

# Energy - Environment -Management, M Sc in Engineering

300 credits

Civilingenjör i energi - miljö - management

6CEMM

Valid from: 2017 Spring semester

**Determined by** Board of Studies for Mechanical Engineering and Design

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
Period 0					
TATM79	Foundation Course in Mathematics	6*	G1X	-	С
Period 1					
TATA67	Linear Algebra with Geometry	6*	G1X	3	С
TATM79	Foundation Course in Mathematics	6*	G1X	3	С
TDDD44	Programming with Applications in Engineering	6*	G1X	4	С
TMES24	Sustainable Energy Systems	6	G2X	1	С
Period 2					
TATA67	Linear Algebra with Geometry	6*	G1X	4	С
TDDD44	Programming with Applications in Engineering	6*	G1X	1	С
TKMJ24	Environmental Engineering	6	G1X	3	С

# Semester 2 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA41	Calculus in One Variable 1	6	G1X	3	С
TMMV04	Engineering Thermodynamics	6	G1X	2	С
TRTE16	Basic Principles for Environmental Chemistry	6*	G1X	1	С
THEN18	English	6*	G1N	1	E
TGTU35	Introduction to University Studies	2*	G1X	-	V
Period 2					
TATA42	Calculus in One Variable 2	6	G1X	3	С
TEAE01	Industrial Economics, Basic Course	6	G1X	2	С
TRTE16	Basic Principles for Environmental Chemistry	6*	G1X	1	С
THEN18	English	6*	G1N	3	E
TGTU35	Introduction to University Studies	2*	G1X	-	V



# Semester 3 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA69	Calculus in Several Variables	6	G1X	4	С
ТМКТ94	Introduction to CAD	6*	G1X	1	С
TMME62	Engineering Mechanics	6	G1X	2	С
Period 2					
TEAE05	Resource Theory	6	G1N	1	С
TMKT94	Introduction to CAD	6*	G1X	2	С
TMMV11	Fluid Mechanics and Heat Transfer	6	G2X	3	С

# Semester 4 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ15	Environmental Management Strategies	6	G1F	3	С
TMEL08	Electrical Systems	6	G2X	2	С
TMMV19	Applied Energy Conversion	6*	G2X	4	С
Period 2					
TAOP88	Engineering Optimization	6	G2X	3	С
TMKM21	Engineering Materials	6	G2X	1	С
TMMV19	Applied Energy Conversion	6*	G2X	4	С
TPTE06	Industrial Placement	6	G1X	-	E



# Semester 5 (Autumn 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TETS44	Logistics and Quality Development	6*	G2X	1	С
TMES30	Building Energy Systems	6	G2F	2	С
TSRT22	Automatic Control	6	G2X	4	С
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	Е
THTY05	German	6*	G1X	4	E
Period 2					
TETS44	Logistics and Quality Development	6*	G2X	1	С
TKMJ35	Industrial Ecology	6	G2F	3	С
TMES31	Efficient Industrial Energy Systems	6	G2F	2	С
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E



# Semester 6 (Spring 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS11	Probability and Statistics, first course	6	G2X	1	С
TEIO96	Integrated Project Management	6*	G2X	3	С
TKMJ41	Bachelor Thesis - Energy and Environmental Engineering	18*	G2E	4	С
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	Е
THTY05	German	6*	G1X	4	E
Period 2					
TEIO96	Integrated Project Management	6*	G2X	4	С
TKMJ41	Bachelor Thesis - Energy and Environmental Engineering	18*	G2E	4	С
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	Е
THTY05	German	6*	G1X	4	E

# Semester 7 (Autumn 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	E
TEAE08	Cost-benefit Analysis	6	G2F	3	E
TEIM11	Industrial Marketing	6	G2X	3	E
TEIO19	Industrial Management	6	G2F	4	E
TEIO90	Innovation Management	6	A1X	2	E
TFYA88	Additive Manufacturing: Tools, Materials and Methods	6	A1X	3	E
TGTU91	Oral and Written Communication	6	G1X	2	E
TKMJ38	Industrial Symbiosis	6*	A1N	1	E
TMES27	Modelling of Energy Systems	6	A1N	3	E
TMHL22	Solid Mechanics	6	G2X	3	E



