



DEPARTMENT OF TECHNOLOGY AND BUILT ENVIRONMENT
Division of Electronics

Master's Thesis in Electronics, D
20 credits
Code: 7EMEXD
Subject area: Electronics
Education area: Technology 100 %

Established by the Board of Dept.
of Technology and Built Environment
2003-10-01 (valid from autumn 2003)

MASTER'S THESIS IN ELECTRONICS D, 20 CREDITS

(Magisteruppsats i Elektronik D, 20p)

Aim

The thesis is connected to a Master's degree for which a major subject is clearly given. By the character of academic engineering, the thesis is also valid for Engineering degree as well as a Bachelor's degree.

The thesis is regarded as an advanced course on the D level in the major subject.

The aim of a thesis is to show that the student:

- * has insight in the scientific methodology for preparation and finalizing of a project,
- * has the ability of applying achieved knowledge on such a level to independently work through a given assignment of scientifically interesting nature,
- * has the ability of communicating in writing and speech,
- * can use advanced literature in the field and use results hereof in the thesis work,
- * has knowledge and ability to document the work in a scientific way.

The extent of the thesis work

The thesis work is nominally equivalent to 20 weeks of full-time studies. This time is encompassing analysis, literature study, project-specific study, finalizing, documentation and other reporting to appropriate proportions, in order to achieve the goals stated above.

Examiner

An examiner is appointed by the Head of ITB/Electronics.

The examiner is responsible to examine that the thesis is fulfilling the requirements set by the university. Before the thesis work starts, the examiner is responsible for stating the focus and main tasks, which have to be documented. Furthermore, the examiner has to assess whether or not the task is reaching the stated academic height, in order to achieve the goals stated above. For this, the application form "Master's Thesis (D-level), 20 p Application" is used.

The examiner is responsible to make sure that the appointed supervisors are fulfilling their obligations towards the student. The examiner is finally completing the examination and decides if the thesis, the presentation of the thesis, and the defence of the thesis is up to standards of the university. If so, the thesis is approved by the examiner.

Supervision and supervisors

A supervisor is appointed for the thesis work in agreement with the examiner.

The supervisor is participating in the writing of the project description, in order to make formulations and necessary limitations in agreement with the requirements of extent and academic height of the thesis.

The supervisor is supposed to help the student to plan the thesis work, make the student familiar with scientific approach, analysis, and process. The supervisor should be engaged in the work enough to certify that the work is progressing according to the intended time schedule.

More than one supervisor may be appointed. However, at least one supervisor must be scientifically experienced.

Patents, publicity etc.

For thesis work performed in industry or equivalent, rights to e.g. patents and ownership have to be stated in a written agreement before starting the thesis work.



After examination and approval of the examiner, the thesis is official and treated as a public document. The degree of publicity may be limited partly or totally by means of an agreement of confidentiality. Such an agreement of confidentiality is made with the University of Gävle, normally in advance at the time when the project is formulated. The decision concerning confidentiality is a matter of the Head of Education of the University of Gävle.

Prerequisites

Before starting the thesis work, an application – “Master’s Thesis (D-level), 20 p, Application” has to be filled out and a short description of the project enclosed.

Furthermore is needed:

- approved results of at least 90 credits in mathematics and major subject,
- approved results of such courses which may be considered of vital importance for the performance of the thesis work, i.e. courses on the D level in the major subject.

For students holding a Bachelor’s degree or equivalent, all courses of relevance for the thesis assignment in a Master’s program should be finished with passed results.

Examination

Examination is performed by the University of Gävle. The Head of ITB/Electronics may decide that examination should be performed by another university or equivalent institution within Sweden or abroad.

A correctly performed project is presented in a scientific report of common kind. The report is written in English. If the Head of Education of the University of Gävle has agreed on confidentiality of the thesis, the thesis has to be presented in two versions. One complete version is presented to the examiner and supervisors, and another version is presented as the public document where confidential parts are omitted. Despite the fact that confidential parts are omitted in the public version, this document must be written in a trustworthy way. The thesis is defended publicly in a seminar held at the University of Gävle, at a time decided by the Head of ITB/Electronics. The student is requested to act as opponent at the seminar presentation of another thesis and also to be present at seminar presentations of at least another two theses before graduating. The presence of the student as opponent and two other seminars is noted in a personal examination record (the Green Book) by the examiner in duty.

After approved examination and all other obligations stated above fulfilled, the course is marked with the grade “Godkänd”. If any of the above stated obligations are not approved the course is marked with the grade “Underkänd”.