

# Industrial Engineering and Management, M Sc in Engineering

300 credits

Civilingenjör i industriell ekonomi

6CIII

Valid from: 2015 Spring semester

**Determined by** Board of Studies for Industrial Engineering and Logistics

Date determined

# Entry requirements

# Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp



# Curriculum

# Semester 4 (Spring 2017)

Period 1TAOP37Operations Research, Extended Course4G2X3CTPPE98Economic Analysis: Economic Theory4G2X4CTDDE10Object Oriented Programming in Java6G2X2ETFBI11Genetics and Evolution6G1X2ETMMV04Engineering Thermodynamics6G1X2ETMPT07Manufacturing Technology6G2X2ETRTE16Basic Principles for Environmental Chemistry6*G1X1ETSRT12Automatic Control6G2X1EPeriod 2TAMS65Mathematical Statistics, second course6G2X2C
TPPE98Economic Analysis: Economic Theory4G2X4CTDDE10Object Oriented Programming in Java6G2X2ETFBI11Genetics and Evolution6G1X2ETMMV04Engineering Thermodynamics6G1X2ETMPT07Manufacturing Technology6G2X2ETRTE16Basic Principles for Environmental Chemistry6*G1X1ETSRT12Automatic Control6G2X1EPeriod 2
TDDE10Object Oriented Programming in Java6G2X2ETFBI11Genetics and Evolution6G1X2ETMMV04Engineering Thermodynamics6G1X2ETMPT07Manufacturing Technology6G2X2ETRTE16Basic Principles for Environmental Chemistry6*G1X1ETSRT12Automatic Control6G2X1EPeriod 2
TFBI11Genetics and Evolution6G1X2ETMMV04Engineering Thermodynamics6G1X2ETMPT07Manufacturing Technology6G2X2ETRTE16Basic Principles for Environmental Chemistry6*G1X1ETSRT12Automatic Control6G2X1EPeriod 2
TMMV04Engineering Thermodynamics6G1X2ETMPT07Manufacturing Technology6G2X2ETRTE16Basic Principles for Environmental Chemistry6*G1X1ETSRT12Automatic Control6G2X1EPeriod 2
TMPT07Manufacturing Technology6G2X2ETRTE16Basic Principles for Environmental Chemistry6*G1X1ETSRT12Automatic Control6G2X1EPeriod 2
TRTE16Basic Principles for Environmental Chemistry6*G1X1ETSRT12Automatic Control6G2X1EPeriod 2
TSRT12   Automatic Control   6   G2X   1   E     Period 2
Period 2
TAMS65Mathematical Statistics, second course6G2X2C
TPPE24Economic Analysis: Decision- and Financial Methodology6G2X3C
TATA80Transform Theory6G1X1E
TATA82Discrete Mathematics6G1X1E
TMES44 Energy Systems - Supply and Demand 6 G2X 1 E
TMKT14   CAD and Machine Elements   6   G2X   1   E
TRTE16   Basic Principles for Environmental Chemistry   6*   G1X   1   E
TPTE06Industrial Placement6G1X-V

# Specialisation: Biotechnical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFBI11	Genetics and Evolution	6	G1X	2	С
TRTE16	Basic Principles for Environmental Chemistry	6*	G1X	1	С
Period 2					
TRTE16	Basic Principles for Environmental Chemistry	6*	G1X	1	С



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE10	Object Oriented Programming in Java	6	G2X	2	С
Period 2					
TATA82	Discrete Mathematics	6	G1X	1	С

# Specialisation: Computer Science and Engineering Specialization

#### Specialisation: Electrical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSRT12	Automatic Control	6	G2X	1	С
Period 2					
TATA80	Transform Theory	6	G1X	1	С

#### Specialisation: Energy Engineering Specialization

Course name	Credits	Level	Timetable module	ECV
Engineering Thermodynamics	6	G1X	2	С
Energy Systems - Supply and Demand	6	G2X	1	С
	Engineering Thermodynamics	Engineering Thermodynamics 6	Engineering Thermodynamics 6 G1X	Course name   Credits   Level   module     Engineering Thermodynamics   6   G1X   2