Course code	Course name	Credits	Level	Timetable module	ECV
TMHP02	Fluid Power Systems	6	G2X	2	E
TMKA09	Disruptive Technologies	6*	A1X	4	E
TMKM16	Sustainable Material Selection	6	A1X	4	E
TMKM17	Polymer Materials	6	A1X	2	E
TMKT78	Product Development	6	G2X	1	E
TMKT80	Wood - Material	6	G2X	2	E
TMME66	Musculoskeletal Biomechanics and Human Movements	6	G2X	2	E
TMME67	Musculoskeletal Biomechanics and Human Movements	6	A1X	2	E
TMMV18	Fluid Mechanics	6	A1X	1	E
Period 2					
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TATA71	Ordinary Differential Equations and Dynamical Systems	6	G2X	2	E
TEAE09	Environmental Law	6	G1X	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
TFYA96	The physics behind technology	6	G2X	4	E
TGTU04	Leadership	6	G2X	2	E
TGTU49	History of Technology	6	G1X	3	E
TKMJ38	Industrial Symbiosis	6*	A1N	2	E
TKMJ39	Resource Efficient Products and Production	6	G2F	1	E
TMES45	Energy Planning and Modelling of Communities	6	A1F	4	E
TMES51	International Energy Markets	6	A1N	1	E
TMKA09	Disruptive Technologies	6*	A1X	4	E
TMME28	Engineering Mechanics - Dynamics	6	G1X	2	E
TMMS31	Biomechanical Modelling of Tissues and Systems	6	A1N	4	E
TMMV54	Computational Heat Transfer	6	A1X	1	E
TSIU02	Computer Hardware and Architecture	4	G1X	2	E
TSRT06	Automatic Control, Advanced Course	6	A1N	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIM11	Industrial Marketing	6	G2X	3	С
TEIO19	Industrial Management	6	G2F	4	С
TEIO90	Innovation Management	6	A1X	2	С
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	E
TETS23	Purchasing	6	A1N	2	E
TKMJ38	Industrial Symbiosis	6*	A1N	1	E
TMKM16	Sustainable Material Selection	6	A1X	4	E
TMMV18	Fluid Mechanics	6	A1X	1	E
Period 2					
TEAE09	Environmental Law	6	G1X	4	С
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	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
TKMJ38	Industrial Symbiosis	6*	A1N	2	E
TKMJ39	Resource Efficient Products and Production	6	G2F	1	E
TMMV54	Computational Heat Transfer	6	A1X	1	E

#### Specialisation: Sustainable Business Development



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ38	Industrial Symbiosis	6*	A1N	1	С
TMES27	Modelling of Energy Systems	6	A1N	3	С
TEIO19	Industrial Management	6	G2F	4	E
Period 2					
TKMJ38	Industrial Symbiosis	6*	A1N	2	С
TMES45	Energy Planning and Modelling of Communities	6	A1F	4	С
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TGTU04	Leadership	6	G2X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	E

#### Specialisation: System Tools for Sustainable Development

#### Specialisation: Technology for Sustainable Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKM16	Sustainable Material Selection	6	A1X	4	С
TMKT78	Product Development	6	G2X	1	С
TMES27	Modelling of Energy Systems	6	A1N	3	E
TMHL22	Solid Mechanics	6	G2X	3	E
TMHP02	Fluid Power Systems	6	G2X	2	E
TMKM17	Polymer Materials	6	A1X	2	E
TMMV18	Fluid Mechanics	6	A1X	1	E
Period 2					
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	С
TMMV54	Computational Heat Transfer	6	A1X	1	С

# Semester 8 (Spring 2021)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE50	Megagame - Design for Sustainable Development in the light of Climate Change	6*	G2F	-	E



