



ME2312 Advanced Studies in Industrial Economics and Management 12.0 credits

Avancerade studier inom industriell ekonomi och organisation

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

On 13/06/2019, the Dean of the ITM school has decided to establish this official course syllabus to apply from spring term 2020 (registration number M-2019-1321).

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Industrial Management

Specific prerequisites

The following courses should be completed:

ME1305/ME1314 Introduction to Industrial Engineering and Management completed

ME1308 Operations Strategy for I

ME1309 Industrial Management Control for I

ME1310 Economics for I

ME1311 Corporate Finance

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

On completion of the course, the student should show deep knowledge and understanding in the subject area of Industrial economics and management and particularly in chosen track by being able to:

1. identify and analyse established methods, models and theories in the management area, to lead and control different types of industrial and technology-based activities
2. describe and analyse management and development of activities based on different interested parties, perspectives and levels of analysis
3. analyse, assess and handle complex phenomena, issues and situations, even with limited information
4. independently identify and formulate issues and plan and with adequate methods carry out a given assignment within a given framework
5. compile and synthesise scientific knowledge relevant for chosen topic
6. make assessments considering relevant scientific and social aspects in the main field of study industrial economics and management
7. orally and in writing, in dialogue with different groups, clearly account for and discuss one's own conclusions, and the knowledge and the arguments that these are based on

Course contents

The field of Industrial engineering and organisation deals with combining theoretical and practical knowledge about management of innovation, production and marketing, in established and emerging industries. The natural starting point for both education and research is thereby the organisation (the company/the section/the project) and its activities. Characteristic for teaching in industrial economics is thus reasoning about technical and economical skills required to solve problems from an industrial perspective. Thereby, the integration of technology, economics and leadership is emphasised, as well as the ability to communicate and cooperate in groups of different skills. After graduating as a Master of Engineering in Industrial Engineering and Management your tasks will most probably be directed towards technology-based business development within both established and emerging industries. Thus, the development and organisation of efficient industrial activities, profitable technology-based businesses and the creation of opportunities for innovation, development and growth, are central. Therefore you must have the ability to combine deep technical knowledge with advanced knowledge of industrial economics, to be able to solve complex problems, based on several different perspectives.

The general aim of this course is to give advanced theoretical and applied knowledge and understanding of different parts of the topic Industrial economics and organisation. This implies that each student should get deepened knowledge of the entire subject area while they

gain considerably deepened knowledge within certain parts of the subject area. To achieve this, each student should at the beginning of the course choose one of a number of given tracks, that focuses on a specific area of studies. This course consequently intends to give the students research-based specialist knowledge (a minor) in a particular subject area in Industrial economics.

Examination

- SEM1 - Seminars, 2.0 credits, grading scale: P, F
- INL1 - Assignments, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- SEM2 - Seminars, 2.0 credits, grading scale: P, F
- INL2 - Assignments, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Exam, 2.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Exact criteria for part and final mark in each individual track are given at the beginning of the course.

Other requirements for final grade

The course can contain items with compulsory attendance.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.