

# Industrial Engineering and Management - International, M Sc in Engineering

300 credits

Civilingenjör i industriell ekonomi - internationell

6CIEI

Valid from: 2017 Spring semester

**Determined by**

Board of Studies for Industrial  
Engineering and Logistics

**Date determined**

2017-01-25

## Entry requirements

### Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp

# Curriculum

## Semester 1 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 0</b>					
TATM79	Foundation Course in Mathematics	6*	G1X	-	C
<b>Period 1</b>					
TATA31	Linear Algebra	8*	G1X	2	C
TATM79	Foundation Course in Mathematics	6*	G1X	2	C
TEIE17	Industrial Economics	10*	G1X	4	C
THSP21	Spanish for Engineers I, part 1	2*	G1X	3	C
<b>Period 2</b>					
TATA31	Linear Algebra	8*	G1X	2	C
TATA41	Calculus in One Variable 1	6	G1X	3	C
TEIE17	Industrial Economics	10*	G1X	4	C
THSP21	Spanish for Engineers I, part 1	2*	G1X	1	C

## Semester 2 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TATA42	Calculus in One Variable 2	6	G1X	2	C
TDDD11	Introduction to Programming	8*	G1X	4	C
THSP22	Spanish for Engineers I, part 2	6*	G1X	3	C
<b>Period 2</b>					
TAOP52	Introduction to Operations Research	4	G1X	3	C
TATA69	Calculus in Several Variables	6	G1X	2	C
TDDD11	Introduction to Programming	8*	G1X	4	C
THSP22	Spanish for Engineers I, part 2	6*	G1X	1	C

### Semester 3 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
THSP41	Spanish for Engineers II, part 1	6*	G1X	4	C
TKMJ51	Corporate Sustainability Management	6	G1F	2	C
TMME27	Engineering Mechanics	10*	G1X	3	C
<b>Period 2</b>					
TAMS79	Mathematical Statistics, First Course	4	G1X	3	C
THSP41	Spanish for Engineers II, part 1	6*	G1X	4	C
TMME27	Engineering Mechanics	10*	G1X	1	C
TPPE98	Economic Analysis: Economic Theory	4	G2X	2	C

### Semester 4 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TAMS65	Mathematical Statistics, second course	6*	G2X	4	C
TAOP62	Operations Research, Extended Course	6	G2X	3	C
TDDE10	Object Oriented Programming in Java	6	G2X	1	E
TEIO61	Industrial Management	6	G2X	1	E
TFBI11	Genetics and Evolution	6	G1X	2	E
TMMV04	Engineering Thermodynamics	6	G1X	2	E
TMPT07	Manufacturing Technology	6	G2X	2	E
TSEA22	Switching Theory and Logical Design	6	G1X	2	E
TSRT04	Introduction in Matlab	2	G1X	2	E
<b>Period 2</b>					
TAMS65	Mathematical Statistics, second course	6*	G2X	2	C
THSP42	Spanish for Engineers II, part 2	2	G1X	4	C
TPPE24	Economic Analysis: Decision- and Financial Methodology	6	G2X	3	C
TATA82	Discrete Mathematics	6	G1X	1	E
TFKE52	Fundamentals of Chemistry	6	G1X	1	E
TMES44	Energy Systems - Supply and Demand	6	G2X	1	E
TMKT14	CAD and Machine Elements	6	G2X	1	E
TSEA82	Computer Hardware and Architecture	4	G1X	4	E
TSRT04	Introduction in Matlab	2	G1X	1	E
TPTE06	Industrial Placement	6	G1X	-	V

*Specialisation: Specialization Biotechnical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TFBI11	Genetics and Evolution	6	G1X	2	C
<b>Period 2</b>					
TFKE52	Fundamentals of Chemistry	6	G1X	1	C

*Specialisation: Specialization Computer Science and Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE10	Object Oriented Programming in Java	6	G2X	1	C
<b>Period 2</b>					
TATA82	Discrete Mathematics	6	G1X	1	C

*Specialisation: Specialization Electrical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSEA22	Switching Theory and Logical Design	6	G1X	2	C
<b>Period 2</b>					
TSEA82	Computer Hardware and Architecture	4	G1X	4	C

*Specialisation: Specialization Energy Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMMV04	Engineering Thermodynamics	6	G1X	2	C
<b>Period 2</b>					
TMES44	Energy Systems - Supply and Demand	6	G2X	1	C

*Specialisation: Specialization Mechanical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMPT07	Manufacturing Technology	6	G2X	2	C
<b>Period 2</b>					
TMKT14	CAD and Machine Elements	6	G2X	1	C

