



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Examensarbete i industriell elektroteknik och automation

Degree Project in Industrial Electrical Engineering and Automation

EIEL05, 22,5 credits, G2 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: The Faculty Board

Date of Decision: 2015-06-02

General Information

Elective for: IDA3, IEA3

Aim

The aim of the degree project is to allow the student to develop and demonstrate the knowledge and skills required to work independently as an engineer by acquiring new knowledge and by applying the knowledge previously acquired on the programme to a problem in engineering, resolving it independently and in a manner conducive to engineering practice.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- demonstrate an ability to acquire the knowledge relevant to the problem under examination, and
- demonstrate an ability to place the problems explored in the degree project in the wider context of the discipline by exploiting knowledge acquired during the programme of study.

Competences and skills

For a passing grade the student must

- demonstrate an ability to identify, formulate and handle issues in a holistic,

autonomous and creative manner and be able to evaluate various technical solutions to the problems explored in the degree project,

- demonstrate an ability to plan and execute a degree project within given time limits using relevant methods conducive to engineering practice,
- demonstrate an ability to critically and systematically integrate the knowledge acquired in key courses on the programme and in the work on the degree project,
- demonstrate an ability to identify relevant sources of information, carry out information searches, assess the relevance of this information and use correct reference management, and
- demonstrate an ability to give an account of and discuss orally and in writing their information, problems and solutions in relation to the issues explored in the degree project.

Judgement and approach

For a passing grade the student must

- demonstrate an ability to assess their own degree projects and those of other students informed by relevant disciplinary, social and ethical issues.

Contents

The degree project is to include the following assessed components:

- a document describing the goals of the degree project,
- a written report in Swedish or English with a summary in Swedish (only for Swedish-speaking students) and English,
- a popular science poster,
- oral presentation of the degree project at a public seminar at the Faculty of Engineering, and
- an oral and written critical review of another student's degree project at a public seminar where it is presented.

The document describing the goals of the degree project is to be written at an early stage and must be approved by all supervisors and the examiner. It is to include a description of the problem to solve. The document is also to include a general description of the approach, choice of method, resource requirements and time needed.

The written report is to describe the degree project and its findings. If two students have collaborated on the project, the contribution of each student must be clearly discernible.

The written report is to be made available in a form suitable for review at least one week before the seminar, which is to be timetabled at some point between 15 August and the Monday of Midsummer week, with the exception of the period 22 December–6 January.

The oral critical review is to be based on a fellow student's written report when it is presented at a public seminar. The review is to be documented in writing before the seminar. One degree project can be reviewed by more than one student.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: Written and oral examination. The assessed components are to demonstrate that the student has attained the learning outcomes. For a pass on the degree project, the

student must have passed all assessed components within 12 months, unless there are valid reasons. The report is a public document. The assessment may not be based on classified information.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Admission requirements:

- Students may commence work on the degree project when they have passed at least 120 credits which can count towards their degree. Exemption from this requirement must be approved by the programmes board and will only be granted in exceptional circumstances.

Reading list

- The course literature and other teaching material that is to be used is to be approved by the supervisor with due consideration taken of the nature of the degree project assignment.

Contact and other information

Examiner: The examiner must be a member of academic staff at Lund University who holds at least a Licentiate degree or the equivalent and who is appointed by the head of department.

Course homepage: <https://www.lth.se/iea/utbildning/kurser-paa-campus-helsingborg/examensarbete-i-industriell-elektroteknik-och-automation/>

Further information: One or several supervisors shall be appointed for each degree project. At least one of the supervisors (the principal supervisor) must be an employee of Lund University and hold at least a degree of Master of Science. In addition to the principal supervisor, assistant supervisors may be appointed. The supervisors will provide continuous supervision throughout the work on the project and are to ensure that, among other things, it is possible for the student to complete the project within a period of 15 weeks of full-time study. The student can only request supervision for a period of no more than 12 months.

The student is responsible for registering his or her passed degree project in LUP Student Papers. The degree project is then approved in LUP by the department. The department is responsible for filing the report.

More information on degree project support is available at <http://www.hbg.lth.se/student/examensarbete/> and at <https://www.student.lth.se/english/masters-students/degree-project/>.