# Specialisation: Mechanical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPT07	Manufacturing Technology	6	G2X	2	С
Period 2					
TMKT14	CAD and Machine Elements	6	G2X	1	С

# Semester 5 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TPPE13	Production and Operations Management	6	G2X	1	С
TDDE22	Data Structures and Algorithms	6	G2X	3	E



Course code	Course name	Credits	Level	Timetable module	ECV
TFBI22	Cell Biology and Microbial Processes	6	G1X	3	E
THEN18	English	6*	G1X	4	E
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	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
TSEA52	Switching Theory and Logical Design	6*	G1X	2	E
TSEA57	Computer Hardware and Architecture	6*	G1X	3	E
TSRT22	Automatic Control	6	G2X	4	E
Period 2					
TEIO04	Project Management	6	G2X	2	С
NBIB45	Principles in Physiology and Ethics	6	G1F	1	E
TDTS10	Computer Architecture	6	G1X	3	E
TEAE05	Resource Theory	6	G1X	1	E
TEIM03	Intercultural Communication	4	G1X	4	E
THEN18	English	6*	G1X	4	E
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
TKMJ35	Industrial Ecology	6	G2X	3	E
TKMJ39	Resource Efficient Products and Production	6	G2X	1	E
TMKM86	Engineering Materials	6*	G2X	4	E
TMMI46	Industrial Automation	6	G2X	3	E
TMMV57	Applied Energy Engineering	6*	G2X	3	E
TSDT18	Signals and Systems	6	G2X	3	E
TSEA52	Switching Theory and Logical Design	6*	G1X	4	E
TSEA57	Computer Hardware and Architecture	6*	G1X	1	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFBI22	Cell Biology and Microbial Processes	6	G1X	3	С
Period 2					
NBIB45	Principles in Physiology and Ethics	6	G1F	1	С
TKMJ35	Industrial Ecology	6	G2X	3	Е

# Specialisation: Biotechnical Engineering Specialization

#### Specialisation: Computer Science and Engineering Specialization

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

# Specialisation: Electrical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSEA52	Switching Theory and Logical Design	6*	G1X	2	С
TSEA57	Computer Hardware and Architecture	6*	G1X	3	С
Period 2					
TSDT18	Signals and Systems	6	G2X	3	С
TSEA52	Switching Theory and Logical Design	6*	G1X	4	С
TSEA57	Computer Hardware and Architecture	6*	G1X	1	С



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

# Specialisation: Energy Engineering Specialization

# Specialisation: Mechanical Engineering Specialization

	1	5	51			
Course code	Course name		Credits	Level	Timetable module	ECV
Period 1						
TMHL22	Solid Mechanics		6	G2X	3	С
TMKM86	Engineering Materials		6*	G2X	4	С
Period 2						
TMKM86	Engineering Materials		6*	G2X	4	С
TMMI46	Industrial Automation		6	G2X	3	E

Semester 6 (Spring 2018)



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIM32	Industrial Marketing	6	G2X	4	С
TDDD81	Database Technology	6*	G2X	2	E
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	E
TDDE11	Object Oriented Programming in Java	4	G2X	1	E
TFBI23	Ecology and the Environment	6	G1X	3	E
TFBI24	Biotechnology - Bachelor Project	18*	G2X	2	E
TFYA89	Natural Sciences for Engineers - Principles and Applications	6*	G2X	-	E
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	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
TSEA56	Electronics Engineering - Bachelor Project	16*	G2X	2	E
Period 2					
TDDD81	Database Technology	6*	G2X	4	E
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	Е
TFBI24	Biotechnology - Bachelor Project	18*	G2X	2/3/4	E
TFYA89	Natural Sciences for Engineers - Principles and Applications	6*	G2X	-	E
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	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



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

# Specialisation: Biotechnical Engineering Specialization

Specialisation:	Computer	Science	and End	ineerina	Specialization
opeenaneane	00	~~~~~~			op coundation

