

# Design and Product Development

300 credits

Civilingenjör i design och produktutveckling

6CDPU

Valid from: 2014 Spring semester

**Determined by**

Board of Studies for Mechanical  
Engineering and Design

**Date determined**

## Entry requirements

### Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp

# Curriculum

## Semester 6 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO23	Industrial Project Management	6*	G2X	3	C
TMKT82	Bachelor Thesis - Product Development	18*	G2X	1	C
TSRT21	Dynamical Systems and Control	6	G2X	2	C
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
<b>Period 2</b>					
TEIO23	Industrial Project Management	6*	G2X	3	C
TMKT82	Bachelor Thesis - Product Development	18*	G2X	1	C
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E

## Semester 7 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TAOP88	Engineering Optimization	6	G2F	1	E
TDDD90	Interactive Products	6*	A1N	1	E
TEIE72	Corporate Strategies	6	A1X	4	E
TEIO19	Industrial Management	6	G2X	4	E
TEIO90	Innovation Management	6	A1X	2	E
TETS37	Basics in Logistics Management	6	G2X	4	E
TKMJ31	Biofuels for Transportation	6	A1X	1	E
TMES09	Industrial Energy Systems	6	A1X	3	E
TMES27	Modelling of Energy Systems	6	A1X	3	E
TMKA01	Design Studio I	12*	A1X	3	E
TMKM16	Materials Selection and Optimization	6	A1X	4	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMKT80	Wood - Material	6	G2X	2	E
TMME14	Machine Elements, Second Course	6	A1X	3	E
TMME19	Mechanics, second course	6	A1X	4	E
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	2	E
TMPS33	Virtual Manufacturing	6	A1N	4	E
TMPT03	Production Engineering - Continuing Course	6	G2F	2	E
TMQU03	Quality Management and Engineering	6	G2X	2	E
TPPE13	Production and Operations Management	6	G2X	1	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G2X	-	V
<b>Period 2</b>					
TDDD90	Interactive Products	6*	A1N	-	E
TEIE42	Industrial Sales Management	6	A1X	4	E
TEIM10	Industrial Service Development	6	A1X	2	E
TETS27	Supply Chain Logistics	6	A1X	2	E
TGTU04	Leadership	6	G2X	2	E
TGTU49	History of Technology	6	G1F	3	E
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMHL63	Introduction to Computational Mechanics	6	G2X	3	E
TMHP03	Engineering Systems Design	6	A1X	4	E
TMKA01	Design Studio I	12*	A1X	2	E
TMKM17	Polymer Materials	6	A1X	2	E
TMKT81	Wood - Realisation	6	G2X	1	E
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	4	E
TMMS07	Biomechanics	6	A1X	4	E
TMMV18	Fluid Mechanics	6	A1X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E
TPPE21	Production Logistics	6	A1X	4	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G2X	-	V

*Specialisation: Product Development - Design Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD90	Interactive Products	6*	A1N	1	C
TMKA01	Design Studio I	12*	A1X	3	C
TEIO19	Industrial Management	6	G2X	4	E
<b>Period 2</b>					
TDDD90	Interactive Products	6*	A1N	-	C
TMKA01	Design Studio I	12*	A1X	2	C
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E

*Specialisation: Product Development - Engineering Design and manufacturing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD90	Interactive Products	6*	A1N	1	C
TEIO19	Industrial Management	6	G2X	4	E
TMME14	Machine Elements, Second Course	6	A1X	3	E
<b>Period 2</b>					
TDDD90	Interactive Products	6*	A1N	-	C
TMHL63	Introduction to Computational Mechanics	6	G2X	3	C
TMHP03	Engineering Systems Design	6	A1X	4	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E

*Specialisation: Product Development - Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD90	Interactive Products	6*	A1N	1	C
TEIO19	Industrial Management	6	G2X	4	C
TEIO90	Innovation Management	6	A1X	2	C
TEIE72	Corporate Strategies	6	A1X	4	E
TMQU03	Quality Management and Engineering	6	G2X	2	E
<b>Period 2</b>					
TDDD90	Interactive Products	6*	A1N	-	C
TEIE42	Industrial Sales Management	6	A1X	4	E
TEIM10	Industrial Service Development	6	A1X	2	E

