



Programme syllabus

[An accessible version of the syllabus can be found in the Course and programme directory.](#)

Master's Programme, Industrial Management 120 credits

Masterprogram, industriell ekonomi

Valid for students admitted to the education from autumn 15 (HT - Autumn term; VT - Spring term).

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

Programme objectives

Beyond the goals that are specified in the Higher Degree Ordinance, there are also specific goals for this programme.

A graduate from the Industrial Management programme will:

Knowledge and understanding

- Show broad and deep knowledge and understanding of the area Industrial Management as a complement to, and a continuation of technical and natural scientific knowledge.
- Be well acquainted with current research and development within the field.

- Show deep knowledge about how strategic choices that, when establishing, managing, planning, following-up and development of foremost, industrial/technically intensive companies and organizations, affect the organisation's efficiency and its stakeholders' support and profit.
- Show deep knowledge about scientific tools and methods used to analyse, calculate, and evaluate facts in the interaction among technology, natural science, and social science.

Skills and abilities

- Show the ability to, through a holistic view and from different perspectives, constructively identify, formulate, creatively reflect over, handle and solve technical, economical and organisational problems in industrial/technically-intensive organisations each for their own as well as together and then also be able to set certain organisation and technologies in their contextual setting.
- Show good ability to, independently as well as in different groups, utilise theories within industrial management in practical situations when finding solutions with regard to technical and natural scientific aspects and with regards taken to relevant scientific and professional standpoints for sustainable, economical, social, and ecological development
- Show good ability to systematically integrate economic and management models with technology as well as ability of modeling, simulating, predicting and evaluating processes with limited information.
- Show good ability to participating in research and development work or to work independently in qualified positions and thereby contributing to knowledge development.
- Show preparedness for a successful completion of planning and management-related assignments on different levels within industrial/technically intensive organisations, independently as well as in groups.
- Show good ability to communicate, in writing and orally, in different contexts and in dialogue with different groups and outline one's own conclusions and the knowledge and arguments that conclusions are based on.

Ability to make judgements and adopt a standpoint

- Show good ability to make assessments with regard to relevant scientific, societal and ethical aspects as well as awareness of the ethical aspects of research and development work within industrial/technically intensive organizations
- Show a reflective approach with regard to the limits and possibilities of science, its role in society, and the individual's responsibility when utilizing it, including social, economic, work environment and environment aspects,
- Show good ability to identify one's own needs for extended knowledge and take responsibility of continuous developing of one's own knowledge and qualifications.

KTH's local degree ordinance can be found in KTH's guidelines www.kth.se

Extent and content of the programme

The programme comprises 120 higher education credits which correspond to two years of full-time study.

The programme is primarily in the second cycle.

The language of instruction in the programme is English.

Eligibility and selection

In order to be eligible for the programme, a relevant higher education degree comprising 180 higher education credits is required. In case the first level courses are not finished, an exemption to the normal rules may be made. See KTH's admission ordinance, which can be found in KTH's guidelines, www.kth.se

Required special qualifications: A technical Bachelor's degree with specialization in one of the fields: Mechanical Engineering, Design and Product Development, Information and Communication Technology, Computer Science and Engineering, Materials Science and Engineering (or equivalent). That means, a Bachelor's degree with a specialization in Industrial Management does not fulfill the special requirements. A basic course in Industrial Management is, however, required in order to fulfill the specific requirements.

Furthermore, for all KTH's programmes with English as the language of instruction, there is a special requirement of English B or corresponding knowledge.

The selection process is based on the following selection criteria: University, previous studies (for instance GPA, grades in specific subjects and English), motivation for the studies (for instance letter of motivation, references, thesis proposal and relevant work experience). The evaluation scale is 1-75.

More information can be found in KTH's guidelines, www.kth.se

Implementation of the education

Structure of the education

Study years, terms, and study periods are described in KTH's guidelines, www.kth.se

Structure of the education

The structure of the programme is adapted for the possibility to complete a Master of Science in Engineering degree (Civilingenjörsexamen) and/or a Master's degree (Two Years) within Industrial Management

Structure for the Master of Science in Engineering with Masters Degree (two years) within Industrial Management

The programme starts with a course package that provides a solid foundation within the area of Industrial Management. Upon that, a package of optional courses provides requisite courses within technology and Industrial Management in the second cycle with the intention of completing a Master of Science in Engineering within the respective programmes at KTH. This course package is mainly taken in terms 1 and 2.

