Degree projects at EIT

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This document provides an overview of how degree projects are performed at the department of Electrical and Information Technology (EIT). Aspects from both the student and supervisor/examiner perspective are considered in order to clarify the responsibility of each role and what is expected from the different involved parties.

1 General information

The department offers degree projects within its whole scientific area. Since this is broad and extensive, both depth and breadth in the projects are possible. Regulations and information material are available at the LTH site for degree projects, in swedish and english:

https://www.student.lth.se/kurs-och-programinformation/examensarbete/

https://www.student.lth.se/english/masters-students/degree-project/

There you will find a link to the electronic enrolment form. The same system is also handling the activities. The webpage also contains useful information, instructions and guidelines, e.g., for writing goal document, popular science summary and the opposition.

The EIT web page has a list of announced projects with corresponding suitable contact persons. If you or a company have your own proposal, please have a look at the research pages to see if you can find a suitable contact person. If you cannot find a good starting point, the list of examiners may be of help. It is important to note that the list of announced projects is not exhaustive. Many researchers and companies have projects in mind but have not written them down or published them on a webpage yet. It is always a good idea to discuss directly with the researchers to see what possibilities you currently have.

There are four different degree projects at EIT:

EITM01: Master theses for five year engineering programmes, 30 credits.
EITM02: Master theses for two year international master programmes, 30 credits.
EITL01: Bachelor theses for five year engineering programmes, 15 credits.
EITL05: Bachelor theses for three year engineering programmes in Helsingborg, 22.5 credits.

The prerequisits for starting a project is given in the course syllabus, available at these links.

2 Examiner and supervisor

Regardless if the degree project is performed at the department or at a company, you need to have an examiner who makes sure that the project is well defined and satisfies the academic requirements in the course plan. EIT has a limited number of examiners, who are appointed by the Head of Department. These are responsible for the overall academic quality of approved theses, and are expected to discuss, develop, and communicate to the supervisors, the criteria for approved theses. The examiner must be a member of academic staff at Lund University and hold a PhD. The employment regulations at Lund University define academic staff as "professor and guest professor, adjunct professor, associate professor, adjunct associate

professor, assistant professor, research associate, post doctor, lecturer, and adjunct lecturer." The examiners at EIT are listed on the web page:

EIT Degree Projects

From the course plan of EITM01/EITM02: "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 licentiate or the equivalent. 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 20 weeks of full-time study. The student can only request supervision for a period of no more than 12 months." Hence, a PhD student in the beginning of his/her studies can not be principal supervisor, only assistant supervisor.

For EITL01 and EITL05 the recommended study time is 10 and 15 weeks, with a maximum period of supervision of 5 and 12 months respectively.

3 Enrolment and registration

The procedure for enrolling and registering a degree project (EITM01 and EITM02) consists of the following steps:

1. To make sure that you are elegible for the project, you send in the electronics enrolment form linked above, and wait for the confirmation email that you forward to your supervisor and examiner.
2. The project is registered in the department database, making it visible on the webpage. The main supervisor is responsible for this. The students must provide the main supervisor with a short text for the webpage, describing the project.
3. Registration of a project will only be done once the goal document has been signed by the examiner and all supervisors.

When starting the degree project, the students should print out the "summary of activities" form and keep it for the duration of the project, filling it out as each new component has been approved.

4 Assessed components

The degree projects EITM01 or EITM02 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 English.
- A separate summary, which is aimed at a popular science readership.
- An oral presentation of the degree project at a public seminar at the Faculty of Engineering.
- An oral and written critical review of another student's degree project at a public seminar where it is presented.

Documentation of activites are done using the summary of activities document.

For EITL05 projects, and projects starting in the fall 2015 and later, the above assessed components also apply with the difference that the popular science article is replaced by a popular science poster.

For EITL01 (and EITL05 before fall 2015) there are no requirements for a goal document or separate popular science summary.

A degree project of inferior quality or that passes the time limit of 12 months shall be formally failed and registered in Ladok. This does not prevent renewed examination. Refer to the current course plan for more details of requirements and regulations.

5 Goal document

From the course plan of EITM01/EITM02: "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 disciplinary foundation and proven experience on which the project is to be based, the main sources of information, and the project's expected contribution to the advancement of knowledge. The document is also to include a general description of the approach, choice of method, resource requirements and time needed. The contents of the document are to be gradually integrated in the written report."

