

Energy-Environment-Management

300 credits

Civilingenjör i energi - miljö - management

6CEMM

Valid from: 2014 Spring semester

Determined byFaculty Board of Institute of Technology

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
Period 1					
TAMS11	Probability and Statistics, first course	6	G2F	1	С
TEIO28	Integrated Project Management	6*	G2X	3	С
TKMJ41	Bachelor Thesis - Energy and Environment Engineering	18*	G2X	4	С
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
Period 2					
TEIO28	Integrated Project Management	6*	G2X	3	С
TKMJ41	Bachelor Thesis - Energy and Environment Engineering	18*	G2X	4	С
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
Period 1					
TDEI09	Strategic Application of IT: E-business and Knowledge Management	6	A1X	4	E
TEIM11	Industrial Marketing	6	G2X	3	E
TEIO19	Industrial Management	6	G2X	4	Е
TEIO90	Innovation Management	6	A1X	2	E
TGTU91	Oral and Written Communication	6	G1F	2	E
TKMJ38	Industrial Symbiosis	6	A1X	1	E
TMES27	Modelling of Energy Systems	6	A1X	3	Е
TMHL22	Solid Mechanics	6	G2X	3	E
TMHP02	Fluid Power Systems	6	G2X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
TMKM16	Materials Selection and Optimization	6	A1X	4	E
TMKT78	Product Development	6	G2X	2	E
Period 2					
TMES45	Energy Planning and Modelling of Communities	6	A1X	4	С
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TATA71	Ordinary Differential Equations and Dynamical Systems	6	G2F	3	E
TEAE09	Environmental Law	6	G1X	4	E
TEIE42	Industrial Sales Management	6	A1X	4	Е
TEIM10	Industrial Service Development	6	A1X	2	E
TETS27	Supply Chain Logistics	6	A1X	2	E
TGTU04	Leadership	6	G2X	2	Е
TGTU49	History of Technology	6	G1F	3	E
TKMJ39	Resource Efficient Products and Production	6	G2X	1	E
TMES45	Energy Planning and Modelling of Communities	6	A1X	4	E
TMES45	Energy Planning and Modelling of Communities	6	A1X	4	E
TMES51	International Energy Markets	6	A1X	1	E
TMKM17	Polymer Materials	6	A1X	2	E
TMMI39	Engineering Mechanics, Advanced Course	6	G2X	2	E
TMMI39	Engineering Mechanics, Advanced Course	6	G2X	2	E
TMMS07	Biomechanics	6	A1X	4	E
TMMS07	Biomechanics	6	A1X	4	E
TMMS07	Biomechanics	6	A1X	4	Е
TMMV18	Fluid Mechanics	6	A1X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	Е



Specialisation: Sustainable Business Development

Course name	Credits	Level	Timetable module	ECV
Industrial Marketing	6	G2X	3	С
Industrial Management	6	G2X	4	С
Innovation Management	6	A1X	2	С
Strategic Application of IT: E-business and Knowledge Management	6	A1X	4	E
Purchasing	6	A1N	2	E
Industrial Symbiosis	6	A1X	1	E
Materials Selection and Optimization	6	A1X	4	E
Optimization of Realistic Complex Systems	6	A1N	3	С
Environmental Law	6	G1X	4	С
Industrial Sales Management	6	A1X	4	E
Industrial Service Development	6	A1X	2	E
Supply Chain Logistics	6	A1X	2	E
Resource Efficient Products and Production	6	G2X	1	E
Fluid Mechanics	6	A1X	2	E
Computational Heat Transfer	6	A1X	1	E
	Industrial Marketing Industrial Management Innovation Management Strategic Application of IT: E-business and Knowledge Management Purchasing Industrial Symbiosis Materials Selection and Optimization Optimization of Realistic Complex Systems Environmental Law Industrial Sales Management Industrial Service Development Supply Chain Logistics Resource Efficient Products and Production Fluid Mechanics	Industrial Marketing 6 Industrial Management 6 Innovation Management 6 Strategic Application of IT: E-business and Knowledge Management 6 Purchasing 6 Industrial Symbiosis 6 Materials Selection and Optimization 6 Optimization of Realistic Complex Systems 6 Environmental Law 6 Industrial Sales Management 6 Industrial Service Development 6 Supply Chain Logistics 6 Resource Efficient Products and Production 6 Fluid Mechanics 6	Industrial Marketing 6 G2X Industrial Management 6 G2X Innovation Management 6 A1X Strategic Application of IT: E-business and Knowledge Management 6 A1X Purchasing 6 A1N Industrial Symbiosis 6 A1X Materials Selection and Optimization 6 A1X Optimization of Realistic Complex Systems 6 A1N Environmental Law 6 G1X Industrial Sales Management 6 A1X Industrial Service Development 6 A1X Supply Chain Logistics 6 A1X Resource Efficient Products and Production 6 G2X Fluid Mechanics 6 A1X	Industrial Marketing 6 G2X 3 Industrial Management 6 G2X 4 Innovation Management 6 A1X 2 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 Purchasing 6 A1N 2 Industrial Symbiosis 6 A1X 1 Materials Selection and Optimization 6 A1X 4 Optimization of Realistic Complex Systems 6 A1N 3 Environmental Law 6 G1X 4 Industrial Sales Management 6 A1X 2 Supply Chain Logistics 6 A1X 2 Resource Efficient Products and Production 6 G2X 1 Fluid Mechanics 6 A1X 2

