



COURSE SYLLABUS

Final Project Work in Industrial Engineering and Management, 15 credits

Examensarbete i Industriell organisation och ekonomi, 15 högskolepoäng

Course Code:	TEIP19	Education Cycle:	First-cycle level
Confirmed by:	Dean Dec 4, 2018	Disciplinary domain:	Technology
Valid From:	Jan 1, 2019	Subject group:	IE1
Version:	1	Specialised in:	G2E
		Main field of study:	Industrial Engineering and Management

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- demonstrate knowledge of the disciplinary foundation of the engineering field chosen and proven experience in this field as well as awareness of current research and development work
- demonstrate broad knowledge in the engineering field chosen and relevant knowledge of mathematics and the natural sciences

Skills and abilities

- demonstrate the ability to identify, formulate and deal with issues autonomously and creatively using a holistic approach and to analyse and evaluate technological solutions
- demonstrate the ability to plan and using appropriate methods undertake tasks within predetermined parameters
- demonstrate the ability to use knowledge critically and systematically to model, simulate, predict and evaluate series of events on the basis of relevant information
- demonstrate the ability to design and manage products, processes and systems while taking into account the circumstances and needs of individuals and the targets for economically, socially and ecologically sustainable development set by the community
- demonstrate the ability to present and discuss information, problems and solutions in speech and writing and in dialogue with different audiences

Judgement and approach

- demonstrate the ability to make assessments informed by relevant disciplinary, social and ethical aspects
- demonstrate insight into the possibilities and limitations of technology, its role in society and the responsibility of the individual for how it is used, including social and economic aspects as well as environmental and occupational health and safety aspects
- demonstrate the ability to identify the need for further knowledge and undertake ongoing

development of his or her skills.

Contents

The course provides basic knowledge and skills to independently carry out a larger work that shows the student's ability to apply, critically use and further develop education, the acquired skills, preferably in close cooperation with companies, organizations or authorities.

The course includes the following elements:

- Problem formulating
- Project planning
- Collecting, processing, and analyzing data
- Project implementation
- Report writing
- Oral presentation and opposition

Type of instruction

The student conducts, in groups of two (the course manager can grant an exemption from this), a thesis project in the field of Industrial Engineering and Management.

The teaching is normally conducted in Swedish, but can occasionally be in English.

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Prerequisites

General entry requirements and completed courses of at least 120 credits in the program, including courses of at least 60 credits and at least 60 credits in relevant courses in the field of Industrial Engineering and Management, including 15 credits in Mathematics (or the equivalent). In the requirement of the completed courses (120 credits) the course Basic Physics 2, 6 credits are not included (or the equivalent course).

Examination and grades

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

The course is examined through a written report, oral presentation of the report, opposition on another group's thesis, tutoring, as well as attending the mandatory sessions. The grade is set according to a special assessment template.

Registration of examination:

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

Other information

The course responsible can grant an exemption from the study requirements in admission requirements

A supervisor and an examiner are appointed for each thesis. Implementation should follow the instructions laid down at JTH. The work may start after the examiner's approval.

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.