**Semester 5 (Autumn 2019)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TPPE13	Production and Operations Management	6	G2X	1	C
TSRT22	Automatic Control	6	G2X	4	C
TDDE18	Programming C++	6*	G2X	2	E
TDDE22	Data Structures and Algorithms	6	G2X	3	E
TEIO91	Project Management	6*	G2X	-	E
TFBI22	Cell Biology and Microbial Processes	6	G1X	3	E
TMHL22	Solid Mechanics	6	G2X	3	E
TMKM86	Engineering Materials	6*	G2X	4	E
TMMV11	Fluid Mechanics and Heat Transfer	6	G2X	2	E
TMMV57	Applied Energy Engineering	6*	G2X	3	E
TSDT84	Signals and Systems, and Transform Theory	8*	G2X	4	E
TSEA52	Switching Theory and Logical Design	6*	G1X	2	E
TSTE95	Electronics	4	G1X	3	E
<b>Period 2</b>					
TEIO04	Project Management	6	G2X	2	C
NBIB45	Principles in Physiology and Ethics	6	G1X	1	E
TDDE18	Programming C++	6*	G2X	1	E
TDTS10	Computer Architecture	6	G1X	3	E
TEIM03	Intercultural Communication	4	G1X	4	E
TEIO91	Project Management	6*	G2X	-	E
TKMJ35	Industrial Ecology	6	G2F	3	E
TKMJ39	Resource Efficient Products and Production	6	G2F	1	E
TMKM86	Engineering Materials	6*	G2X	4	E
TMMI46	Industrial Automation	6	G2X	3	E
TMMV57	Applied Energy Engineering	6*	G2X	3	E
TSDT84	Signals and Systems, and Transform Theory	8*	G2X	3	E
TSEA52	Switching Theory and Logical Design	6*	G1X	4	E

*Specialisation: Specialization Biotechnical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TFBI22	Cell Biology and Microbial Processes	6	G1X	3	C
<b>Period 2</b>					
NBIB45	Principles in Physiology and Ethics	6	G1X	1	C
TKMJ35	Industrial Ecology	6	G2F	3	E

*Specialisation: Specialization Computer Science and Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSEA52	Switching Theory and Logical Design	6*	G1X	2	C
TDDE22	Data Structures and Algorithms	6	G2X	3	E
<b>Period 2</b>					
TDTS10	Computer Architecture	6	G1X	3	C
TSEA52	Switching Theory and Logical Design	6*	G1X	4	C

*Specialisation: Specialization Electrical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE18	Programming C++	6*	G2X	2	C
TSDT84	Signals and Systems, and Transform Theory	8*	G2X	4	C
TSTE95	Electronics	4	G1X	3	E
<b>Period 2</b>					
TDDE18	Programming C++	6*	G2X	1	C
TSDT84	Signals and Systems, and Transform Theory	8*	G2X	3	C



*Specialisation: Specialization Energy Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMMV11	Fluid Mechanics and Heat Transfer	6	G2X	2	C
TMMV57	Applied Energy Engineering	6*	G2X	3	C
<b>Period 2</b>					
TMMV57	Applied Energy Engineering	6*	G2X	3	C
TKMJ39	Resource Efficient Products and Production	6	G2F	1	E

*Specialisation: Specialization Mechanical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMHL22	Solid Mechanics	6	G2X	3	C
TMKM86	Engineering Materials	6*	G2X	4	C
<b>Period 2</b>					
TMKM86	Engineering Materials	6*	G2X	4	C
TMMI46	Industrial Automation	6	G2X	3	E

**Semester 6 (Spring 2020)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIM32	Industrial Marketing	6	G2X	4	C
TDDD81	Database Technology	6*	G2X	2	E
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	E
TFBI23	Ecology and the Environment	6	G1X	3	E
TFBI24	Biotechnology - Bachelor Project	18*	G2X	2	E
TMMV04	Engineering Thermodynamics	6	G1X	2	E
TMMV16	Energy Engineering - Bachelor Project	18*	G2X	3	E
TMMV58	Modelling and Simulation of Energy and Heat Transfer Processes	6	G2X	1	E
TMPS32	Mechanical Engineering - Bachelor Project	18*	G2X	3	E
TSBB18	Embedded Perception Systems	6	G2X	3	E
TSEA56	Electronics Engineering - Bachelor Project	16*	G2X	2	E
<b>Period 2</b>					
TDDD12	Database Technology	6	G2X	4	E
TDDD81	Database Technology	6*	G2X	4	E
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	E
TFBI24	Biotechnology - Bachelor Project	18*	G2X	2/3/4	E
TMMV16	Energy Engineering - Bachelor Project	18*	G2X	3	E
TMPS32	Mechanical Engineering - Bachelor Project	18*	G2X	3	E
TSEA56	Electronics Engineering - Bachelor Project	16*	G2X	-	E
TSKS10	Signals, Information and Communication	4	G2X	3	E
TPTE06	Industrial Placement	6	G1X	-	V

*Specialisation: Specialization Biotechnical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TFBI23	Ecology and the Environment	6	G1X	3	C
TFBI24	Biotechnology - Bachelor Project	18*	G2X	2	E
<b>Period 2</b>					
TFBI24	Biotechnology - Bachelor Project	18*	G2X	2/3/4	E

*Specialisation: Specialization Computer Science and Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD81	Database Technology	6*	G2X	2	E
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	E
<b>Period 2</b>					
TDDD12	Database Technology	6	G2X	4	C
TDDD81	Database Technology	6*	G2X	4	E
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	E

*Specialisation: Specialization Electrical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSBB18	Embedded Perception Systems	6	G2X	3	C
TSEA56	Electronics Engineering - Bachelor Project	16*	G2X	2	E
<b>Period 2</b>					
TSKS10	Signals, Information and Communication	4	G2X	3	C
TSEA56	Electronics Engineering - Bachelor Project	16*	G2X	-	E

