



# HÖGSKOLAN I GÄVLE

## Master's Thesis in Electronics 30cr

*Examensarbete på masternivå i elektronik 30hp*

Set by Board of Technology and Built Environment

### Version

Set at	Valid from
9/17/10	VT2009
11/7/12	VT2013

<b>Level</b>	A2E
<b>Education level</b>	Second cycle
<b>Course identifier</b>	EE470D
<b>Credits</b>	30cr
<b>Main field of study</b>	Electronics
<b>Subject group</b>	Electronics
<b>Disciplinary domain</b>	Technology 100.0%

**Learning outcomes** The aim of the Master's thesis is to show that the student has gained the professional ability to find, plan, work through, and report, a scientifically interesting project within the major subject of the education.

The Master's thesis gives a possibility for the student to deepen knowledge, skills and capabilities, in relation to the education given on the Master's level.

On completion of the course the student has shown:

- ability to independently integrate and use knowledge gained on the Master's level
- ability to manage complex facts, problems, and situations
- qualifications for a working life in research and development work

**Course content** The Master's thesis is carried out as a scientific project. The content is described by the following items:

- to find a suitable thesis project and discuss the contents with the client and the university program management
- to methodologically plan the thesis project

- to apply gained knowledge in the major subject and peripheral subjects of relevance for the project
- to gain new knowledge from literature necessary for the project
- to communicate the project and its findings in a professional way both orally and in writing

**Teaching**

Instruction is given by a scientifically competent supervisor throughout the project.

**Prerequisites**

At least 60 hp (ECTS) should be finished of the Master's Program in Electronics/Telecommunications, 120 hp (ECTS). In addition, courses on the advanced level of relevance for the suggested thesis project should be completed.

**Examination**

The examination of the thesis (mom 0020) concerns:

a) The process.

The examiner should be in contact with the supervisor in order to get detailed information about the student's capability as regards:

- theoretical competence
- practical competence (if applicable)
- capability of working independently
- capability of cooperation
- capability of taking advice

b) Technical and scientific content.

Assessment of technical content and scientific depth of the written thesis.

c) Presentation.

The assessment of the presentation of the thesis in a public seminar concerns the quality of visual material, the quality of the oral presentation, and defense and answer to criticism.

These three ingredients are assessed individually in three levels (sufficient, good, excellent), and the final grade is produced according to a given grading scheme (cf. Administrativ Handbok, Master's Program in Electronics/Telecommunications, ch. 5.4.1).

**Grade**

A, B, C, D, E, Fx, F

**Sustainable environment**

Content with sustainable development is not relevant to this course.

**Module**

0020	Thesis (including presentation)	29cr	Grade: AF
0030	Opposition at one thesis seminar	0.5cr	Grade: UG
0040	Visit to two other thesis seminars	0.5cr	Grade: UG