

# Industrial Engineering and Management, Master's programme

120 credits

Industrial Engineering and Management,  
masterprogram

6MIND

Valid from: 2016 Spring semester

**Determined by**  
Faculty Board of Institute of Technology

**Date determined**  
2015-01-16

## Introduction

For the complete komplett syllabus, also see "Tekniska högskolans studiehandbok":

[http://kdb-5.liu.se/liu/lith/studiehandboken/enutbplan.lasso?  
&up\\_year=2017&up\\_ladokkod=6MIND](http://kdb-5.liu.se/liu/lith/studiehandboken/enutbplan.lasso?&up_year=2017&up_ladokkod=6MIND)

## Entry requirements

### Degree in Swedish

Master of Science (120 credits) with a major in Industrial Engineering and Management

### Degree in English

Master of Science (two years) with a major in Industrial Engineering and Management

## Curriculum

### Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TKMJ10	Industrial Ecology	6	A1X	1	E
TMQU31	Statistical Quality Control	6	A1X	2	E
TPMM04	Operations Strategy	6	A1X	3	E
TPPE54	Advanced Planning and Scheduling	6	A1X	1	E
<b>Period 2</b>					
TEIO06	Innovative Entrepreneurship	6	A1X	2	E
TEIO41	Corporate Social Responsibility	6	A1X	4	E
TKMJ29	Resource Efficient Products	6	A1X	1	E
TMQU04	Six Sigma Quality	6	A1X	2	E
TPMM06	Analysing and Improving Manufacturing Operations	6	A1X	3	E

#### *Specialisation: Environmental Innovation Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO13	Leadership and Organizational Change	6	A1X	4	C
TKMJ10	Industrial Ecology	6	A1X	1	C
<b>Period 2</b>					
TEIO06	Innovative Entrepreneurship	6	A1X	2	C
TEIO41	Corporate Social Responsibility	6	A1X	4	C
TKMJ29	Resource Efficient Products	6	A1X	1	C

*Specialisation: Operations Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMQU31	Statistical Quality Control	6	A1X	2	C
TPMM04	Operations Strategy	6	A1X	3	C
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TPPE54	Advanced Planning and Scheduling	6	A1X	1	E
<b>Period 2</b>					
TEIO41	Corporate Social Responsibility	6	A1X	4	C
TEIO06	Innovative Entrepreneurship	6	A1X	2	E
TKMJ29	Resource Efficient Products	6	A1X	1	E
TMQU04	Six Sigma Quality	6	A1X	2	E
TPMM06	Analysing and Improving Manufacturing Operations	6	A1X	3	E

**Semester 3 (Autumn 2017)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMQU14	Philosophy of Science and Research Methodology	6*	A1X	1	C
TEIO07	Project Based Organization and Management	6	A1X	4	E
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	E
TEIO90	Innovation Management	6	A1X	2	E
TMKT78	Product Development	6	G2X	2	E
TMQU13	Customer Focused Product and Service Development	6	A1X	4	E
TMQU27	Quality Management - Project Course	12*	A1X	2	E
TPPE73	Operations Management - Project Course	12*	A1X	4	E
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
<b>Period 2</b>					
TMQU14	Philosophy of Science and Research Methodology	6*	A1X	1	C
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	E
TKMJ32	Integrated Product Service Engineering	6	A1X	3	E
TMES51	International Energy Markets	6	A1X	1	E
TMQU12	Lean Production	6	A1X	2	E
TMQU27	Quality Management - Project Course	12*	A1X	4	E
TPPE73	Operations Management - Project Course	12*	A1X	4	E

*Specialisation: Environmental Innovation Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	C
TEIO90	Innovation Management	6	A1X	2	C
TMQU14	Philosophy of Science and Research Methodology	6*	A1X	1	C
<b>Period 2</b>					
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	C
TMQU14	Philosophy of Science and Research Methodology	6*	A1X	1	C
TKMJ32	Integrated Product Service Engineering	6	A1X	3	E
TMES51	International Energy Markets	6	A1X	1	E

*Specialisation: Operations Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMQU14	Philosophy of Science and Research Methodology	6*	A1X	1	C
TMQU27	Quality Management - Project Course	12*	A1X	2	C/E
TPPE73	Operations Management - Project Course	12*	A1X	4	C/E
TEIO07	Project Based Organization and Management	6	A1X	4	E
TEIO90	Innovation Management	6	A1X	2	E
TMKT78	Product Development	6	G2X	2	E
TMQU13	Customer Focused Product and Service Development	6	A1X	4	E
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
<b>Period 2</b>					
TMQU12	Lean Production	6	A1X	2	C
TMQU14	Philosophy of Science and Research Methodology	6*	A1X	1	C
TMQU27	Quality Management - Project Course	12*	A1X	4	C/E
TPPE73	Operations Management - Project Course	12*	A1X	4	C/E

## Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C
<b>Period 2</b>					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory / Voluntary

\*The course is divided into several semesters and/or periods