-r					
Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD81	Database Technology	6*	G2X	2	С
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	С
Period 2					
TDDD81	Database Technology	6*	G2X	4	С
TDDD83	Computer Engineering - Bachelor Project	18*	G2X	1/3	С

# Specialisation: Electrical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE11	Object Oriented Programming in Java	4	G2X	1	С
TSEA56	Electronics Engineering - Bachelor Project	16*	G2X	2	С
Period 2					
TSEA56	Electronics Engineering - Bachelor Project	16*	G2X	-	С
TSKS10	Signals, Information and Communication	4	G2X	3	С

# Specialisation: Energy Engineering Specialization

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



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMMV04	Engineering Thermodynamics	6	G1X	2	С
TMPS32	Mechanical Engineering - Bachelor Project	18*	G2X	3	С
Period 2					
TMPS32	Mechanical Engineering - Bachelor Project	18*	G2X	3	С

# Specialisation: Mechanical Engineering Specialization

# Semester 7 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
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	A1N	2	E
TETS37	Basics in Logistics Management	6	G2X	4	E



Course code	Course name	Credits	Level	Timetable module	ECV
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TMES09	Industrial Energy Systems	6	A1X	3	E
TMES27	Modelling of Energy Systems	6	A1N	3	E
TMKM16	Sustainable Material Selection	6	A1X	4	E
TMKT80	Wood - Material	6	G2X	2	E
TMPS35	Emerging Factory Technologies	6	A1N	3	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
TSRT62	Modelling and Simulation	6	A1X	3	E
TSTE86	Digital Integrated Circuits	6	A1X	2	E
Period 2					
NBID31	Modelling of Biological Systems	6	A1X	3/4	E
TAOP04	Mathematical Optimization	6	A1X	4	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
TDDD55	Compilers and Interpreters	4	G2X	1	E
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