TEIM09International Business6A1X2ETEIO13Leadership and Organizational Change6A1X4ETETS57Logistics Analysis6A1X2ETGTU59Responding to Global Climate Change6A1X4ETGTU94Technology and Ethics6G1X1ETKMJ47Environmental Systems Analysis6*A1N3ETMES43Analysis and Modelling of Industrial Energy Systems6A1F1ETMES53Energy Management6A1X1ETMKA04Wood - Innovation6A1X1ETMKA10Design for Sustainable Everyday Life6*A1N3ETMQU31Statistical Quality Control6A1X2ETDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G1X2ETEAE13Civil and Commercial Law6G1X2EETEIO06Innovative Entrepreneurship6A1X3EETEIO41Corporate Social Responsibility6A1X4E
TETS57Logistics Analysis6A1X2ETGTU59Responding to Global Climate Change6A1X4ETGTU94Technology and Ethics6G1X1ETKMJ47Environmental Systems Analysis6*A1N3ETMES43Analysis and Modelling of Industrial Energy Systems6A1F1ETMES53Energy Management6A1N2ETMKA04Wood - Innovation6A1X1ETMK001Advanced Materials and the Environment6A1N2ETMQU31Statistical Quality Control6A1X2ETDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2EETEIO06Innovative Entrepreneurship6A1X3E
TGTU59Responding to Global Climate Change6A1X4ETGTU94Technology and Ethics6G1X1ETKMJ47Environmental Systems Analysis6*A1N3ETMES43Analysis and Modelling of Industrial Energy Systems6A1F1ETMES53Energy Management6A1N2ETMKA04Wood - Innovation6A1X1ETMKA10Design for Sustainable Everyday Life6*A1N3ETMK001Advanced Materials and the Environment6A1X2ETMQU31Statistical Quality Control6A1X2ETDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2EETEIO06Innovative Entrepreneurship6A1X3E
TGTU94Technology and Ethics6G1X1ETKMJ47Environmental Systems Analysis6*A1N3ETMES43Analysis and Modelling of Industrial Energy Systems6A1F1ETMES53Energy Management6A1N2ETMKA04Wood - Innovation6A1X1ETMKA10Design for Sustainable Everyday Life6*A1N3ETMK001Advanced Materials and the Environment6A1X2ETMQU31Statistical Quality Control6A1N2ETSRT07Industrial Control Systems6A1N2EPeriod 2ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2EETEIO06Innovative Entrepreneurship6A1X3ETEIO41Corporate Social Responsibility6A1X3E
TKM147Environmental Systems Analysis6*A1N3ETMES43Analysis and Modelling of Industrial Energy Systems6A1F1ETMES53Energy Management6A1N2ETMKA04Wood - Innovation6A1X1ETMKA10Design for Sustainable Everyday Life6*A1N3ETMK001Advanced Materials and the Environment6A1X2ETMQU31Statistical Quality Control6A1X2ETSRT07Industrial Control Systems6A1N2EPeriod 2ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2EETEIO06Innovative Entrepreneurship6A1X3ETEIO41Corporate Social Responsibility6A1X3E
TMES43Analysis and Modelling of Industrial Energy Systems6A1F1ETMES53Energy Management6A1N2ETMKA04Wood - Innovation6A1N1ETMKA10Design for Sustainable Everyday Life6*A1N3ETMK001Advanced Materials and the Environment6A1X2ETMQU31Statistical Quality Control6A1N2ETSRT07Industrial Control Systems6A1N2EPeriod 2ETDDD12Database Technology6G2X4ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X2ETEIO41Corporate Social Responsibility6A1X3E
