



Faculty of Technology and Science
Environmental and Energy Systems

Syllabus

Course Approval

The syllabus was approved by the Faculty Board of Technology and Science on 24 February 2010, and is valid from the Spring semester of 2010 at Karlstad University.

Course Code: EMGC17

Energy and Environmental Technology: Degree Project, 30 ECTS Credits

(Examensarbete för högskoleingenjörsexamen i energi- och miljöteknik med internationell inriktning, 30 Swedish credit points)

Degree Level: Bachelor

Increasingly In-depth Study: G2E (First cycle, has at least 60 credits in first-cycle course/s as entry requirements, contains degree proj. for B.A./B.Sc.)

Language of Instruction

The language of instruction is Swedish but some components may be taught in English.

Prerequisites

The course is open to students who, beyond the degree project credits, have completed all but 30 of the required credits for the Bachelor's degree.

Major Field of Study

MEI (Environmental and Energy Systems)

Learning Outcomes

The aim of the degree project is that students develop and demonstrate the knowledge and skills required for professional work abroad in engineering by documenting such experience.

Knowledge and understanding

For a degree project Pass grade, students should be able to:

- demonstrate specialised knowledge in the chosen technological area,
- describe how the work relates to social and ethical issues in the country in which the degree project was carried out.

Skills and abilities

For a degree project Pass grade, students should be able to:

- critically, independently and creatively identify, formulate and deal with engineering problems,
- plan and carry out tasks within specified time limits using the appropriate engineering methods,
- critically and systematically integrate knowledge acquired in the course of the programme,
- clearly present and discuss their results and the knowledge and arguments on which these are based, orally and in writing,
- perform information searches and independently identify relevant information,
- write a report conforming to standard practice in science as regards disposition, formal aspects and correct referencing.

Judgement and approach

For a degree project Pass grade, students should be able to:

- assess a fellow-student's degree project or equivalent in terms of relevant scientific and ethical aspects,
- evaluate the ways in which the project result can contribute to sustainable development from an ecological, social and economic perspective.

Content and Form of Instruction

The course consists of a longer period abroad where the degree project material is collected.

The purpose, aim, and method of the project are set by the examiner or supervisor.

If two students collaborate on a project, their individual problem formulations must be clearly indicated from the start. The students are required to submit separate reports.

Students are required to conduct, manage, perform and present the project problem and the period abroad independently.

Students are responsible for the process and the result. Instruction is in the form of supervision and seminars.

Reading List

See separate document.

Examination

Assessment is based on problem formulation, implementation, written report, oral presentation and performance as seminar discussant.

The examiner awards a grade in consultation with the supervisor.

Grades

One of the grades Fail (U), Pass (G), or Distinction (VG) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.

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