TEIE42Industrial Sales Management6A1X4ETEIM10Industrial Service Development6A1X2ETETS27Supply Chain Logistics6A1X2ETFBI17Advanced Project Course in Ecosystem Service Valuation6G2F3ETKMJ35Industrial Ecology6G2F3ETKMJ49Environmentally Driven Business Development6*A1N3ETMES45Energy Planning and Modelling of Communities6A1F4ETMHL63Introduction to Computational Mechanics6G2X3ETMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMKT81Wood - Realisation6G2X1ETMMV38Fluid Mechanics6A1X2ETMMV44Computational Heat Transfer6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETSB806Multidimensional Signal Analysis6*A1X4ETSB809Image Sensors6A1X4ETSR01Digital Communication6*A1X4ETSKS01Digital Communication6*A1X4ETSKS01Digital Communication	Course code	Course name	Credits	Level	Timetable module	ECV
TETS27Supply Chain Logistics6A1X2ETFBI17Advanced Project Course in Ecosystem Service Valuation6A1X-ETKMJ35Industrial Ecology6G2F3ETKMJ49Environmentally Driven Business Development6*A1N3ETMES45Energy Planning and Modelling of Communities6A1F4ETMHL63Introduction to Computational Mechanics6G2X3ETMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMMV18Fluid Mechanics6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV18Fluid Mechanics6A1X2ETMMV18Fluid Mechanics6A1X3ETMQU12Lean Production6A1X3ETPPE29Financial Markets and Instruments6A1X3ETPPE76Operations Planning and Control6A1X4ETSB06Multidimensional Signal Analysis6*A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2F2E	TEIE42	Industrial Sales Management	6	A1X	4	E
TFBI17Advanced Project Course in Ecosystem Service ValuationA1X-ETKM135Industrial Ecology6G2F3ETKM149Environmentally Driven Business Development6*A1N3ETMES45Energy Planning and Modelling of Communities6A1F4ETMHL63Introduction to Computational Mechanics6G2X3ETMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMKT71Affective Engineering6A1X2ETMKT81Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X3ETMQU12Lean Production6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X4ETSBB06Multidimensional Signal Analysis6*A1X4ETSBB09Image Sensors6A1X4ETSBB09Image Sensors6A1X4ETSRS01Digital Communication6*A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G	TEIM10	Industrial Service Development	6	A1X	2	E
IPBI17Valuation6A1X-ETKMJ35Industrial Ecology6G2F3ETKMJ49Environmentally Driven Business Development6*A1N3ETMES45Energy Planning and Modelling of Communities6A1F4ETMHL63Introduction to Computational Mechanics6G2X3ETMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMKT81Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X3ETMS22Assembly Technology6A1X3ETMQU12Lean Production6A1X2ETPPE76Operations Planning and Control6A1X3ETSB806Multidimensional Signal Analysis6*A1X4ETSB809Image Sensors6A1X4ETSB809Image Sensors6A1X4ETSR801Digital Communication6*A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TETS27	Supply Chain Logistics	6	A1X	2	E
TKMI49Environmentally Driven Business Development6*A1N3ETMES45Energy Planning and Modelling of Communities6A1F4ETMHL63Introduction to Computational Mechanics6G2X3ETMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMK711Affective Engineering6A1X2ETMK711Affective Engineering6A1X2ETMK711Affective Engineering6A1X2ETMK781Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X3ETMPS18Engineering Design and Product Development6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X3ETSB06Multidimensional Signal Analysis6*A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSEA81Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS01Digital Communication <td>TFBI17</td> <td></td> <td>6</td> <td>A1X</td> <td>-</td> <td>E</td>	TFBI17		6	A1X	-	E
IKMJ49Development6"AIN3ETMES45Energy Planning and Modelling of Communities6A1F4ETMHL63Introduction to Computational Mechanics6G2X3ETMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMK711Mfective Engineering6A1X2ETMK711Mfective Engineering6A1X2ETMK781Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X3ETMPS18Engineering Design and Product Development6A1X3ETMQU12Lean Production6A1X2EETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X4ETSB806Multidimensional Signal Analysis6*A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TKMJ35	Industrial Ecology	6	G2F	3	E
IMES4SCommunities6AIF4ETMHL63Introduction to Computational Mechanics6G2X3ETMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMKT81Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X1ETMPS18Engineering Design and Product Development6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSIT02Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4E	TKMJ49		6*	A1N	3	E
TMKM90Engineering Materials - Deformation and Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMKT81Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X1ETMP518Engineering Design and Product Development6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X3ETSBB06Multidimensional Signal Analysis6*A1X3ETSEA81Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMES45		6	A1F	4	E
IMKM90Fracture6A1X2ETMKT71Affective Engineering6A1X2ETMKT81Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X1ETMPS18Engineering Design and Product Development6A1X3ETMPS22Assembly Technology6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X4ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMHL63	Introduction to Computational Mechanics	6	G2X	3	E
TMKT81Wood - Realisation6G2X1ETMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X1ETMPS18Engineering Design and Product Development6A1X3ETMPS22Assembly Technology6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X3ETSBB06Multidimensional Signal Analysis6*A1X3ETSB809Image Sensors6A1X4ETSIT02Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	ТМКМ90		6	A1X	2	E
TMMV18Fluid Mechanics6A1X2ETMMV54Computational Heat Transfer6A1X1ETMPS18Engineering Design and Product Development6A1X3ETMPS22Assembly Technology6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X3ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSIT02Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMKT71	Affective Engineering	6	A1X	2	E
TMMV54Computational Heat Transfer6A1X1ETMPS18Engineering Design and Product Development6A1X3ETMPS22Assembly Technology6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X3ETSBB06Multidimensional Signal Analysis6*A1X3ETSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMKT81	Wood - Realisation	6	G2X	1	E
TMPS18Engineering Design and Product Development6A1X3ETMPS22Assembly Technology6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X3ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMMV18	Fluid Mechanics	6	A1X	2	E
TMPS22Assembly Technology6A1X3ETMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X4ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMMV54	Computational Heat Transfer	6	A1X	1	E
TMQU12Lean Production6A1X2ETPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X4ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMPS18	Engineering Design and Product Development	6	A1X	3	E
TPPE29Financial Markets and Instruments6A1X2ETPPE76Operations Planning and Control6A1X4ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMPS22	Assembly Technology	6	A1X	3	E
TPPE76Operations Planning and Control6A1X4ETSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TMQU12	Lean Production	6	A1X	2	E
TSBB06Multidimensional Signal Analysis6*A1X3ETSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TPPE29	Financial Markets and Instruments	6	A1X	2	E
TSBB09Image Sensors6A1X4ETSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TPPE76	Operations Planning and Control	6	A1X	4	E
TSEA81Computer Engineering and Real-time Systems6A1X4ETSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSIT02Computer Security6G2F2ETSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TSBB09	Image Sensors	6	A1X	4	E
TSKS01Digital Communication6*A1X4ETSKS11Networks: Models, Algorithms and Applications6G2X3E	TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSKS11 Networks: Models, Algorithms and 6 G2X 3 E	TSIT02	Computer Security	6	G2F	2	E
Applications 6 G2X 3 E	TSKS01	Digital Communication	6*	A1X	4	E
TSRT78Digital Signal Processing6A1X2E	TSKS11		6	G2X	3	E
	TSRT78	Digital Signal Processing	6	A1X	2	E