Structure for the Masters degree (two years) within Industrial Management

The programme starts with a course package that provides a solid foundation within the area of Industrial Management. Upon that, a package of optional courses provides continued knowledge development within the area of Industrial Management. Within the optional course package, courses are provided for profiling and research preparation within the subject area of Industrial Management. These course packages are mainly taken during terms 1 and 2.

Common for both specialisations, a project course given during term 3 comprising 12 higher education credits within the area of Industrial Management is given, where the focus is the execution of an extensive industrial project and preparations for the degree project.

The degree project should address a problem within the area between Industrial Management and technology or natural science with a relation to the student's own chosen focus area.

Courses

The programme is course-based. Lists of courses are included in appendix 1.

Grading system

Courses in the first and the second cycle are graded on a scale from A to F. A-E are passing grades, A is the highest grade. The grades pass (P) and fail (F) are used for courses under certain circumstances.

Conditions for participation in the programme

Term Enrolment and Course Application

A prerequisite to be allowed to participate in the studies is that the student verifies enrollment for courses the coming term every spring and fall. This is done via www.antagning.se between the 1st and 15th of November and the 1st and 15th of May.

Conditions for participation in the programme

For studies in year 2:

At least 45 higher education credits must be completed from study year 1 by the end of the examination period in August. Students who have not fulfilled this requirement must, in collaboration with a study adviser, create an individual study plan. The main intent with the individual study plan is that the student will complete the remaining elements during the next coming study year. In the study plan, the remaining elements should be included as well as suitable courses from the next study year. Special consideration should be given to the courses' prerequisites.

Recognition of previous academic studies

The student has the possibility to apply for recognition of previous academic studies from course(s) from another university or higher education institution, national or international.

KTH's entire policy for recognition of previous academic studies can be found in KTH's guidelines www.kth.se

Studies abroad

Possibility for studies abroad is given, preferably in relation to the degree project.

Degree project

KTH's rules for the degree project can be found in KTH's guidelines. Generally, it is required that a main portion of the studies must be completed before starting the degree project.

Degree

In order to earn the Degree of Master of Science (120 credits), passing grades in all courses which are included in the student's study plan are required. The study plan must comprise 120 higher education credits which include a degree project consisting of 30 higher education credits, in the second cycle.

KTH's local degree ordinance can be found at <http://intra.kth.se/regelverk/>

Appendix 1 - Course list

Appendix 2 - Programme syllabus descriptions



Appendix 1: Course list

Master's Programme, Industrial Management (TINEM)

General courses

Year 1

Mandatory courses (42.0 Credits)

Code	Name	Credits	Edu. level
ME2016	Project Management: Leadership and Control <i>Only compulsory for TINEM 2-year master</i>	6.0 hp	Second cycle
ME2063	Team Leadership and Human Resource Management <i>Only compulsory for TINEM 2-year master</i>	6.0 hp	Second cycle
ME2064	Finance and Control in Industrial Organizations	6.0 hp	Second cycle
ME2065	Operations and Supply Chain Strategy	6.0 hp	Second cycle
ME2066	Strategy and Industrial Marketing	6.0 hp	Second cycle
ME2067	Industrial Transformation and Technical Changes (ITTEC)	6.0 hp	Second cycle
ME2501	Perspectives on Industrial Management	6.0 hp	Second cycle

Supplementary information

Students within CMAST, CDEPR and CMATD must choose at least 18hp technical courses on the advanced level within a recognized technical profile in semester 1-3. These include: Machine Design, Production engineering and Energy Engineering.

Students within CFATE takes in period 1, year 4 course ME2016 "Project Management: Leadership and Control", and must choose at least 18hp technical courses on the advanced level within a recognized technical profile in semester 1-3. These include: Machine Design, Production engineering and Energy Engineering.

CDATE and CINTE must choose during semester 1-3 within the programme 30hp technical courses and 6hp elective courses.

Students who are not admitted to a Civilingenjör's program will take 22,5 credits elective courses during semesters 1 -3 within the program.

Year 2

Mandatory courses (55.5 Credits)

Code	Name	Credits	Edu. level
ME2001	Research Methods in Industrial Engineering and Management	7.5 hp	Second cycle
ME200X	Degree Project in Industrial Economics and Management, Second Cycle	30.0 hp	Second cycle
ME2069	Managing Research and Innovation	6.0 hp	Second cycle
ME2502	Change Project in Industrial Management	12.0 hp	Second cycle



Appendix 2: Specialisations

Master's Programme, Industrial Management (TINEM)

This programme has no specialisations.