PROCEDURES FOR STUDENT DEGREE PROJECT WRITING – MASTER OF SCIENCE, MASTER, BACHELOR OF SCIENCE

(ACADEMICALLY ATTACHED TO THE DEPARTMENT OF CIVIL, ENVIRONMENTAL AND NATURAL RESOURCES ENGINEERING, SBN)

GENERAL

To be awarded a degree, you are required to have completed a degree project that has primarily been carried out individually or, in some cases, by no more than two students. When the degree project has been written by two students, this should be reflected in the scope and depth of the thesis. It should also be stated clearly who did what.

AIM/GOAL

The overall goal of the degree project is for you to practice, develop and display proficiency in applying theory and method to solve problems relevant to your chosen profile. Detailed intended learning outcomes for the degree project can be found in the course syllabus that applies to the degree project you intend to do.

ADMISSION REQUIREMENTS

The admission requirements are specified in the course syllabus that applies to your degree project. General admission requirements are a minimum number of passed courses according to the programme syllabus and a certain number of these needs to be at an advanced level. There are also requirements concerning the maximum number of compulsory courses that may be unfinished. The examiner appointed to your degree project will determine if you have the qualifications required for the proposed degree project.

SCOPE

Master of Science in Engineering counts for 30 credits, which corresponds to 20 weeks of full time work. Bachelor of Science in Engineering counts for 15 credits, which corresponds to 10 weeks of full time work.

EXAMINATION

For your degree project to pass it is required that:

- 1. the written report is approved by the examiner and published in the LTU database
- 2. the work has been presented and defended
- 3. an approved opposition has been carried out for another degree project
- 4. you have participated at two other degree project presentations.

These requirements are to be documented on the degree project form after approval.

START

PREPARATION

In order to be prepared for the degree project, it is recommended that you read and listen to the theses and presentations of a few other students before starting on your own.

SUGGESTED THESES

You should start looking for degree project ideas on your own accord. You may apply for projects externally, directly via companies or organisations, for example through their websites where thesis projects tend to be advertised. The LARV days can also be an opportunity for contacting companies that may have suitable projects for a degree project. "Exjobb Luleå" can help by matching you with a company. Suggestions for thesis projects can also be found on various websites, for example http://www.ltu.se/edu/karriar/Exjobb. Suggestions can also be made by teachers at the department, either as a result of companies contacting LTU, or of suitable degree project subjects existing in current research projects.

A degree project can also be carried out at another university or research institute, in Sweden or abroad.

APPOINTMENT OF EXAMINER, SUPERVISOR AND APPROVAL TO BEGIN THE WORK.

Give a brief description (approximately 2-3 A4 pages) of your suggested degree project, including background, aim and implementation plan.

Then contact your faculty programme director, or a teacher in your field of interest, in order to have an examiner appointed for you. The examiner is your primary supervisor and the person who approves your starting the degree project and who ultimately decides whether it passes.

The examiner may also, in some cases, appoint an internal supervisor for you. The primary task of the internal supervisor is to advice you on the planning and writing of your report.

When the degree project is done at a company, an external supervisor should be provided by the company to provide continuous guidance and discussion throughout the thesis process. The external supervisor shouldhave sufficient expertise in the field where you are applying your engineering knowledge. LTU reserves the right to approve this supervisor. You relay the contact information of the external supervisor to the examiner, who in turn relays the degree project information to the external supervisor.

Your assigned examiner will assess whether or not your subject qualifications are sufficient and whether the project you have chosen is suitable for degree project. The short description that you have previously submitted, as well as your curriculum vitae, will be the basis for this decision. The project's suitability is assessed based on whether:

- The degree project has clearly defined boundaries and is suitable in scope
- The aim is clearly defined and has a scientific/engineering basis.
- The degree project is clearly focused on the subject area that is being studied

If the degree project is done externally at a company, it is important that all partners (the student, the examiner and the company) have the same idea about what needs to be done. A meeting with all partners may therefore be required before you receive approval to begin work on your degree project.

AGREEMENT ON PRACTICAL ISSUES, RIGHTS AND PATENTS

Before work commences, the student should have reached an agreement with the company or the department concerning any work and travel compensation, access to offices/workspaces, computers, housing, etc. In cases where the degree project might be subject to confidentiality and/or the degree project might lead to products or patents, these aspects must be agreed upon beforehand through contracts concerning confidentiality and rights. For help with contracts concerning commercialisation, contact the commercialisation group at CENTEK, LTU.

ADMISSION AND COURSE REGISTRATION

The degree project work formally starts once you have been admitted to and registered on the degree project course. There is a web form for registering the start of your Degree Project that you must fill in. The web form should not be filled in before you fulfill the entry requirements for the Degree project course and your examiner has approved your subject qualifications and your project as a suitable degree project. Once this form has been submitted to the Educational Administration and approved by your examiner the formalities of starting your degree project are complete.

DURING THE COURSE OF THE DEGREE PROJECT WORK

PROJECT PLAN/PILOT STUDY/PLANNING REPORT

You should write a detailed project plan within 1-2 weeks of starting your degree project, corresponding to 3-5 A4 pages. The project plan is a steering document stating the direction, scope and sub-objectives of the work that you are to conduct. The plan should contain overall descriptions of tasks and a time schedule where the tasks' temporal and logical relation to each other is made clear. Comments concerning expected problems and alternative approaches should also be included. Possible expansion and necessary limitation should also be commented on. The plan may obviously change during the course of the work if the conditions change.

The plan is established to create a logical structure for the project and highlight challenges, time constraints and limitations from an early stage. After discussion with your examiner and possibly your external supervisor, you may need to adjust your project plan, after which your examiner approves it.