*Specialisation: Specialization Energy Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMMV58	Modelling and Simulation of Energy and Heat Transfer Processes	6	G2X	1	C
TMMV16	Energy Engineering - Bachelor Project	18*	G2X	3	E
<b>Period 2</b>					
TMMV16	Energy Engineering - Bachelor Project	18*	G2X	3	E

*Specialisation: Specialization Mechanical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMMV04	Engineering Thermodynamics	6	G1X	2	C
TMPS32	Mechanical Engineering - Bachelor Project	18*	G2X	3	E
<b>Period 2</b>					
TMPS32	Mechanical Engineering - Bachelor Project	18*	G2X	3	E

**Semester 7 (Autumn 2020)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
THSP18	Spanish for Engineers III	6*	G2X	-	C
TAMS32	Stochastic Processes	6	A1X	1	E
TAMS46	Probability Theory, Second Course	6	A1X	3	E
TANA21	Scientific Computing	6	G1X	3	E
TAOP34	Large Scale Optimization	6	A1X	3	E
TATA34	Real Analysis, Honours Course	6*	G2X	4	E
TATA44	Vector Analysis	4	G1X	1	E
TATM38	Mathematical Models in Biology	6	A1X	3	E
TDDC17	Artificial Intelligence	6	G2X	3	E
TDDC88	Software Engineering	12*	A1X	1	E
TDDD23	Design and Programming of Computer Games	6	A1X	2	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	E
TDDE18	Programming C++	6*	G2X	2	E
TDEI13	Enterprise Resource Planning Systems: Process and Implementation	6	A1X	2	E
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	E
TEIE72	Corporate Strategies	6	A1X	4	E
TEIO07	Project Based Organization and Management	6	A1X	4	E
TEIO90	Innovation Management	6	A1X	2	E
TETS23	Purchasing	6	A1X	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TETS37	Basics in Logistics Management	6	G2X	4	E
TKMJ14	Large Technical Systems and the Environment	6	A1X	4	E
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TMES09	Industrial Energy Systems	6	A1X	2	E
TMES27	Modelling of Energy Systems	6	A1X	3	E
TMKM16	Sustainable Material Selection	6	A1X	4	E
TMKT80	Wood - Material	6	G2X	2	E
TMMV18	Fluid Mechanics	6	A1X	1	E
TMPS33	Virtual Manufacturing	6	A1X	4	E
TMPS35	Emerging Factory Technologies	6	A1X	3	E
TMPT03	Production Engineering - Continuing Course	6	G2X	2	E
TMQU03	Quality Management and Engineering	6	G2X	2	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
TPPE17	Corporate Finance	6	G2X	4	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
TSBB08	Digital Image Processing	6	A1X	4	E
TSDT14	Signal Theory	6	A1X	1	E
TSKS01	Digital Communication	6*	A1X	4	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1X	3	E
<b>Period 2</b>					
THSP18	Spanish for Engineers III	6*	G2X	-	C
NBID31	Modelling of Biological Systems	6	A1X	3/4	E
TAOP04	Mathematical Optimization	6	A1X	2	E
TATA34	Real Analysis, Honours Course	6*	G2X	4	E
TATA45	Complex Analysis	6	G2X	1	E
TDDC88	Software Engineering	12*	A1X	1	E
TDDD07	Real Time Systems	6	A1X	4	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TDDE01	Machine Learning	6	A1X	1	E
TDDE18	Programming C++	6*	G2X	1	E
TDEI19	Management Control	6	A1X	2	E
TDEI21	Strategic Organisational Application of IT - Workflow and Knowledge Management	6	A1X	4	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
TFBI17	Advanced Project Course in Ecosystem Service Valuation	6	A1X	-	E
TFYA96	The physics behind technology	6	G2X	4	E
TKMJ35	Industrial Ecology	6	G2F	3	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TMES17	Building Energy Systems	6	A1X	3	E
TMES45	Energy Planning and Modelling of Communities	6	A1X	4	E
TMHP03	Engineering Systems Design	6	A1X	4	E
TMKM90	Engineering Materials - Deformation and Fracture	6	A1X	2	E
TMKT71	Affective Engineering	6	A1X	2	E
TMKU02	Wood - Realisation	6	G2X	1	E
TMPS22	Assembly Technology	6	A1X	3	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E
TMQU12	Lean Production	6	A1X	2	E
TPPE29	Financial Markets and Instruments	6	A1X	2	E
TPPE76	Operations Planning and Control	6	A1X	4	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSBB09	Image Sensors	6	A1X	4	E
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSIT02	Computer Security	6	G2X	2	E
TSKS01	Digital Communication	6*	A1X	4	E
TSKS33	Complex networks and big data	6	A1X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E

*Specialisation: Master Profile Digitisation and Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	C
TDEI13	Enterprise Resource Planning Systems: Process and Implementation	6	A1X	2	E
<b>Period 2</b>					
TDEI21	Strategic Organisational Application of IT - Workflow and Knowledge Management	6	A1X	4	C
TDEI19	Management Control	6	A1X	2	E

*Specialisation: Master Profile Finance*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TPPE17	Corporate Finance	6	G2X	4	E
<b>Period 2</b>					
TPPE29	Financial Markets and Instruments	6	A1X	2	C

*Specialisation: Master Profile Industrial Marketing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIE72	Corporate Strategies	6	A1X	4	E
<b>Period 2</b>					
TEIE42	Industrial Sales Management	6	A1X	4	C/E
TEIM10	Industrial Service Development	6	A1X	2	C/E