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

# Specialisation: Biotechnical Engineering Specialization

Specialisation: Computer Science and Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDC88	Software Engineering	12*	A1X	1	С
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
TSTE86	Digital Integrated Circuits	6	A1X	2	E
Period 2					
TDDC88	Software Engineering	12*	A1X	1	С
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDD55	Compilers and Interpreters	4	G2X	1	E
TDDE01	Machine Learning	6	A1X	1	E
TDDE18	Programming C++	6*	G2X	1	E
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSIT02	Computer Security	6	G2F	2	E
TSKS11	Networks: Models, Algorithms and Applications	6	G2X	3	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
TSBB08	Digital Image Processing	6	A1X	4	E
TSDT14	Signal Theory	6	A1X	1	Е
TSKS01	Digital Communication	6*	A1X	4	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
TSRT62	Modelling and Simulation	6	A1X	3	E
TSTE86	Digital Integrated Circuits	6	A1X	2	E
Period 2					
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSBB09	Image Sensors	6	A1X	4	Е
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSIT02	Computer Security	6	G2F	2	E
TSKS01	Digital Communication	6*	A1X	4	E
TSKS11	Networks: Models, Algorithms and Applications	6	G2X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E

# Specialisation: Electrical Engineering Specialization

# Specialisation: Energy Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMES09	Industrial Energy Systems	6	A1X	3	E
TMES27	Modelling of Energy Systems	6	A1N	3	E
Period 2					
TMES45	Energy Planning and Modelling of Communities	6	A1F	4	E
TMMV18	Fluid Mechanics	6	A1X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSDT14	Signal Theory	6	A1X	1	С
TSRT62	Modelling and Simulation	6	A1X	3	С
Period 2					
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSRT78	Digital Signal Processing	6	A1X	2	E

# Specialisation: Master Profile Automatic Control

Specialisation: Master Profile Computer Science and Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDC88	Software Engineering	12*	A1X	1	С
Period 2					
TDDC88	Software Engineering	12*	A1X	1	С

# Specialisation: Master Profile Digitisation and Management

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



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMES09	Industrial Energy Systems	6	A1X	3	E
TMES27	Modelling of Energy Systems	6	A1N	3	E
Period 2					
TMMV18	Fluid Mechanics	6	A1X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	E

# Specialisation: Master Profile Energy Engineering

# Specialisation: Master Profile Finance

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

# Specialisation: Master Profile Industrial Marketing

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

# Specialisation: Master Profile Logistics Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TETS37	Basics in Logistics Management	6	G2X	4	С
TETS23	Purchasing	6	A1N	2	E
Period 2					
TETS27	Supply Chain Logistics	6	A1X	2	C/E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPS35	Emerging Factory Technologies	6	A1N	3	E
Period 2					
TMPS22	Assembly Technology	6	A1X	3	С

