



HÖGSKOLAN I GÄVLE

Environmental Assessment of Buildings 7.5 cr

Miljöbedömning av byggnader 7,5 hp

Set by Board of Technology and Built Environment

Version

Set at

Valid from

10/9/08

VT2011

Level	A1N
Education level	Second cycle
Course identifier	MX340D
Credits	7.5 cr
Main field of study	Energy Technology
Subject group	Energy Technology
Disciplinary domain	Technology 100.0 %

Learning outcomes

Upon completion of the course the student is expected to

- understand the basics for the mutual interaction between buildings, humans and the surrounding environment
- understand how buildings may affect peoples' health, ecosystems and use of resources
- understand the meaning of vital terms like e.g. green building and environmental management
- understand what life cycle assessment (LCA) is in terms of method and applications for buildings
- have practical experience of a computerised tool for environmental assessment of a building
- understand which factors that are crucial to the result of an environmental assessment of a building

Course content

The content includes lectures with a broad orientation about the environmental issues in the Swedish building sector and life cycle assessment. A special attention is given to practical applications of LCA softwares to analyse the environmental performance of buildings. In more detail the lectures cover areas as

- (1) broad orientation about different Swedish and foreign methods for environmental assessment of buildings with inclusion of LCA

(2) an overview of case studies where several methods have been applied to the same building. The course also includes a computer laboration with a seminar. The laboration will give some skill in user practise meanwhile a deeper understanding about what factors contribute to the overall result.

Teaching

Lectures
Laboration
Assignment
Seminar
Study visit

Prerequisites

English language proficiency equivalent to (the Swedish upper secondary school) English course 6/B.
Any basic course in environmental science.

Examination

Written examination, Laboration, Written assignment and Seminar.

Grade

A, B, C, D, E, Fx, F

Sustainable environment

The majority of the course content deals with sustainable development..

Module

0010	Written examination	3 cr	Grade: AF
0020	Laboration	0.5 cr	Grade: UG
0030	Written assignment	2 cr	Grade: AF
0040	Seminar	2 cr	Grade: UG