Programme syllabus

Master (Two Years), Erasmus Mundus, Industrial Management
Masterprogram, Erasmus Mundus, Industrial Management
120.0 credits

Valid for students admitted to the education from autumn 07 (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 organisation’s 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 a good ability to perform planning and management-related assignments on different levels within modern and future technology-intensive companies independently as well as in a group.

Ability to make judgements and adopt a standpoint

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

• Show an 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 is mainly on the second level. The language of instruction for the programme is English.

**Eligibility and selection**

In order to be eligible to apply to the master’s programme, a relevant higher education degree of at least 180 higher education credits, degree of bachelor in science and engineering, technical bachelor’s degree, or another corresponding technical 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 selection to the programme is done by the programme’s scientific committee in consultation with admission entities at the respective educational sites and in accordance with the directive which the European commission mandates for the Erasmus Mundus programme.

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 carried out during four terms where the first term is taken at UPM in Madrid, the second term at POLIMI in Como and the third term at KTH. During the fourth term, the students carry out the degree project which is supervised from one of the above mentioned educational sites. The first term’s courses can be described as basic within the subject industrial management where the student is given an introduction to organisation theory, economic control, marketing, and strategy.

The second term is focused within the area “Operations Management”. The courses consist of production, quality management, and supply chain management.

The third term deepens, more than anything, the first term’s basic knowledge and aims to integrate the specialised knowledge from the second term to one entity. The term consists of advanced courses in economic control, marketing, project management, and entrepreneurship.

During the fourth term, the student can apply their theoretical knowledge through work with their degree projects which is preferably done in cooperation with an industry partner.

Study year, terms, and study period descriptions can be found in the KTH-Handbook.

**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**

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

The choice of optional courses (beyond the programme) is done in consultation with the programme coordinator.

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.

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

The student in the programme has the possibility to carry out the project work in Europe.

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

Management, a passing grade must be achieved in all courses which are in the student’s study plan. The study plan must constitute 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 (Two Years), Erasmus Mundus, Industrial Management (TIMAM), Programme syllabus for studies starting in autumn 2007

General courses

Year 1

Year 2

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>ME2601</td>
<td>Industrial Project Management</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2602</td>
<td>Human Resource Management</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2603</td>
<td>Entrepreneurship</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2604</td>
<td>Advanced Industrial Marketing</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>ME2605</td>
<td>Cost Management and Control</td>
<td>6.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>
Appendix 2: Specialisations

Master (Two Years), Erasmus Mundus, Industrial Management (TIMAM), Programme syllabus for studies starting in autumn 2007

This programme has no specialisations.