*Specialisation: Master Profile Logistics and Supply Chain Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TETS37	Basics in Logistics Management	6	G2X	4	C
TETS23	Purchasing	6	A1X	2	E
<b>Period 2</b>					
TETS27	Supply Chain Logistics	6	A1X	2	C/E

*Specialisation: Master Profile Operations Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TPPE16	Manufacturing Strategies	6	A1X	2	C
<b>Period 2</b>					
TPPE76	Operations Planning and Control	6	A1X	4	E

*Specialisation: Master Profile Project, Innovation and Entrepreneurship*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO90	Innovation Management	6	A1X	2	C
TEIO07	Project Based Organization and Management	6	A1X	4	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
<b>Period 2</b>					
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E

*Specialisation: Master Profile Quality Technology and Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMQU03	Quality Management and Engineering	6	G2X	2	C
<b>Period 2</b>					
TMQU12	Lean Production	6	A1X	2	E



*Specialisation: Master Profile Strategic Management and Control*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIE72	Corporate Strategies	6	A1X	4	C
TEIO90	Innovation Management	6	A1X	2	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
<b>Period 2</b>					
TDEI19	Management Control	6	A1X	2	C
TDEI21	Strategic Organisational Application of IT - Workflow and Knowledge Management	6	A1X	4	E
TEIE42	Industrial Sales Management	6	A1X	4	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E

*Specialisation: Specialization Biotechnical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TATM38	Mathematical Models in Biology	6	A1X	3	E
TKMJ31	Biofuels for Transportation	6	A1N	1	E
<b>Period 2</b>					
NBID31	Modelling of Biological Systems	6	A1X	3/4	C
TFBI17	Advanced Project Course in Ecosystem Service Valuation	6	A1X	-	E
TKMJ35	Industrial Ecology	6	G2F	3	E

*Specialisation: Specialization Computer Science and Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDC88	Software Engineering	12*	A1X	1	C
TDDC17	Artificial Intelligence	6	G2X	3	E
TDDD23	Design and Programming of Computer Games	6	A1X	2	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDE18	Programming C++	6*	G2X	2	E
<b>Period 2</b>					
TDDC88	Software Engineering	12*	A1X	1	C
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDE01	Machine Learning	6	A1X	1	E
TDDE18	Programming C++	6*	G2X	1	E
TSIT02	Computer Security	6	G2X	2	E
TSKS33	Complex networks and big data	6	A1X	3	E

*Specialisation: Specialization Electrical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
TSBB08	Digital Image Processing	6	A1X	4	E
TSDT14	Signal Theory	6	A1X	1	E
TSKS01	Digital Communication	6*	A1X	4	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1X	3	E
<b>Period 2</b>					
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSBB09	Image Sensors	6	A1X	4	E
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSIT02	Computer Security	6	G2X	2	E
TSKS01	Digital Communication	6*	A1X	4	E
TSKS33	Complex networks and big data	6	A1X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E

*Specialisation: Specialization Energy Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TKMJ14	Large Technical Systems and the Environment	6	A1X	4	E
TMES09	Industrial Energy Systems	6	A1X	2	E
TMES27	Modelling of Energy Systems	6	A1X	3	E
TMMV18	Fluid Mechanics	6	A1X	1	E
<b>Period 2</b>					
TMES17	Building Energy Systems	6	A1X	3	E
TMES45	Energy Planning and Modelling of Communities	6	A1X	4	E

*Specialisation: Specialization Mechanical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TANA21	Scientific Computing	6	G1X	3	E
TMKM16	Sustainable Material Selection	6	A1X	4	E
TMKT80	Wood - Material	6	G2X	2	E
TMPS33	Virtual Manufacturing	6	A1X	4	E
TMPS35	Emerging Factory Technologies	6	A1X	3	E
TMPT03	Production Engineering - Continuing Course	6	G2X	2	E
<b>Period 2</b>					
TMHP03	Engineering Systems Design	6	A1X	4	E
TMKM90	Engineering Materials - Deformation and Fracture	6	A1X	2	E
TMKT71	Affective Engineering	6	A1X	2	E
TMKU02	Wood - Realisation	6	G2X	1	E
TMPS22	Assembly Technology	6	A1X	3	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E

