



COURSE SYLLABUS

Project Course, 15 credits

Projektkurs, 15 högskolepoäng

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| Course Code: TPJS22 | Education Cycle: Second-cycle level |
| Confirmed by: Dean Mar 1, 2022 | Disciplinary domain: Technology (75%) and social sciences (25%) |
| Valid From: Aug 1, 2022 | Subject group: TE9 |
| Version: 1 | Specialised in: A1N |
| | Main field of study: Production Systems, Product Development |

Intended Learning Outcomes (ILO)

After a successful course, the student shall:

Knowledge and understanding

- demonstrate familiarity with challenges that might occur in multidisciplinary projects
- demonstrate knowledge of scoping and planning projects
- demonstrate knowledge of challenges in integrated product and production development

Skills and abilities

- demonstrate the ability to apply knowledge, methods, and tools to conceive, develop and analyse solutions and artifacts
- demonstrate the ability to progress a project by finding, analysing, and using information from various sources
- demonstrate the ability to plan and conduct a complete collaborative project involving several disciplines
- demonstrate the ability to solve industrial problem in the field of integrated product and production development with a scientific result

Judgement and approach

- demonstrate an understanding of problem solving in industrial and scientific contexts
- demonstrate an understanding of multidisciplinary aspects in projects.

Contents

This course is project based. It involves applying knowledge from previous courses in combination with searching for relevant knowledge to conceive and develop solutions to technical and scientific problems.

The course includes the following elements:

- Formulation of technical and scientific problems
- Plan and division of work
- Identification of knowledge needed for solving the provided project task

- Collection, processing, and analysis of data
- Development of a conceptual solution for the provided project task
- Validation of the derived results
- Report of project progress
- Written scientific report
- Oral presentation and opposition

Type of instruction

Supervision, lectures, and seminars.

The teaching is conducted in English.

Prerequisites

Passed courses 180 credits in first cycle, at least 90 credits within the major subject Mechanical Engineering, Industrial Engineering and Management, Computer Engineering or Civil Engineering, and 15 credits in Mathematics or equivalent. Proof of English proficiency is required.

Examination and grades

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

The final grade is derived from the grades of the two examinations. They must both be completed before the final grade is given.

Registration of examination:

| Name of the Test | Value | Grading |
|------------------------|------------|---------|
| Individual examination | 3 credits | 5/4/3/U |
| Project | 12 credits | 5/4/3/U |

Course literature

The literature list for the course will be provided 8 weeks before the course starts.

Selected individually based on the project task. The selection will be based on a discussion between the students and the supervisors in relation to the selected project task. The students will be the main responsible for the identification and the selection of relevant literature.