



Faculty of Technology and Science
Electrical Engineering

Syllabus

Course Approval

The syllabus was approved by the Faculty Board of Technology and Science on 28 May 2009, and is valid from the Spring semester of 2008 at Karlstad University.

Course Code: ELGC11

**Electrical Engineering: Degree Project, 22.5 ECTS Credits
(Examensarbete, 22.5 Swedish credit points)**

Degree Level: Bachelor

Progression Level: C

Language of Instruction

The language of instruction is Swedish, but the course can also be taught in English if so required by international students or teachers.

Prerequisites

In order to be allowed to commence the degree project, at least 135 ECTS Credits from the courses of the program must be approved.

Major Field of Study

Electrical Engineering

Learning Outcomes

The degree project is usually the final course of the program. The students are given the opportunity to convert their knowledge of the field in a larger project and demonstrate both their subject knowledge and ability to perform work that meet the standards of engineering. The project is usually done in collaboration with a company.

During the course, students will demonstrate their ability to:

- define and formulate a problem in such a way that it becomes possible to solve within the given time frame and make the necessary delimitations
- identify, retrieve, and evaluate the knowledge and information needed to solve the problem
- select a suitable method to solve the problem
- convert their theoretical knowledge into practical actions to solve the problem
- work independently, i.e. to conduct and manage the project and take responsibility for its execution
- retrieve and integrate the views of the customer/supervisor
- present their work in a written report that meets the requirements of transparency, traceability, repeatability, logical structure, adequate language, and established industrial standards
- present their work orally in a seminar
- act as opponent and give constructive criticism on the work of fellow students.

Content and Form of Instruction

The course work consists of an independent project that can be done individually or in pairs. In case two students collaborate on a larger project, the individual contribution and area of responsibility must be made explicit from the start of the project. The topic of the project is selected in consultation with the course examiner. Once that is established, students will be assigned a supervisor. The students are responsible for maintaining contacts with the supervisor.

The degree project will be presented in a written report and an oral presentation. In connection to this, each student will act as an opponent on the work of a fellow student.

Reading List

See separate document.

Examination

Examination is in the form of active participation in seminars and oral and written presentation. The examination is done during two obligatory seminars with oral presentations: one presentation of the work in progress and one final presentation. At the final presentation, each student will act as opponent on the work of a fellow student. The finished work shall also be presented in a written report. This shall be submitted according to university directives.

Students are expected submit a draft of the report to the course examiner about two weeks prior to the final presentation. At this point, the course examiner consults the supervisor to decide whether the project is in such a state of readiness that it can be admitted for final presentation.

Grades

One of the grades Fail (U) or Pass (G) 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, ref. C2007/368, stipulate the obligations and rights of students and staff.