IMES43Systems6AIF1ETMES53Energy Management6A1N2ETMKA04Wood - Innovation6A1X1ETMKA10Design for Sustainable Everyday Life6*A1N3ETMK001Advanced Materials and the Environment6A1N2ETMQU31Statistical Quality Control6A1X2ETSRT07Industrial Control Systems6A1N2EPeriod 2ETDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2EETEIO06Innovative Entrepreneurship6A1X3ETEIO41Corporate Social Responsibility6A1X3E
TMKA04Wood - Innovation6A1X1ETMKA10Design for Sustainable Everyday Life6*A1N3ETMKO01Advanced Materials and the Environment6A1N2ETMQU31Statistical Quality Control6A1X2ETSRT07Industrial Control Systems6A1N2EPeriod 2TDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X3ETEIO41Corporate Social Responsibility6A1X3E
TMKA10Design for Sustainable Everyday Life6*A1N3ETMK001Advanced Materials and the Environment6A1N2ETMQU31Statistical Quality Control6A1X2ETSRT07Industrial Control Systems6A1N2EPeriod 2TDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X3ETEIO41Corporate Social Responsibility6A1X3E
TMKO01Advanced Materials and the Environment6A1N2ETMQU31Statistical Quality Control6A1X2ETSRT07Industrial Control Systems6A1N2EPeriod 2TDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X3ETEIO41Corporate Social Responsibility6A1X3E
TMQU31Statistical Quality Control6A1X2ETSRT07Industrial Control Systems6A1N2EPeriod 2TDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X3ETEIO41Corporate Social Responsibility6A1X3E
TSRT07Industrial Control Systems6A1N2EPeriod 2TDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X2ETEIO41Corporate Social Responsibility6A1X3E
Period 2TDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X2ETEIO41Corporate Social Responsibility6A1X3E
TDDD12Database Technology6G2X4ETDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X2ETEIO41Corporate Social Responsibility6A1X3E
TDDE50Megagame - Design for Sustainable Development in the light of Climate Change6*G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X2ETEIO41Corporate Social Responsibility6A1X3E
TDDESUDevelopment in the light of Climate Change6G2F-ETEAE13Civil and Commercial Law6G1X2ETEIO06Innovative Entrepreneurship6A1X2ETEIO41Corporate Social Responsibility6A1X3E
TEIO06Innovative Entrepreneurship6A1X2ETEIO41Corporate Social Responsibility6A1X3E
TEIO41   Corporate Social Responsibility   6   A1X   3   E
TETS36 Sustainable Logistics Systems 6 A1X 4 E
TGTU95 Philosophy of Science and Technology 6 G1X 4 E
TKMJ47Environmental Systems Analysis6*A1N2E
TKMJ50 Environmental and Energy Related Policy Instruments 6 A1N 1 E
TMES41 Strategic Development of Sustainable Energy 6 A1F 2 E Systems
TMKA10   Design for Sustainable Everyday Life   6*   A1N   3   E
TMKM17Polymer Materials6A1X2E
TMKT83   Small Scale Renewable Energy Conversion   6   A1X   4   E
TMMV07 Computational Fluid Dynamics, advanced 6 A1X 4 E course
TMQU04Six Sigma Quality6A1X2E