**Semester 8 (Spring 2021)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					

Course code	Course name	Credits	Level	Timetable module	ECV
TEIE06	Corporate Planning	6*	A1X	-	C
NBIB35	Environmental Management	6	G1X	2/3/4	E
TAMS29	Stochastic Processes Applied to Financial Models	6	A1X	3	E
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
Tddb68	Concurrent Programming and Operating Systems	6	G2X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD20	Design and Analysis of Algorithms	6	A1X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1X	3	E
TDDD57	Physical Interaction and Game Programming	6	A1X	1	E
TDDD75	Effect-Driven Development and Human-Centered Design of Interactive Systems	6	G2X	3	E
TDDD97	Web Programming	6	G2X	3	E
TDDE46	Software Quality	6*	A1N	2	E
TDEI71	Digitisation, Business Ecologies and Business Models	6	A1N	4	E
TDS04	Computer Networks and Distributed Systems	8	G2X	2	E
TEIE88	Computer Law	4	G1X	1	E
TEIM09	International Business	6	A1X	2	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TETS57	Logistics Analysis	6	A1X	2	E
TFYA45	Biotechnology Project	6*	A1X	-	E
TFYA62	Introduction to Biosensor Technology	6	G2X	4	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
TGTU91	Oral and Written Communication	6	G1X	2	E
TGTU94	Technology and Ethics	6	G1X	1	E
TKMJ10	Industrial Ecology	6	A1X	1	E
TKMJ47	Environmental Systems Analysis	6*	A1N	3	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1X	1	E
TMKA04	Wood - Innovation	6	A1X	1	E
TMKT48	Design Optimization	6	A1X	3	E
TMKT74	Advanced CAD	6	A1X	4	E
TMMS21	Mechatronics	6	G2X	1	E
TMPS42	Production System Automation	6	A1X	1	E
TMQU31	Statistical Quality Control	6	A1X	2	E
TPPE32	Financial Risk Management	6	A1X	2	E
TPPE78	Quantitative Models and Analysis in Operations Management	6	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1X	2	E
TSKS13	Wireless Communications	6	A1F	4	E
TSRT07	Industrial Control Systems	6	A1X	2	E
TSRT09	Control Theory	6	A1X	3	E
TSTE27	Analog and Discrete-Time Integrated Circuits	6	A1F	3	E
TVCB11	Cellbiological Methodology	6	G2X	1/4	E
<b>Period 2</b>					
TEIE06	Corporate Planning	6*	A1X	-	C
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD27	Advanced Web Programming	6	A1N	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDE07	Bayesian Learning	6	A1X	2	E
TDDE31	Big Data Analytics	6	A1X	3	E
TDDE41	Software Architectures	6	A1X	1	E
TDDE46	Software Quality	6*	A1N	2	E
TDEI35	Strategy and Management Control	6	A1X	2	E
TEAE13	Civil and Commercial Law	6	G1X	2	E
TEIM07	Industrial Market Research	6	A1X	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TEIO06	Innovative Entrepreneurship	6	A1X	2	E
TEIO41	Corporate Social Responsibility	6	A1X	3	E
TETS36	Sustainable Logistics Systems	6	A1X	4	E
TETS56	Logistics and Quality in Health Care	6	A1X	2	E
TFYA45	Biotechnology Project	6*	A1X	-	E
TGTU95	Philosophy of Science and Technology	6	G1X	4	E
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E
TMES21	Industrial Energy Systems	6	A1X	3	E
TMES41	Strategic Development of Sustainable Energy Systems	6	A1X	2	E
TMHL24	Solid Mechanics - Design Criteria	6	G2X	1	E
TMKT57	Product Modelling	6	A1X	3	E
TMKT77	System Safety	6	A1X	4	E
TMKT83	Small Scale Renewable Energy Conversion	6	A1X	4	E
TMME11	Road Vehicle Dynamics	6	A1X	1	E
TMPS27	Production Systems	6	A1X	3	E
TMQU04	Six Sigma Quality	6	A1X	2	E
TMQU13	Customer Focused Product and Service Development	6	A1X	4	E
TPPE33	Portfolio Management	6	A1X	2	E
TPPE74	Design and Development of Manufacturing Operations	6	A1X	4	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSKS14	Multiple Antenna Communications	6	A1X	3	E
TSKS16	Signal Processing for Communications	6	A1X	1	E
TSRT14	Sensor Fusion	6	A1N	2	E

*Specialisation: Master Profile Digitisation and Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDEI71	Digitisation, Business Ecologies and Business Models	6	A1N	4	C
<b>Period 2</b>					
TDEI35	Strategy and Management Control	6	A1X	2	C

*Specialisation: Master Profile Finance*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TPPE32	Financial Risk Management	6	A1X	2	C
<b>Period 2</b>					
TPPE33	Portfolio Management	6	A1X	2	E

*Specialisation: Master Profile Industrial Marketing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIM09	International Business	6	A1X	2	C/E
<b>Period 2</b>					
TEIM07	Industrial Market Research	6	A1X	2	C

*Specialisation: Master Profile Logistics and Supply Chain Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TETS57	Logistics Analysis	6	A1X	2	C/E
<b>Period 2</b>					
TETS36	Sustainable Logistics Systems	6	A1X	4	E
TETS56	Logistics and Quality in Health Care	6	A1X	2	E

*Specialisation: Master Profile Operations Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TPPE78	Quantitative Models and Analysis in Operations Management	6	A1X	1	E
<b>Period 2</b>					
TPPE74	Design and Development of Manufacturing Operations	6	A1X	4	C

*Specialisation: Master Profile Project, Innovation and Entrepreneurship*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO13	Leadership and Organizational Change	6	A1X	4	E
<b>Period 2</b>					
TEIO06	Innovative Entrepreneurship	6	A1X	2	E
TEIO41	Corporate Social Responsibility	6	A1X	3	E

*Specialisation: Master Profile Quality Technology and Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMQU31	Statistical Quality Control	6	A1X	2	E
<b>Period 2</b>					
TMQU04	Six Sigma Quality	6	A1X	2	C/E
TMQU13	Customer Focused Product and Service Development	6	A1X	4	C/E
TETS56	Logistics and Quality in Health Care	6	A1X	2	E



