



Resource Recovery

Resursåtervinning

7.5 credits

Ladok Code: 42K18C

Version: 1.0

Established by: The Teaching Committee 2012-02-24

Valid from: Spring 2012

Education Cycle: Second cycle

Main Field of Study (Progressive Specialisation): Environmental Engineering (A1N)

Disciplinary Domain: Technology

Prerequisites:

Subject Area: Environmental Science

Grading Scale: ECTS-credits

Content

- Resource recovery for a sustainable development
- Sustainable materials
- Feeding the waste streams: sources of materials in the environment
- Managing material waste: technologies for separation and recycling
- Drivers and barriers for material recycling: social, legal and economic factors
- Design for the environment: the life cycle approach
- Environmental impacts of waste and recycling

Learning Outcomes

Having passed the course, the student will be able to

- explain the reasons behind and the motives for resource recovery
- describe the steps in recycling process which contains
 - collection*
 - sorting*
 - dismantling*
 - identification*
- describe and discuss available recycling technologies e.g. crushing, melting, converting
- evaluate various available recycling technologies from economical, environmental and social points of view
- explain and discuss how waste management can be made sustainable

Forms of Teaching

Lectures, exercises, study visits and project work

Forms of Examination

The course will be examined through the following examination elements:

Written Examination

Learning outcomes:

Credits: 5

Grading scale: ECTS-credits

Project

Learning outcomes:

Credits: 2

Grading scale: Fail (U) or Pass (G)

Study visits

Learning outcomes:

Credits: 0.5

Grading scale: Fail (U) or Pass (G)

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

To be announced at course start.

Student Influence and Evaluation

The head of department and course coordinator have the responsibility to systematically and regularly monitor the students' assessments of the course. These assessments form the foundation for the course development.

Miscellaneous