Course code	Course name	Credits	Level	Timetable module	ECV
TSFS03	Vehicle Propulsion Systems	6	A1X	3	E
TSFS11	Electrical and Energy Technology	6	G2F	4	E

#### Specialisation: Sustainable Business Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ47	Environmental Systems Analysis	6*	A1N	3	С
TEIM09	International Business	6	A1X	2	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TETS57	Logistics Analysis	6	A1X	2	E
TMQU31	Statistical Quality Control	6	A1X	2	E
Period 2					
TKMJ47	Environmental Systems Analysis	6*	A1N	2	С
ТКМЈ50	Environmental and Energy Related Policy Instruments	6	A1N	1	С
TEIO41	Corporate Social Responsibility	6	A1X	3	E
TETS36	Sustainable Logistics Systems	6	A1X	4	E
TMQU04	Six Sigma Quality	6	A1X	2	E

#### Specialisation: System Tools for Sustainable Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ47	Environmental Systems Analysis	6*	A1N	3	С
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1F	1	С
TGTU59	Responding to Global Climate Change	6	A1X	4	E
Period 2					
TKMJ47	Environmental Systems Analysis	6*	A1N	2	С
TETS36	Sustainable Logistics Systems	6	A1X	4	E
ТКМЈ50	Environmental and Energy Related Policy Instruments	6	A1N	1	E
TMES41	Strategic Development of Sustainable Energy Systems	6	A1F	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKO01	Advanced Materials and the Environment	6	A1N	2	С
TMKO04	Composite Materials	6*	A1N	1	E
TMMV08	Computational Fluid Dynamics	6	A1X	3	E
TSRT07	Industrial Control Systems	6	A1N	2	E
Period 2					
TMES41	Strategic Development of Sustainable Energy Systems	6	A1F	2	E
TMKM17	Polymer Materials	6	A1X	2	E
TMKO03	Metals for Lightweight Applications	6	A1N	3	E
TMKO04	Composite Materials	6*	A1N	4	E
TMKT83	Small Scale Renewable Energy Conversion	6	A1X	4	E
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E
TSFS03	Vehicle Propulsion Systems	6	A1X	3	E

#### Specialisation: Technology for Sustainable Development

# Semester 9 (Autumn 2021)



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEAE08	Cost-benefit Analysis	6	G2F	3	E
TEIE72	Corporate Strategies	6	A1X	4	E
TETS23	Purchasing	6	A1N	2	E
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TKMJ48	Sustainable City Development	6*	A1F	1	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TMES52	Policies and Instruments for the Energy Conversion	6	A1N	4	E
TMKT73	CAD, second course	6*	G2X	1	E
TMMV01	Aerodynamics	6	A1X	2	E
TMMV12	Gas Turbine Engines	6	A1X	4	E
Period 2					
TEAE18	Sustainable Value Chain Strategies	6	A1X	4	E
TETS31	Logistics Strategies	6	A1X	4	E
TFKE30	Analytical Chemistry	6	G1X	4	E
TKMJ48	Sustainable City Development	6*	A1F	4	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TMES51	International Energy Markets	6	A1N	1	E
TMKA11	Model-based System-of-Systems Engineering	6	A1X	3	E
TMKT73	CAD, second course	6*	G2X	1	E
TMQU12	Lean Production	6	A1X	2	E
TSRT06	Automatic Control, Advanced Course	6	A1N	2	E
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Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIE72	Corporate Strategies	6	A1X	4	С
TMPI04	Project Course Advanced - Sustainable Business Development	12*	A1X	3	С
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMES27	Modelling of Energy Systems	6	A1N	3	E
Period 2					
TMPI04	Project Course Advanced - Sustainable Business Development	12*	A1X	3	С
TEAE18	Sustainable Value Chain Strategies	6	A1X	4	E
TMQU12	Lean Production	6	A1X	2	E

#### Specialisation: Sustainable Business Development

	Specialisation: System Tools for Sustainable Development						
Course code	Course name	Credits	Level	Timetable module	ECV		
Period 1							
TKMJ48	Sustainable City Development	6*	A1F	1	С		
TMPE07	Project Course Advanced - System Tools for Sustainable Development	12*	A1F	2	С		
TMES52	Policies and Instruments for the Energy Conversion	6	A1N	4	Е		
Period 2							
TKMJ48	Sustainable City Development	6*	A1F	4	С		
TMPE07	Project Course Advanced - System Tools for Sustainable Development	12*	A1F	2	С		
TMES51	International Energy Markets	6	A1N	1	E		



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMMV12	Gas Turbine Engines	6	A1X	4	С
TMPE09	Project Course Advanced - Technology for Sustainable Development	12*	A1X	3	С
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMKT73	CAD, second course	6*	G2X	1	E
TMMV01	Aerodynamics	6	A1X	2	E
Period 2					
TMPE09	Project Course Advanced - Technology for Sustainable Development	12*	A1X	4	С
TMKT73	CAD, second course	6*	G2X	1	E
TSRT06	Automatic Control, Advanced Course	6	A1N	2	E

#### Specialisation: Technology for Sustainable Development

#### Semester 10 (Spring 2022)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С
Period 2					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С

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://styrdokument.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://styrdokument.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.

#### 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://styrdokument.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://styrdokument.liu.se/Regelsamling/Innehall/Utbildning\_pa\_grund-\_och\_avancerad\_niva.