**Semester 8 (Spring 2018)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD51	Service Design and Innovation	6	A1X	4	E
TDDE03	Design Studio II	12*	A1F	4	E
TEIE06	Corporate Planning	6*	A1X	-	E
TEIM09	International Business	6	A1X	2	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TKMJ34	Product Development Methodology	6*	A1X	2	E
TMKA04	Wood - Innovation	6	A1X	1	E
TMKT48	Design Optimization	6	A1X	3	E
TMKT74	Advanced CAD	6	A1X	1	E
TMMS21	Mechatronics	6	G2F	1	E
TPPE78	Quantitative Models and Analysis in Operations Management	6	A1X	1	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G1X	-	V
<b>Period 2</b>					
TDDE03	Design Studio II	12*	A1F	4	E
TDEI21	Strategic Organisational Application of IT - Workflow and Knowledge Management	6	A1X	4	E
TEIE06	Corporate Planning	6*	A1X	-	E
TEIO06	Innovative Entrepreneurship	6	A1X	2	E
TKMJ29	Resource Efficient Products	6	A1N	1	E
TKMJ34	Product Development Methodology	6*	A1X	2	E
TMKM18	Engineering Materials, Welding and Manufacturing Technology	6	G2X	2	E
TMKT57	Product Modelling	6	A1X	3	E
TMKT69	Conceptual Design - Project Course	6	A1N	4	E
TMME19	Mechanics, second course	6	A1X	1	E
TMPS27	Production Systems	6	A1X	3	E
TPPE74	Design and Development of Manufacturing Operations	6	A1X	4	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G1X	-	V

*Specialisation: Product Development - Design Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE03	Design Studio II	12*	A1F	4	C
TKMJ34	Product Development Methodology	6*	A1X	2	C
<b>Period 2</b>					
TDDE03	Design Studio II	12*	A1F	4	C
TKMJ34	Product Development Methodology	6*	A1X	2	C
TKMJ29	Resource Efficient Products	6	A1N	1	E

*Specialisation: Product Development - Engineering Design and manufacturing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMMS21	Mechatronics	6	G2F	1	C
TKMJ34	Product Development Methodology	6*	A1X	2	E
TMKT48	Design Optimization	6	A1X	3	E
TMKT74	Advanced CAD	6	A1X	1	E
<b>Period 2</b>					
TKMJ34	Product Development Methodology	6*	A1X	2	E
TMKT57	Product Modelling	6	A1X	3	E
TMKT69	Conceptual Design - Project Course	6	A1N	4	E
TMPS27	Production Systems	6	A1X	3	E

*Specialisation: Product Development - Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIE06	Corporate Planning	6*	A1X	-	E
TEIM09	International Business	6	A1X	2	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
<b>Period 2</b>					
TEIE06	Corporate Planning	6*	A1X	-	E
TEIM07	Industrial Market Research	6	A1X	2	E
TEIO06	Innovative Entrepreneurship	6	A1X	2	E

## Semester 9 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E
TEIO07	Project Based Organization and Management	6	A1X	4	E
TETS23	Purchasing	6	A1N	2	E
TKMJ46	Advanced Ecodesign	6	A1F	1	E
TMKT77	System Safety	6	A1X	4	E
TMKT79	Collaborative Multidisciplinary Design Optimization	6	A1X	2	E
TMKT96	Product Visualization	6*	A1X	3	E
TMMV01	Aerodynamics	6	A1X	2	E
TMQU13	Customer Focused Product and Service Development	6	A1X	4	E
TNGD11	Information Design Foundation	6	G2X	2	E
<b>Period 2</b>					
TAOP18	Supply Chain Optimization	6	A1F	1	E
TDDD61	Design - Strategy and Management	6	A1X	1	E
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E
TETS31	Logistics Strategies	6	A1X	4	E
TMKT71	Affective Engineering	6	A1X	2	E
TMKT96	Product Visualization	6*	A1X	3	E
TMPS22	Assembly Technology	6	A1N	3	E

*Specialisation: Product Development - Design Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMPP03	Project Course Advanced - Design Engineering	12*	A1X	3	C
TKMJ46	Advanced Ecodesign	6	A1F	1	E
TMKT96	Product Visualization	6*	A1X	3	E
<b>Period 2</b>					
TMPP03	Project Course Advanced - Design Engineering	12*	A1X	-	C
TDDD61	Design - Strategy and Management	6	A1X	1	E
TMKT71	Affective Engineering	6	A1X	2	E
TMKT96	Product Visualization	6*	A1X	3	E

*Specialisation: Product Development - Engineering Design and manufacturing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMPPM03	Project Course Advanced - Design and Manufacturing Engineering	12*	A1X	3	C
TMKT77	System Safety	6	A1X	4	E
TMKT79	Collaborative Multidisciplinary Design Optimization	6	A1X	2	E
<b>Period 2</b>					
TMPPM03	Project Course Advanced - Design and Manufacturing Engineering	12*	A1X	-	C
TMPS22	Assembly Technology	6	A1N	3	E

*Specialisation: Product Development - Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMPI02	Project Course Advanced - Management	12*	A1F	3	C
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E
TEIO07	Project Based Organization and Management	6	A1X	4	E
TMQU13	Customer Focused Product and Service Development	6	A1X	4	E
<b>Period 2</b>					
TMPI02	Project Course Advanced - Management	12*	A1F	-	C
TDEI19	Management Control	6	A1X	2	E
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E

**Semester 10 (Spring 2019)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C
<b>Period 2</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory / Voluntary

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