Programme syllabus

Master's Programme, Industrial Management, 120 credits
Masterprogram, industriell ekonomi
120.0 credits

Valid for students admitted to the education from autumn 08 (HT - Autumn term; VT - Spring term).

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

Programme objectives

Beyond the objectives which are specified in the Higher Education Degree Ordinance, there are also specific goals for this programme. After completing the programme, the student should:

Knowledge and understanding

• Show deep knowledge about established and new theories and models within the Industrial Management area as a complement to and a development of the earlier acquired technical and natural scientific knowledge

• Show deep knowledge about establishment, management, planning, follow-up, development, and termination of companies and other organisations based on strategic choices, and about how these choices affect the organisations efficiency and its interest’s support and exchange.

• Show deep knowledge about scientific tools used to analyse, work with, and evaluate facts, and about how knowledge is developed in the gray-area between technology, natural science and social science.

Skills and abilities

• Show a good ability to, through perspective changes, constructively and creatively reflect over, handle, and solve technical economical and organisational problems in industrial activities for one’s self as well as together, and then also be able to put individual activities and engineers in one larger organisational unit

• Show a good ability to apply theories within industrial management in practical activities with consideration to technical and natural scientific aspects and with regards to relevant scientific, professional and social judgments and approaches.

• Show the ability to handle economy and management models and the ability to theoretically and practically analyse company’s economical problems, show preparation for a successful execution of planning and management-related assignments on varying levels within modern and future technology-intensive companies independently and in a group.

Ability to make judgements and adopt a standpoint

• Show a reflective approach to and ability to discuss responsibility, ethics, equality, global balance, gender equality, and ecological balance which are prerequisites to today’s and tomorrow’s business activities.

• Show a good analytical ability as well as the ability to reflectively and critically think in relationship to established theories and practices, and about how knowledge is developed within natural science, technology and social science.

Reference to the local degree ordinance of the Royal Institute of Technology (The KTH-Handbook).
Extent and content of the programme

The programme consists of 120 higher education credits which correspond to two years full time studies. The programme’s in mainly on the second level.

Available specialisation areas for Industrial Management are:

• Industrial Marketing: aims to provide deepened knowledge about how industrial companies and products’ trademarks are formed and establish worth, and how communication can and should be designed in a company context.

• Project and Production Management: Aims to provide deepened knowledge in economic, organisation’s and management related inquiries about the company’s production processes and organisation in project form.

• Innovation and Entrepreneurship: Aims to provide insight into innovation, innovative thinking and innovation management and, thus, prepare the student for a career in branches with fast development.

The programme is mainly in Swedish, but certain courses and elements are in English.

Eligibility and selection

In order to be eligible to apply to the master’s programme, a higher education degree of at least 180 higher education credits, degree of Bachelor of science and engineering, technical bachelor’s degree, or another corresponding technical degree or natural scientific degree in the first level must be completed. Other studies or work experiences are judged on the basis of the actual competencies which are referred to.

The criteria which are the foundation for the selection are based on the applicants’ grade averages from earlier studies (courses which are included/are thought to be included in the eligibility-giving degree). The applicants are divided into three groups based on these grade averages. The applicants are then accepted by group, starting with the highest ranking group. Within the lowest ranking group, the students are chosen with by drawing. (Random)

The reference to KTH’s admission policy can be found in the KTH-Handbook.

Implementation of the education

Structure of the education

The programme is an extension on a degree within technology or natural science. The two years have the following structure:

Study Year 1 – Platform and Profile

The first year consists of two types of courses: Partly building a common platform and partly building a profile within the programme.

The common platform constitutes 30 higher education credits and aims to build the foundation for continued studies within the programme. The courses give a broad starting point for the more focused studies which follow.

The profile which is built consists of 30 higher education credits. The profile is a series of connected courses which have one or more professional roles in focus.

Study Year 2 – Perspective and Absorption

During the concluding year, the earlier acquired knowledge is absorbed and fortified in a degree project. The absorption occurs through specialised perspective courses as well as through the student’s chosen courses within Industrial Management. The perspective courses, which are 18 higher education credits, start from management in theory and the practicum in combination with research methods. They aim to integrate and further develop acquired knowledge. This,
together with the student’s chosen courses (12 higher education credits) which absorb one or more areas, give a foundation for the following degree project consisting of 30 higher education credits. The degree project considers a problem within the gray-area between industrial management and technology/natural science, in connection with the student’s profile 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**

A condition in order to be able to participate in the studies is that the student must enrol for the next term every spring and fall. This is done via “Mina Sidor” on KTH’s website between November 1st and 15th and between May 1st and 15th.