*Specialisation: Master Profile Strategic Management and Control*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIM09	International Business	6	A1X	2	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
<b>Period 2</b>					
TEIM07	Industrial Market Research	6	A1X	2	E
TETS36	Sustainable Logistics Systems	6	A1X	4	E

*Specialisation: Specialization Biotechnical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
NBIB35	Environmental Management	6	G1X	2/3/4	E
TFYA45	Biotechnology Project	6*	A1X	-	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
TKMJ47	Environmental Systems Analysis	6*	A1N	3	E
<b>Period 2</b>					
TFYA45	Biotechnology Project	6*	A1X	-	E
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E

*Specialisation: Specialization Computer Science and Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TDDB68	Concurrent Programming and Operating Systems	6	G2X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD20	Design and Analysis of Algorithms	6	A1X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1X	3	E
TDDD75	Effect-Driven Development and Human-Centered Design of Interactive Systems	6	G2X	3	E
TDTS04	Computer Networks and Distributed Systems	8	G2X	2	E
<b>Period 2</b>					
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD27	Advanced Web Programming	6	A1N	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDE07	Bayesian Learning	6	A1X	2	E
TDDE31	Big Data Analytics	6	A1X	3	E
TDDE41	Software Architectures	6	A1X	1	E

*Specialisation: Specialization Electrical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1X	2	E
TSKS13	Wireless Communications	6	A1F	4	E
TSRT07	Industrial Control Systems	6	A1X	2	E
TSRT09	Control Theory	6	A1X	3	E
<b>Period 2</b>					
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSKS14	Multiple Antenna Communications	6	A1X	3	E
TSKS16	Signal Processing for Communications	6	A1X	1	E
TSRT14	Sensor Fusion	6	A1N	2	E

*Specialisation: Specialization Energy Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TKMJ10	Industrial Ecology	6	A1X	1	E
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1X	1	E
<b>Period 2</b>					
TMES21	Industrial Energy Systems	6	A1X	3	E
TMES41	Strategic Development of Sustainable Energy Systems	6	A1X	2	E
TMKT83	Small Scale Renewable Energy Conversion	6	A1X	4	E

*Specialisation: Specialization Mechanical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMKA04	Wood - Innovation	6	A1X	1	E
TMKT48	Design Optimization	6	A1X	3	E
TMKT74	Advanced CAD	6	A1X	4	E
TMMS21	Mechatronics	6	G2X	1	E
TMPS42	Production System Automation	6	A1X	1	E
<b>Period 2</b>					
TMHL24	Solid Mechanics - Design Criteria	6	G2X	1	E
TMKT57	Product Modelling	6	A1X	3	E
TMKT77	System Safety	6	A1X	4	E
TMME11	Road Vehicle Dynamics	6	A1X	1	E
TMPS27	Production Systems	6	A1X	3	E

**Semester 9 (Autumn 2021)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TATM38	Mathematical Models in Biology	6	A1X	3	E
TDDD04	Software Testing	6	A1X	2	E
TDDE15	Advanced Machine Learning	6	A1X	1	E
TDDE45	Software Design and Construction	6	A1X	4	E
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	E
TEAE12	Strategic Analysis and Methods for Strategic Change	12*	A1X	2	E
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	E
TETS38	Logistics Project	12*	A1X	4	E
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMKT79	Collaborative Multidisciplinary Design Optimization	6	A1X	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMPE10	Project Course Advanced - Sustainability Engineering and Management	12*	A1X	-	E
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E
TMQU27	Quality Management - Project Course	12*	A1X	2	E
TMQU47	Quality Engineering and Design	6	A1X	4	E
TPPE53	Financial Valuation Methodology	6	A1X	2	E
TPPE66	Investment Valuation	6*	A1X	4	E
TPPE73	Operations Management - Project Course	12*	A1X	4	E
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSIT03	Cryptology	6	A1X	2	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1X	1	E
<b>Period 2</b>					
NBID79	Ecosystem services in CSR and conservation	6	A1X	1	E
TAOP18	Supply Chain Optimization	6	A1X	1	E
Tddb44	Compiler Construction	6	A1X	1	E
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1X	4	E
TDDC90	Software Security	6	A1X	1	E
TEAE12	Strategic Analysis and Methods for Strategic Change	12*	A1X	2	E
TEAE18	Sustainable Value Chain Strategies	6	A1X	4	E
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E
TEIM10	Industrial Service Development	6	A1X	2	E
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	E
TETS31	Logistics Strategies	6	A1X	4	E
TETS38	Logistics Project	12*	A1X	2	E
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMES51	International Energy Markets	6	A1X	1	E
TMKA03	Industrial Design	6	G2X	1	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMKA11	Model-based System-of-Systems Engineering	6	A1X	3	E
TMPE10	Project Course Advanced - Sustainability Engineering and Management	12*	A1X	-	E
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E
TMQU12	Lean Production	6	A1X	2	E
TMQU27	Quality Management - Project Course	12*	A1X	4	E
TPPE61	Financial Optimization	6	A1X	2	E
TPPE66	Investment Valuation	6*	A1X	4	E
TPPE73	Operations Management - Project Course	12*	A1X	4	E
TSRT08	Optimal Control	6	A1X	3	E

*Specialisation: Master Profile Digitisation and Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 2</b>					
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1X	4	E

