EG2040 Wind Power Systems 7.5 credits

Vindkraftsystem

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

Establishment

Course syllabus for EG2040 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

General admission requirements

Language of instruction

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

Intended learning outcomes

The course Wind Power Systems aims at providing knowledge about the wide area of technology that is needed for persons working in the wind energy industry or related industry, like generation or network companies. The course also provides a general knowledge in this wide area.

Course contents

Wind energy technology covers many technological aspects, like aerodynamics, mechanics, physics and electrical engineering. Hence, the course intends to provide a wide overview of, for example, the physical power in the wind, the historical development, the wind energy industry, market regulations, wind turbine design concepts, environmental impact of wind turbines, economics, network integration, stand-alone systems and offshore wind power systems.

An important part of the course is a team assignment. In this assignment, the team will perform a feasibility study for a wind energy project.

Course literature

J. F. Manwell, J. G. McGowan, A. L. Rogers "Wind Energy Explained: Theory, Design and Application"

Examination

- TEN1 - Examination, 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.

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

Other requirements for final grade

Home assignments, Course project, Exam, 5 credits.

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.