With the enrolment, the student has submitted their intention of studying and participating in the programme. Only after that is it possible for the student to:

- register for courses
- register for the term
- get results

**Course Selection**

During the fall term of study year 1, the student chooses the optional courses within the programme. The choice is done on “Mina Sidor” on KTH’s website in the same way as the term enrolment.

**Conditions for participation in the programme**

*For studies in study year 2:*

At least 45 higher education credits from study year 1 must be completed by the exam period in August. Students which have not fulfilled this requirement must consult with the study counsellor and set up an individual study plan. The main goal with the study plan is that the student should complete the remaining elements during the next study year. In the study plan, the remaining elements and also suitable courses from the next study year are included. Special regard should be taken to the courses prerequisites.

**Specialisation Selection**

Choice of profile happens in tandem with the application to the programme, so that it is completed before the start of the term. The number of places within a profile is unlimited.

**Recognition of previous academic studies**

The student has the possibility to apply to receive credit from courses taken at another university/higher education institution both in Sweden and from abroad. The application can be found on KTH’s website.

KTH’s policy for recognition of previous academic studies can be found entirely in the KTH-Handbook.
Studies abroad
Students in this programme have no possibility to carry out portions of the programme abroad.

Degree project
KTH’s rules for the degree project for the Master’s degree with specialisation can be found in the KTHHandbook.

Generally, the degree project work can be started only after a large portion of the studies have been completed.

KTH’s rules for the degree project can be found in the KTH-Handbook

KTH-Handbok 2, page 15.5

www.kth.se/info/kth-handboken/II/15/5.html

Degree
In order to graduate with the Degree of Master of Science (Two Years) within the main area Industrial Management, a passing grade must be achieved in all courses which are in the student’s study plan. The study plan must comprise 120 higher education credits including a degree project consisting of 30 higher education credits.

KTH’s local degree ordinance can be found in the KTH-Handbook.

Appendix 1 - Course list
Appendix 2 - Programme syllabus descriptions
Appendix 1: Course list

Master's Programme, Industrial Management, 120 credits (TINEM), Programme syllabus for studies starting in autumn 2008

General courses

Year 1

Mandatory courses (30.0 credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME1003</td>
<td>Industrial Management, Basic Course</td>
<td>6.0</td>
<td>First cycle</td>
</tr>
<tr>
<td>ME1007</td>
<td>Strategic Management</td>
<td>6.0</td>
<td>First cycle</td>
</tr>
<tr>
<td>ME2032</td>
<td>Economics of Industrial and Technical Transformation</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2044</td>
<td>Human Resource Management</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2500</td>
<td>Science, Technology and Society</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

Year 2

Mandatory courses (42.0 credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME202X</td>
<td>Degree Project in Industrial Management, Second Cycle</td>
<td>30.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2060</td>
<td>Management Consulting</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2305</td>
<td>Management: Traditions, Theory and Trends</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

Conditionally elective courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME2018</td>
<td>Leading Temporary Organizations and Projects</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td>One of ME2018, ME2026, ME2035, ME2039 must be chosen.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ME2026</td>
<td>Brand, Trends and Traditions</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td>One of ME2018, ME2026, ME2035, ME2039 must be chosen.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course code</td>
<td>Course name</td>
<td>Credits</td>
<td>Edu. level</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>ME2035</td>
<td>Globalization of Industry and Technology, Advanced Course</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2039</td>
<td>Knowledge Management</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td><em>One of ME2018, ME2026, ME2035, ME2039 must be chosen.</em></td>
<td></td>
<td></td>
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</tbody>
</table>

**Industrial Marketing (IM)**

**Year 1**

**Mandatory courses (30.0 credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME2015</td>
<td>Project Management: Leadership and Control</td>
<td>6.0</td>
<td>Second cycle</td>
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<tr>
<td>ME2023</td>
<td>Industrial Marketing</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2024</td>
<td>Industrial Marketing, Advanced Course</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2025</td>
<td>Brand Portfolio Management</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2026</td>
<td>Brand, Trends and Traditions</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2039</td>
<td>Knowledge Management</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td><em>One of ME2018, ME2026, ME2035, ME2039 must be chosen.</em></td>
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</tbody>
</table>

**Year 2**

**Project and Production Management (PP)**

**Year 1**

**Mandatory courses (30.0 credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME2013</td>
<td>Operations Management: Organization and Control</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2014</td>
<td>Operations Management: Strategy and Development</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2015</td>
<td>Project Management: Leadership and Control</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2017</td>
<td>Project Management: Leading Project-based Operations</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2039</td>
<td>Knowledge Management</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

**Year 2**
Appendix 2: Specialisations

Master's Programme, Industrial Management, 120 credits (TINEM), Programme syllabus for studies starting in autumn 2008

**Industrial Marketing (IM)**

**Project and Production Management (PP)**