The typical size of a goal document at EIT is 3-4 pages. The writing of the goal document is a part of the degree project and should be regarded as the first part of the 20 weeks scheduled for the project. Approximately one week should be expected for completing the goal document.

6 Written report

The target group is "A student at the end of your own education". The report should be sent to the opponent(s) one week before the presentations. The main supervisor is responsible for sending the report to all opponents. The final version of the report should be sent to the examiner and supervisor no later than one week after the oral presentation.

If two students have collaborated on the project, the contribution of each student must be clearly discernible.

For BME students, the program has explicitly requested that the report must have a separate subsection discussing ethical aspects of the project.

The report shall demonstrate good academic practice. This entails among other things a correct and pertinent handling of references, and respecting the copyright. The university library has compiled resources for academic integrity at

http://www.lub.lu.se/en/services-and-activities/student-support/academic-integrity

For extensive help on academic writing in English, please see the web site http://awelu.srv.lu.se/.

The report shall be produced and filed in both a printed and an electronic version (pdf). As a rule, color is used only in the electronic version, figures should be adapted so that they can be understood in black and white print. If necessary for understanding the material, a few color pages can be allowed in printing. The examiner is responsible for sending the report for printing, but it can be delegated to the main supervisor if this is more suitable. The department administrator should be on CC when submitting the report for printing. The students themselves are not allowed to send the report for printing.

Each student is entitled to 5 copies each. In addition to these, 3 extra copies are printed. Of these extra copies, two are silently saved for archiving (i.e., not returned to sender) and one is given to the main supervisor. Thus, the default is always to print 8 copies for one student projects and 13 copies for two student projects, all in black and white. The only address to use for sending the report is tryckeriet@ehuset.lth.se.

Templates in Word and LaTeX can be downloaded from the department home page.

The students are responsible for registering the report in LUP student papers. It is subsequently approved in LUP by the department.

7 Popular science summary

The summary should be at most 3000 characters, approximately one page. This summary is also to be registered in LUP student papers.

8 Oral presentation

The target group is "A student at the end of your own education". The presentation should include both the problem setting and the results, i.e., what was supposed to be done and what has been done. The presentation shall be discussed in advance with the supervisor.

When the presentation date has been set, the date and time must be updated in the department database so that the correct date is visible on the webpage. This is done by the main supervisor who also is responsible for booking the presentation room. The room is booked at https://se.timeedit.net/web/lu/db1/lth2/. Suitable rooms at the department are E:2311, E2517 and E3139.

The presentation should last at most 20 minutes. Questions from the opponents and the audience are not included in this time. The main supervisor chairs the seminar and includes the audience to give feedback to the students on their presentation.

The seminar can be scheduled from August 15 to the Monday in the midsummer week, except for December 22 to January 6. This is determined by the course plan.

9 Opposition

The opponents must contact the main supervisor of the project and verify that the opposition is available. The main supervisor or the examiner can restrict the number of opponents for one project. It is recommended to have at most four opponents in order to allow the examiner to properly conduct the examination of the opponents.

Three parts that must be fulfilled are:

- Comments on the report. This can be done by making notes in a copy of the report. These notes and comments are handed to the students presenting the report.
- Written review of the report. This is written before the seminar and should be at least one half and at most one A4 page. It is done individually and should be sent to the examiner before the presentation.
- Oral questions to the presenting students after their presentation. The questions should be of such character that it is obvious to the examiner that the opponents have read and understood the report in order to be able to ask the questions.

A "pass" is documented by signing the opponents' form "Summary of activities". Thus, the opponents must bring this form to the presentation. The examiner of the presented project signs the part "Critical review...". The opponent's own examiner signs the corresponding part under "Written material". Note that the examiner in this case does not approve any material and only has to check that the first part has been signed by the examiner of the presented project.

10 Final registration and filing

When all parts are fulfilled, make sure that the electronic system is updated with the relevant information. The administration verifies that the students have registered the electronic versions of the report and the popular science article in LUP student papers. When this is done, the project is registered as approved in Ladok. Students can log into LUP student papers at https://lup.lub.lu.se/luur/ and a manual can be found at https://lup.lub.lu.se/lupInfoDoc/LUP_manual_student_eng_100706.pdf