*Specialisation: Master Profile Finance*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TPPE53	Financial Valuation Methodology	6	A1X	2	E
TPPE66	Investment Valuation	6*	A1X	4	E
<b>Period 2</b>					
TPPE61	Financial Optimization	6	A1X	2	E
TPPE66	Investment Valuation	6*	A1X	4	E

*Specialisation: Master Profile Industrial Marketing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	C
<b>Period 2</b>					
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	C

*Specialisation: Master Profile Logistics and Supply Chain Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TETS38	Logistics Project	12*	A1X	4	C
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
<b>Period 2</b>					
TETS38	Logistics Project	12*	A1X	2	C
TETS31	Logistics Strategies	6	A1X	4	E

*Specialisation: Master Profile Operations Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TPPE73	Operations Management - Project Course	12*	A1X	4	C
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
<b>Period 2</b>					
TPPE73	Operations Management - Project Course	12*	A1X	4	C

*Specialisation: Master Profile Project, Innovation and Entrepreneurship*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	C
<b>Period 2</b>					
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	C

*Specialisation: Master Profile Quality Technology and Management*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMQU27	Quality Management - Project Course	12*	A1X	2	C
TMQU47	Quality Engineering and Design	6	A1X	4	E
<b>Period 2</b>					
TMQU27	Quality Management - Project Course	12*	A1X	4	C

*Specialisation: Master Profile Strategic Management and Control*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEAE12	Strategic Analysis and Methods for Strategic Change	12*	A1X	2	C
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	E
<b>Period 2</b>					
TEAE12	Strategic Analysis and Methods for Strategic Change	12*	A1X	2	C
TEAE18	Sustainable Value Chain Strategies	6	A1X	4	E
TEIM10	Industrial Service Development	6	A1X	2	E
TMQU12	Lean Production	6	A1X	2	E

*Specialisation: Specialization Biotechnical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TATM38	Mathematical Models in Biology	6	A1X	3	E
<b>Period 2</b>					
NBID79	Ecosystem services in CSR and conservation	6	A1X	1	E

*Specialisation: Specialization Computer Science and Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD04	Software Testing	6	A1X	2	E
TDDE15	Advanced Machine Learning	6	A1X	1	E
TDDE45	Software Design and Construction	6	A1X	4	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSIT03	Cryptology	6	A1X	2	E
<b>Period 2</b>					
TMKA11	Model-based System-of-Systems Engineering	6	A1X	3	E



*Specialisation: Specialization Electrical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSIT03	Cryptology	6	A1X	2	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1X	1	E
<b>Period 2</b>					
TSRT08	Optimal Control	6	A1X	3	E

*Specialisation: Specialization Energy Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMPE10	Project Course Advanced - Sustainability Engineering and Management	12*	A1X	-	E
<b>Period 2</b>					
TMPE10	Project Course Advanced - Sustainability Engineering and Management	12*	A1X	-	E

*Specialisation: Specialization Mechanical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TMKT79	Collaborative Multidisciplinary Design Optimization	6	A1X	2	E
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E
<b>Period 2</b>					
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMKA03	Industrial Design	6	G2X	1	E
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E

## Semester 10 (Spring 2022)

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

## Common rules

### Structure and organisation of study programmes

The contents and design of the programmes are to be continuously revised such that new knowledge is integrated into courses and specialisations. Within one programme, several study specialisations or profiles may be available. The identities of the study specialisations or profiles and the regulations governing how these may be selected are given in the syllabus and curriculum for the particular field of study and programmes.

The structure and organisation of the programmes are to follow specified criteria that are summarised in the syllabus for each programme.

- The syllabus defines the aims of the study programme.
- The curriculum, which constitutes one part of the syllabus for the field of study, gives details of the terms in which the various courses have been timetabled, and their scheduling through the academic year.
- The course syllabus specifies, among other things, the aim and contents of the course, and the prior knowledge that a student must have in order to be able to benefit from the course.

### Qualification requirements

The qualification requirements specified in the Higher Education Ordinance 2007 apply to students admitted after 1 July 2007. A student who has completed components of a programme after 1 July 2007 has the right to be assessed with respect to the qualification requirements specified by the Higher Education Ordinance 2007. In addition, local regulations laid down by the faculty boards and university board apply, see <http://styrdokument.liu.se/Regelsamling/VisaBeslut/622693>.

Higher Education Act Chapter 1, Section 8:

First-cycle courses and study programmes are to develop:

- the ability to make independent and critical assessments
- the ability to identify, formulate and solve problems autonomously, and
- the preparedness to deal with changes in working life.

In addition to knowledge and skills in their field of study, students shall develop the ability to:

- gather and interpret information at a scholarly level
- stay abreast of the development of knowledge, and
- communicate their knowledge to others, including those who lack specialist knowledge in the field.

### Qualifications within a study programme

Qualification requirements that are specific to a study programme are given in the syllabus for that programme.

### **Matriculation and postponement of matriculation**

A person who has been accepted for a study programme is to start their studies (matriculate) in the term that is specified in the decision about admission. The date and location of the compulsory matriculation procedure will be communicated to those admitted to the first term of the programme.

At any one admission occasion, it is possible to be admitted to only one place on a study programme. A student who has been granted a place on a study programme and who is offered and accepts a place on another study programme during a supplementary round of admission will lose the place offered for the first study programme.

Regulations concerning postponement of matriculation have been laid down in the admission regulations for Linköping University,  
<http://stydokument.liu.se/Regelsamling/VisaBeslut/622645>.

