



ME1003 Industrial Management, Basic Course 6.0 credits

Industriell ekonomi, grundkurs

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

Establishment

On 15/04/2022, the Dean of the ITM school has decided to establish this official course syllabus to apply from autumn term 2022 (registration number M-2022-0415)

Grading scale

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

Education cycle

First cycle

Main field of study

Industrial Management, Technology

Specific prerequisites

General entry requirements.

Language of instruction

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

Intended learning outcomes

Engineering work is about more than technology. As an engineer, to be able to participate in technology-based businesses, to carry out projects, to develop activities, as well as to lead teams and co-workers in companies of today, good knowledge of industrial management is required. In practice, the success often relies on understanding both the technical and the economic aspects of decisions. This course gives you basic knowledge in industrial management.

Concretely, this implies that you on completion of the course should be able to:

1. describe and explain different technology-based business models and the dynamics of value creation, value proposition and value capture in industrial enterprises,
2. describe and explain how industrial operations are led and organised,
3. select, use and interpret economic calculations as a basis for decision-making in different business situations,
4. use the basic concepts and the principles of bookkeeping and accounting, and describe and explain how the operations of an industrial enterprise can be financed,
5. compile and analyse financial reports for an industrial enterprise,
6. describe the activities and strategic position of an existing industrial enterprise by means of concepts from the subject industrial management and carry out a basic economic analysis of the company's activities financial position and how it is financed.

Course contents

The course focuses on basic concepts and models to understand and handle economic, organisational and management issues in technology-based and industrial activities, as an engineer.

Module 1: Industrial value creation

- Technical development as a competition factor
- Technology-based business models and strategies
- Innovation, production and marketing
- Organisation
- Human resource management and leadership

Module 2: Product costing

- C/I (Cost/Income) analysis
- Product costing
- Investement apperaisal

Module 3: Financial accounting and corporate finance

- Book-keeping accounting

- Annual report and financial analysis
- Corporate finance

The course consists of lectures and calculation exercises (in module 2 and 3) and is examined through three partial exams (each 1.5 higher education credits) and a written assignment (1.5 higher education credits). The grades on the written assignment are combined to a final course grade. During the course, an optional business simulation (0 higher education credits) is offered, with associated written assignment that can raise the final course grade by one step.

Examination

- KON4 - Partial exam, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- KON5 - Partial exam, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- KON6 - Partial exam, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- INLA - Assignment, 1.5 credits, grading scale: P, F
- SIMA - Business simulation, 0.0 credits, grading scale: P, 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.

Other requirements for final grade

Written examination.

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.