$Specialisation: System\ Tools\ for\ Sustainable\ Development$

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



Specialisation: Technology for Sustainable Development

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

Semester 8 (Spring 2018)



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIM09	International Business	6	A1X	2	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TETS57	Logistics Analysis	6	A1X	2	Е
TGTU59	Responding to Global Climate Change	6	A1N	3	Е
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1F	1	E
TMKM40	Engineering Materials - New Materials	6	A1X	2	Е
TMQU31	Statistical Quality Control	6	A1X	2	E
TSRT07	Industrial Control Systems	6	A1X	2	Е
Period 2					
TEAE13	Civil and Commercial Law	6	G1X	2	E
TEIO06	Innovative Entrepreneurship	6	A1X	2	Е
TEIO41	Corporate Social Responsibility	6	A1X	3	Е
TETS36	Sustainable Logistics Systems	6	A1X	4	Е
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E
TKMJ50	Environmental and Energy Related Policy Instruments	6	A1N	1	E
TMES41	Strategic Development of Sustainable Energy Systems	6	A1F	2	E
ТМКМ09	Engineering Materials for Lightweight Applications	6	A1X	3	E
TMKT83	Small Scale Renewable Energy Conversion	6	A1X	4	Е
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E
TMQU04	Six Sigma Quality	6	A1X	2	Е
TSFS11	Electrical and Energy Technology	6	G2F	4	Е



Specialisation: Sustainable Business Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ47	Environmental Systems Analysis	6*	A1N	2	С
TEIO13	Leadership and Organizational Change	6	A1X	4	Е
TETS57	Logistics Analysis	6	A1X	2	Е
TMQU31	Statistical Quality Control	6	A1X	2	E
Period 2					
TKMJ47	Environmental Systems Analysis	6*	A1N	2	С
TKMJ50	Environmental and Energy Related Policy Instruments	6	A1N	1	С
TEIO41	Corporate Social Responsibility	6	A1X	3	Е
TETS36	Sustainable Logistics Systems	6	A1X	4	Е
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	2	С
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1F	1	С
TGTU59	Responding to Global Climate Change	6	A1N	3	E
Period 2					
TKMJ47	Environmental Systems Analysis	6*	A1N	2	С
TETS36	Sustainable Logistics Systems	6	A1X	4	Е
TKMJ50	Environmental and Energy Related Policy Instruments	6	A1N	1	E
TMES41	Strategic Development of Sustainable Energy Systems	6	A1F	2	E



Specialisation: Technology for Sustainable Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKM40	Engineering Materials - New Materials	6	A1X	2	С
TMMV08	Computational Fluid Dynamics	6	A1X	3	E
TSRT07	Industrial Control Systems	6	A1X	2	E
Period 2					
TMES41	Strategic Development of Sustainable Energy Systems	6	A1F	2	E
ТМКМ09	Engineering Materials for Lightweight Applications	6	A1X	3	E
TMKT83	Small Scale Renewable Energy Conversion	6	A1X	4	E
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E

Semester 9 (Autumn 2018)



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
TMES32	Energy Policy Instruments	6	A1X	3	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					
TETS31	Logistics Strategies	6	A1X	4	E
TFKE30	Analytical Chemistry	6	G1X	4	E
TKMJ48	Sustainable City Development	6*	A1F	3	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TMES51	International Energy Markets	6	A1N	1	E
TMKT73	CAD, second course	6*	G2X	1	E
TMQU12	Lean Production	6	A1X	2	E
TSRT06	Automatic Control, Advanced Course	6	A1X	2	E



Specialisation: Sustainable Business Development

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	1	С
TMQU12	Lean Production	6	A1X	2	E

$Specialisation: System\ Tools\ for\ Sustainable\ Development$

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
TMES32	Energy Policy Instruments	6	A1X	3	E
Period 2					
TKMJ48	Sustainable City Development	6*	A1F	3	С
TMPE07	Project Course Advanced - System Tools for Sustainable Development	12*	A1F	2	С
TMES51	International Energy Markets	6	A1N	1	E



Specialisation: Technology for Sustainable Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMMV12	Gas Turbine Engines	6	A1X	4	С
TMPE06	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					
TMPE06	Project Course Advanced - Technology for Sustainable Development	12*	A1X	3	С
TMKT73	CAD, second course	6*	G2X	1	E
TSRT06	Automatic Control, Advanced Course	6	A1X	2	E

Semester 10 (Spring 2019)

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