A person who has been granted postponement must present to the admitting authority, before the term in which the studies are to be started and before the date of application, a renewed registration for the programme and a copy of the decision granting postponement.

### **Admission to a later part of a programme**

Admission to a part of a study programme is used here to refer to admission with the purpose of completing the programme and taking a degree. Admission to a later part of a programme may take place only if sufficient resources and space on the programme are available. Furthermore, the applicant must satisfy the entry requirements for the relevant term of the programme, as specified in  
[http://stydokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva/Tekniska\\_fakulteten](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva/Tekniska_fakulteten).

### **Interruption in studies**

Notification of an interruption in studies is to be made through the Student Portal. If such a notification is not made and if the student does not register for the first term during which the interruption is to take place, the interruption will be considered to be a withdrawal. An interruption in studies must cover a complete term, and notification of interruptions can be given for a maximum of two consecutive terms. Notification of resumption of studies is to take place at the term registration for the term that follows the interruption. If the student does not register at the term registration, this will be regarded as withdrawal from studies.

A student who is taking an interruption in studies may during this period retake examinations if he or she has re-registered for the most recent study term of the programme. A student who wishes to take another course during the interruption in studies must apply for this separately. The student is responsible that

registration for courses is carried out at the correct times in preparation for the resumption of studies.

### **Withdrawal from a study programme**

A student who wishes to withdraw from a study programme must notify the study guidance counsellor. A student who leaves the studies without giving notification of an interruption in study and who fails to register for the immediately subsequent term is considered to have withdrawn. A student who has withdrawn may return to the study programme if a vacancy is available that is not required for students returning after an interruption in study, and not required for students who are changing their location of study and/or study programme.

### **Interrupting a course**

The vice-chancellor's decision concerning regulations for registration, deregistration and reporting results (Dnr LiU-2015-01241) states that interruptions in study are to be recorded in Ladok. Thus, all students who do not participate in a course for which they have registered must record the interruption, such that the registration on the course can be removed. Deregistration from a course is carried out using a web-based form: [www.lith.liu.se/for-studenter/kurskomplettering?l=sv](http://www.lith.liu.se/for-studenter/kurskomplettering?l=sv).

### **Courses within a study programme**

The curriculum for the various years of a study programme specify which courses are compulsory (o), elective (v) and voluntary (f). If a student wishes to study a different combination than the one specified in the curriculum, an application must be made to the board of studies.

### **Registration for programme courses**

Registration for courses that are given as part of a study programme must be made during the specified period, which has been preliminarily set to 1-10 April for the autumn term, and 1-10 October for the spring term. Information about course registration is published on a webpage, sent to students by email, and disseminated at scheduled information meetings.

### **Registration for programme courses as single-subject courses**

Admission to a programme course as a single-subject subject course may take place only if sufficient resources and space on the course are available. Furthermore, the applicant must satisfy the entry requirements for the relevant course.

### **Cancelled courses**

Courses with few participants (fewer than 10) may be cancelled or organised in a

manner that differs from that stated in the course syllabus. The board of studies is to deliberate and decide whether a course is to be cancelled or changed from the course syllabus.

## Timetabling

Courses are timetabled after a decision has been made concerning the assignment of the course to a study period. A central timetable is not drawn up for courses with fewer than five participants. Most project courses do not have a central timetable.

## Study planning

Students who require support in planning their continued studies can contact the study guidance counsellor of the programme. Study planning involves the student and the study guidance counsellor together drawing up an individual plan for studies during the subsequent term. The individual plan may allow the student to deviate from the general curriculum.

Completed first-cycle courses are a precondition for successful studies at more advanced levels. For this reason, study planning is based on giving priority to courses from earlier years of study that have not been completed. If further capacity is available, new courses may be taken.

Study planning takes place on a regular basis if the student:

- does not satisfy the requirements for progression to later terms. In order for a student to be able to participate in courses from later years in such cases, a decision of exemption is required.
- does not satisfy the requirements for starting a degree project.

Other situations in which study planning may be required:

- A student has fallen behind during the early part of a study programme and has failed to complete several courses.
- A student has not satisfied the entry requirements for a degree project before term 6 of an engineering degree.
- A student has applied for admission to a later part of a programme.
- Studies have been carried out abroad.
- A study programme is to be resumed after an interruption.

In these cases the study guidance counsellor supports the student in planning the continued studies, also in situations in which the student can register for the relevant courses without the need for a special decision for the continued studies.

## Part of education abroad

Students can exchange study at LiTH for study at an institute of higher education abroad, and/or work on a degree project abroad.

In the event that study (courses) at LiTH are exchanged for study abroad, the

relevant board of studies (faculty programme director) is responsible for a decision about an individual study plan, which is to be drawn up in advance, and about the final course approval and its inclusion in the qualification requirements. For this reason, students who plan to participate in an exchange should contact the faculty programme director (or equivalent) at the Dean's Office of the Institute of Technology.

Regulations for entry requirements, ranking and nomination for study abroad through LiTH's exchange agreements are specified in:  
<http://stydokument.liu.se/Regelsamling/VisaBeslut/622362>. Special regulations apply for the compulsory study abroad within Ii (Industrial Engineering and Management – International) and Yi (Applied Physics and Electrical Engineering – International).

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at [http://stydokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).