scarcity, anticipate the effects of environmental policies...).

Description of the programme

The section on management and regulations aims to help students understand and integrate into their daily work the environmental considerations that are essential for all managers in a company, in its technical, regulatory, behavioral and economic components. The objective is to be able to prioritize the main environmental issues for a company, to build environmental approaches and to conduct environmental audits. The goal is to be able to build, implement and improve an environmental management system.
The part of the EU on environmental economics is structured around five main points: introduction to environmental economics; integration of environmental issues in decision making; evaluation of public policies and establishment of indicators and consumer sensitivity to environmental issues; study of sustainable development reports and presentation of work (this collective work aims to

study the sustainable development policy of a few large French companies, with an oral summary in class of 15 min and a written report due in the last class). A table-top assignment completes this evaluation.
These courses are complemented by a series of lectures given by specialists in their field.

Generic central skills and knowledge targeted in the discipline

- C1: Scientific and technical innovation
- C2 : Control of complexity and systems
- C3 : Program Management
- C5 : Strategic vision
- Know how to analyze or diagnose a company in relation to environmental management issues (C1 + C2 + C3 + C5)

Be aware of and knowledgeable about the main regulatory constraints related to environmental management (C1 + C2 + C3 + C5)

How knowledge is tested

Project 50% + Table-top assignment 50%.

Bibliography

– M.-P. Grevêche et L. Vaute, Au cœur de l'ISO 14001:2015 : Le système de management environnemental au centre de la stratégie, AFNOR (2015)

1. Abdelmalki et P. Mundler, Économie de l'environnement et du développement durable, De Boeck (2015)
– T. Tietenberg et coll., Économie de l'environnement et du développement durable,
PEARSON (2013) – Articles dans la Revue des Techniques de l'Ingénieur

Teaching team

- N.Clootens
- Outside contributors

Sustainable Development Goal



Affordable and clean energy



Responsible consumption and production

Total des heures **35h**

CM	Master class	29h
TD	Directed work	6h

Useful info

Name responsible for EU

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