PROJECT/SUPERVISORY MEETINGS

You should have regular meetings with your examiner/supervisor and any external supervisor to ensure that the work progresses as planned. As the student, you are responsible for initiating project meetings and contacting the supervisor and examiner. The meetings should be scheduled well in advance. You and your examiner have a joint responsibility to ensure that all parties agree on what is to be done.

The Department provides active guidance for two semesters, beginning from the start of the course.

WRITING THE REPORT

The report is part of an examination of the degree project and reflects both your knowledge of the particular field and your ability to present an independent work in writing, which is of interest to future employers. Discuss the layout of the report with your internal supervisor at an early stage. External supervisors may also have preferences or demands concerning the layout, but there is no guarantee that they will meet the standards for a scientific report at LTU.

The report may be written in Swedish or English. The author is responsible for ensuring that the language used in the report is correct.

For details concerning the design of the report and how to write the report, consult your examiner.

EXAMINING THE REPORT

The report is normally examined in several steps and it will primarily be read by the examiner, who then provides comments for possible improvements. Remember that examiners have many other duties, and you need to schedule a time for them to read the report.

FINAL PHASE

APPLICATION FOR ORAL PRESENTATION

There are a few occasions each semester for oral presentations and you sign up for these by filling in the "Application form for presenting thesis". You will find the last day of application on the LTU degree project web-site. It is important to have a dialogue with your examiner and agree on that you have come far enough in the process to give your presentation.

ORAL PRESENTATION

The oral presentation is part of the examination of your degree project. You are expected to show that you are able to prepare and conduct a presentation. The presentation should be logical and organised so that persons who haven't read the degree project are still able to follow it. At the presentation, you should also show that you have an ability to highlight the important aspects of your work, as time is limited. Part of the assessment concerns whether or not you can handle delivering a presentation of a certain length. For each presentation you have 20 minutes for presenting, 10 minutes for opposition and 10 minutes for additional questions. Ask your supervisor/examiner to notify the Education Administration by e-mail (edusbn@ltu.se) thatyou have passed your oral presentation. Your opponent should have access to your report at least one week before the date of the presentation.

OPPOSITION

An opposition of another student's degree project is part of the examination of your degree project. In the opposition you should show your ability to read, examine and analyze an academic report. This is done both written and orally. A written opposition report summarized in two pages should be given to both the presenter of the degree project and to the appointed examiner of the degree project you have reviewed. The opposition report should contain an assessment based on the check list in the document "LTU's Guidelines for degree project". The report needs to be submitted two days before the degree project presentation date. The opposition report will be used to assess your opposition and give the presenter the possibility to improve the written report.

An oral opposition is to be made at the time of presentation and is expected to take 10 minutes. The opponent will prepare relevant questions for the presenter as well as compile points from the checklist that you find in the document "LTU's guidelines for degree project". Being two or more opponents still means that each student makes their own assessment of the work. Ask your supervisor/ examiner to notify the Education Administration by e-mail (edusbn@ltu.se) when you opposition has been approved.

ADJUSTMENT, APPROVAL AND PUBLISHING OF THE REPORT

After the oral presentation there are often adjustments to be made. You will therefore meet with your examiner one last time to discuss what additional adjustments need to be made in response to comments made during the oral presentation.

When the report has been adjusted, it can be approved by the examiner, after which you are responsible for uploading the report in Diva, which is done through the LTU library website by filling out an online form connected to the database. Note that it is only the insert (starting with the title page and ending with the final appendix) that should be uploaded. You make the front page separately in the system.

APPROVAL OF THE DEGREE PROJECT

Your final grade will be registered once all the examining modules of the degree project (written report, oral presentation, opposition, attendance at two presentations and uploading your thesis for publication) have been completed and approved by your examiner.

PUBLICATION AND PRICES

Once your degree project has been approved, you can investigate whether there is interest in publishing parts of your work and results in a trade publication. If there is, you may be given the chance to write a short, more easily accessible article about your work and thus reach a wider audience.

You may also investigate whether there are any national and international prices that you can apply for based on your work.

MISCELLANEOUS

DEGREE PROJECT BY TWO STUDENTS

No more than two students are allowed to do a degree project together and this is only to be made in exceptional cases. When this happens it should be shown in the depth and scope of the work. The work should also be divided so that the students execute different parts of the work and the division should also be shown in the foreword of the report. In this way the work can be assessed separately.

PLAGIARISM

Plagiarism is a serious form of cheating. All theses are examined for plagiarism by the examiner before approval. If plagiarism is uncovered disciplinary actions will be taken, which could lead to suspension and you may be required to write another degree project at a later date. Plagiarism is defined as theft of literary or artistic material. It includes copying and using the texts and images of others in your own report without citing sources or quotes. A degree project that is very similar to another, earlier degree project could also be seen as plagiarism, as could the reuse of previously published material to which you have contributed, if the source is not cited.

CONFIDENTIALITY

As a general rule, the principle of public access to official documents applies to all operations at the University, meaning that the public should have access to documents created at the University. For this reason, you should primarily choose degree project subjects that can be published in their entirety when finished. However, the Secrecy Act provides some possibilities for companies that provide degree projects to have them classified as confidential, in whole or in part.

The examiner assists the student to creata a written contract that should be signed by the Department, the company and the student. The report should be published, even if it is classified as confidential. The difference is that the report is not made accessible to the public until the confidentiality period has expired. The Department should have at least one complete report available for archiving.

The degree project should be presented publically during one of the special presentation days that are ar-ranged at the department. At these presentations, consideration must be given to confidentiality require- ments.

PRINTING OF THESES

If you are interested in a printed report you can contact the University Printing Service. You pay for the printing yourself.

https://www.ltu.se/student/Planera/Examensarbete/Bestall-kopia-av-examensarbetet?l=en