# Specialisation: Master Profile Manufacturing

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

#### Specialisation: Master Profile Operations Management

# Specialisation: Master Profile Product Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 2					
TMPS18	Engineering Design and Product Development	6	A1X	3	E

#### Specialisation: Master Profile Project, Innovation and Entrepreneurship

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



Course name	Credits	Level	Timetable module	ECV
Quality Management and Engineering	6	G2X	2	С
Lean Production	6	A1X	2	E
	Quality Management and Engineering	Quality Management and Engineering 6	Quality Management and Engineering 6 G2X	Course name   Credits   Level   Instants module     Quality Management and Engineering   6   G2X   2

# Specialisation: Master Profile Quality Technology and Management

# Specialisation: Master Profile Signal and Image Processing

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB08	Digital Image Processing	6	A1X	4	С
TSDT14	Signal Theory	6	A1X	1	С
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
Period 2					
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSBB09	Image Sensors	6	A1X	4	E
TSRT78	Digital Signal Processing	6	A1X	2	E

# Specialisation: Master Profile Strategic Management and Control

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIE72	Corporate Strategies	6	A1X	4	С
TEIO90	Innovation Management	6	A1X	2	E
TKMJ49	Environmentally Driven Business Development	6*	A1N	3	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
Period 2					
TDEI19	Management Control	6	A1X	2	С
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



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSDT14	Signal Theory	6	A1X	1	С
TSKS01	Digital Communication	6*	A1X	4	С
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
Period 2					
TSKS01	Digital Communication	6*	A1X	4	С
TSIT02	Computer Security	6	G2F	2	E
TSKS11	Networks: Models, Algorithms and Applications	6	G2X	3	E

# Specialisation: Master Profile Telecommunication

# Specialisation: Master Profile Wood Technology

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKT80	Wood - Material	6	G2X	2	С
TMKM16	Sustainable Material Selection	6	A1X	4	E
Period 2					
TMKT81	Wood - Realisation	6	G2X	1	С

# Specialisation: Mechanical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TANA21	Scientific Computing	6	G1X	3	E
TMKM16	Sustainable Material Selection	6	A1X	4	E
ТМКТ80	Wood - Material	6	G2X	2	E
TMPS35	Emerging Factory Technologies	6	A1N	3	E
Period 2					
ТМКМ90	Engineering Materials - Deformation and Fracture	6	A1X	2	E
TMKT71	Affective Engineering	6	A1X	2	E
TMKT81	Wood - Realisation	6	G2X	1	E
TMPS18	Engineering Design and Product Development	6	A1X	3	E
TMPS22	Assembly Technology	6	A1X	3	E



# Semester 8 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIE06	Corporate Planning	6*	A1X	-	С
NBIC50	Ecotoxicology and Environmental Monitoring	6	G2X	1	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
TDDD51	Service Design and Innovation	6	A1X	4	Е
TDDD57	Physical Interaction and Game Programming	6	A1X	1	Е
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
TDTS04	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
TGTU01	Technology and Ethics	6	G1X	1	E



Course code	Course name	Credits	Level	Timetable module	ECV
TGTU91	Oral and Written Communication	6	G1X	2	Е
TKMJ10	Industrial Ecology	6	A1X	1	E
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E
TMES17	Building Energy Systems	6	A1N	3	E
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1F	1	E
TMKA04	Wood - Innovation	6	A1X	1	E
TMKT48	Design Optimization	6	A1X	3	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
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	E
TVCB11	Cellbiological Methodology	6	G2X	1/4	E
Period 2					
TEIE06	Corporate Planning	6*	A1X	-	С
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	A1X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	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
-					



