



COURSE SYLLABUS

Final Project Work in Product Development, 15 credits

Examensarbete i Produktutveckling, 15 högskolepoäng

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|----------------------|-------------------|-----------------------------|---|
| Course Code: | TETT27 | Education Cycle: | Second-cycle level |
| Confirmed by: | Dean Mar 1, 2016 | Disciplinary domain: | Technology (95%) and social sciences (5%) |
| Valid From: | Jan 1, 2017 | Subject group: | MA2 |
| Version: | 1 | Specialised in: | A1E |
| Reg number: | JTH 2016/1292-313 | Main field of study: | Product Development |

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- demonstrate deeper methodological knowledge in the main field of study
- demonstrate in-depth understanding in focused areas of the main field of study

Skills and abilities

- demonstrate the ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available
- demonstrate the ability to critically, independently and creatively formulate issues pertaining to the work at hand
- demonstrate skills of scientific methods and approaches when planning and conducting a task or study within specified time limits
- demonstrate the ability to relate the study to current research within the field
- demonstrate the ability to collect, process and analyse relevant information and knowledge and to critically analyse this information and knowledge
- demonstrate the ability to render and express knowledge through, for instance, language, models, formulas or statistics within the field of the study
- demonstrate the ability to write a scientific report within the main field of study and to present the content orally in accordance with the international practice of the field, as well as to critically assess the knowledge contribution of the final project work.

Judgement and approach

- prove ability to apply the knowledge and skills acquired during the programme and to identify the need of further knowledge
- demonstrate the ability to identify the generalizability of the problem under study
- demonstrate insight into the scientific strength and weaknesses of the study as well as of the perspectives applied

- demonstrate the ability to make assessments within the focused area, taking into account relevant scientific and ethical aspects, as well as to demonstrate awareness concerning sustainable development.

Contents

In this course, the student will perform an independent investigation and research study. The student must in collaboration with industry, institute and/or university, identify a research topic within the main field of study. The student has henceforward to plan and implement the study as well as to write a report and present the results at a seminar. Furthermore, the student must conduct an opposition on another final project work within the same main field of study.

In order to complete the course, the student must also take responsibility for the completion of the final project work, and for co-operating with the supervisor appointed by the university.

The course includes the following elements:

- Project planning
- Literature search
- Collection, processing and analysis of data
- Development work (if applicable)
- Writing reports
- Oral presentation and opposition.

Type of instruction

Supervision and seminars.

The final project work is performed and reported within the main field of study together with another student or individually. A supervisor and an examiner is appointed to each final project work. The completion of the final project work must follow the instructions established by JTH.

The teaching is conducted in English.

Prerequisites

At least 20 credits in the Master´s program should be approved. In addition, the thesis work at first cycle should be approved (or the equivalent).

Examination and grades

The course is graded 5,4,3 or Fail.

The grades are set individually. The evaluation process includes how the work is planned and implemented, engineering and scientific content, and the written and oral presentation. The work must be approved in each of the three parts. The final project work must be terminated within 12 months from the approval at the start of the course, although special reasons may lead to a prolongation of this time frame.

The course is examined through a written report, oral presentation of the report, and opposition of another group. A grade for the course is received only after passed grade for all examination

forms.

Registration of examination:

| Name of the Test | Value | Grading |
|------------------|------------|---------|
| Examination | 15 credits | 5/4/3/U |

Other information

Students may start the final project work upon approval by the examiner. Exemption from the prerequisites may be granted by the programme co-ordinator.

Course literature

Relevant literature is chosen based on the thesis topics in consultation with the supervisor. The student has the main responsibility in this process..