



# Programme syllabus

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

## Degree Programme in Mechanical Engineering 180 credits

Högskoleingenjörutbildning i maskinteknik, Södertälje

*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

Knowledge and understanding

Skills and abilities

Ability to make judgements and adopt a standpoint

Extent and content of the programme

Eligibility and selection

Implementation of the education

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.

Appendix 1 - Course list

Appendix 2 - Programme syllabus descriptions



# Appendix 1: Course list

## Degree Programme in Mechanical Engineering (TIMAS)

### General courses

Year 1

#### Mandatory courses (37.5 Credits)

Code	Name	Credits	Edu. level
<a href="#">HM1000</a>	Engineering Materials and Production 1	7.5 hp	First cycle
<a href="#">HM1001</a>	Strength of Materials with Statics	7.5 hp	First cycle
<a href="#">HM1002</a>	Computerized Tools in Design Process	7.5 hp	First cycle
<a href="#">HN1900</a>	Engineering and Information Skills	7.5 hp	First cycle
<a href="#">HN1901</a>	Mathematics I	7.5 hp	First cycle

#### Optional courses

Code	Name	Credits	Edu. level
<a href="#">6E2300</a>	Introduction to Mathematics	1.5 hp	
<a href="#">6E2301</a>	Introduction to Computer Studies	1.5 hp	

# Industrial Business Administration and Manufacturing (IEPS)

## Year 1

### Mandatory courses (22.5 Credits)

Code	Name	Credits	Edu. level
<a href="#">HM1003</a>	Engineering Materials and Production 2	7.5 hp	First cycle
<a href="#">HM1007</a>	Computer Programming	7.5 hp	First cycle
<a href="#">HU1900</a>	Business Economics and Organizational Behaviour	7.5 hp	First cycle

## Year 2

### Mandatory courses (60.5 Credits)

Code	Name	Credits	Edu. level
<a href="#">HM1005</a>	Quality Assurance	7.5 hp	First cycle
<a href="#">HM1006</a>	Electrical and Control Engineering	7.5 hp	First cycle
<a href="#">HM1013</a>	Mechanical Design and Energy Technology	7.5 hp	First cycle
<a href="#">HM1016</a>	Manufacturing Process, Intermediate Course 1	7.5 hp	First cycle
<a href="#">HN1002</a>	Applied Mathematics	7.5 hp	First cycle
<a href="#">HU1000</a>	Industrial Marketing	7.5 hp	First cycle
<a href="#">HU1901</a>	Engineering Practice and Development	7.5 hp	First cycle
<a href="#">MJ1506</a>	Sustainable Development and Working Environment	8.0 hp	First cycle

## Year 3

### Mandatory courses (7.5 Credits)

Code	Name	Credits	Edu.
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			<b>level</b>
<a href="#">HU1001</a>	Business Calculation and Decision Models	7.5 hp	First cycle

## Conditionally elective courses

<b>Code</b>	<b>Name</b>	<b>Credits</b>	<b>Edu. level</b>
<a href="#">HM101X</a>	Degree Project in Industrial Business Administration and Manufacturing, First Cycle	15.0 hp	First cycle
<a href="#">HM1021</a>	Quality Tools for Continual Improvement	7.5 hp	First cycle
<a href="#">HM1026</a>	Logistics	7.5 hp	First cycle
<a href="#">HM102X</a>	Degree Project in Mechanical Engineering, First Cycle	15.0 hp	First cycle
<a href="#">HU1903</a>	Management	7.5 hp	First cycle
<a href="#">HU1904</a>	Account and Entrepreneurship	7.5 hp	First cycle
<a href="#">HU1905</a>	Civil and Commercial Law for Engineers	7.5 hp	First cycle
<a href="#">ML2200</a>	Manufacturing Process, Intermediate Course 2	7.5 hp	Second cycle

## Innovation and Industrial Design (IODS)

### Year 1

#### Mandatory courses (22.5 Credits)

<b>Code</b>	<b>Name</b>	<b>Credits</b>	<b>Edu. level</b>
<a href="#">HM1003</a>	Engineering Materials and Production 2	7.5 hp	First cycle
<a href="#">HM1007</a>	Computer Programming	7.5 hp	First cycle
<a href="#">HM1009</a>	Industrial Design with Colour and Craft	7.5 hp	First cycle

### Year 2

#### Mandatory courses (60.5 Credits)

<b>Code</b>	<b>Name</b>	<b>Credits</b>	<b>Edu. level</b>
<a href="#">HM1006</a>	Electrical and Control Engineering	7.5 hp	First cycle

HM1008	Mechanics II	7.5 hp	First cycle
HM1010	Functional Elements	7.5 hp	First cycle
HM1018	Innovation and Design Process	7.5 hp	First cycle
HN1002	Applied Mathematics	7.5 hp	First cycle
HU1900	Business Economics and Organizational Behaviour	7.5 hp	First cycle
HU1901	Engineering Practice and Development	7.5 hp	First cycle
MJ1506	Sustainable Development and Working Environment	8.0 hp	First cycle

## Year 3

### Conditionally elective courses

Code	Name	Credits	Edu. level
HM1004	Solid Mechanics, Intermediate Course	7.5 hp	First cycle
HM100X	Degree Project in Innovation and Design, First Cycle	15.0 hp	First cycle
HM1011	Ergonomics in Product Development	7.5 hp	First cycle
HM1012	Industrial Design with Colour and Form, Intermediate Course	7.5 hp	First cycle
HM1015	Integrated Product Development, Project Course	15.0 hp	First cycle
HM1016	Manufacturing Process, Intermediate Course 1	7.5 hp	First cycle
HM1023	Applied Mechanics	7.5 hp	First cycle
HM102X	Degree Project in Mechanical Engineering, First Cycle	15.0 hp	First cycle
HM103X	Degree Project in Mechanical Design, First Cycle	15.0 hp	First cycle
HS1027	Light, Acoustics and Design	7.5 hp	First cycle
ML2201	Computerized Tools in Mechanical Design, Intermediate Course	7.5 hp	Second cycle
ML2202	Computerized Tools in Design Process, Intermediate Course	7.5 hp	Second cycle



# Appendix 2: Specialisations

Degree Programme in Mechanical Engineering  
(TIMAS)

Industrial Business Administration and  
Manufacturing (IEPS)

No information entered.

Innovation and Industrial Design (IODS)

No information entered.