Course code	Course name	Credits	Level	Timetable module	ECV
TEIM07	Industrial Market Research	6	A1X	2	E
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	4	E
TFYA45	Biotechnology Project	6*	A1X	-	E
TGTU83	Philosophy of Science	6	G1X	4	E
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E
TMES21	Industrial Energy Systems	6	A1F	3	E
TMES41	Strategic Development of Sustainable Energy Systems	6	A1F	2	E
TMKT57	Product Modelling	6	A1X	3	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	2	E
TSKS16	Signal Processing for Communications	6	A1X	1	E
TSRT14	Sensor Fusion	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
NBIC50	Ecotoxicology and Environmental Monitoring	6	G2X	1	E
TFYA45	Biotechnology Project	6*	A1X	-	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E
Period 2					
TFYA45	Biotechnology Project	6*	A1X	-	E
TKMJ47	Environmental Systems Analysis	6*	A1N	2	E

# Specialisation: Biotechnical Engineering Specialization

# Specialisation: Computer Science and Engineering Specialization

	1 1 0		· •		
Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1X	2	Е
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	Е
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	Е
Period 2					
TDDD17	Information Security, Second Course	6*	A1X	4	Е
TDDD27	Advanced Web Programming	6	A1X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDE41	Software Architectures	6	A1X	1	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
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
Period 2					
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	2	E
TSKS16	Signal Processing for Communications	6	A1X	1	E
TSRT14	Sensor Fusion	6	A1X	2	E

# Specialisation: Electrical Engineering Specialization

# Specialisation: Energy Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ10	Industrial Ecology	6	A1X	1	E
TMES17	Building Energy Systems	6	A1N	3	E
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1F	1	E
Period 2					
TMES21	Industrial Energy Systems	6	A1F	3	E
TMES41	Strategic Development of Sustainable Energy Systems	6	A1F	2	E
TMKT83	Small Scale Renewable Energy Conversion	6	A1X	4	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSRT07	Industrial Control Systems	6	A1X	2	E
TSRT09	Control Theory	6	A1X	3	E
Period 2					
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1X	2	E

# Specialisation: Master Profile Automatic Control

Specialisation: Master Profile Computer Science and Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 2					
TDDE41	Software Architectures	6	A1X	1	С

# Specialisation: Master Profile Digitisation and Management

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

# Specialisation: Master Profile Energy Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMES17	Building Energy Systems	6	A1N	3	E
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1F	1	E
Period 2					
TMES21	Industrial Energy Systems	6	A1F	3	E
TMKT83	Small Scale Renewable Energy Conversion	6	A1X	4	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TPPE32	Financial Risk Management	6	A1X	2	С
Period 2					
TPPE33	Portfolio Management	6	A1X	2	E

# Specialisation: Master Profile Finance

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

# Specialisation: Master Profile Industrial Marketing

#### Specialisation: Master Profile Logistics Management

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

# Specialisation: Master Profile Manufacturing

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPS42	Production System Automation	6	A1X	1	E
Period 2					
TMPS27	Production Systems	6	A1X	3	С



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

# Specialisation: Master Profile Operations Management

#### Specialisation: Master Profile Product Development

Course name	Credits	Level	Timetable module	ECV
Design Optimization	6	A1X	3	С
Product Modelling	6	A1X	3	С
	Design Optimization	Design Optimization 6	Design Optimization 6 A1X	Course name   Credits   Level   Instance module     Design Optimization   6   A1X   3

# Specialisation: Master Profile Project, Innovation and Entrepreneurship

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIO13	Leadership and Organizational Change	6	A1X	4	E
Period 2					
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
Period 1					
TMQU31	Statistical Quality Control	6	A1X	2	E
Period 2					
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	4	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TSBK07	Computer Graphics	6*	A1X	4	E
Period 2					
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E

# Specialisation: Master Profile Signal and Image Processing

# Specialisation: Master Profile Strategic Management and Control

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
Period 2					
TEIM07	Industrial Market Research	6	A1X	2	E
TETS36	Sustainable Logistics Systems	6	A1X	4	E

# Specialisation: Master Profile Telecommunication

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBK08	Data Compression	6	A1X	2	E
TSKS13	Wireless Communications	6	A1F	4	E
Period 2					
TSBK02	Image and Audio Coding	6	A1X	4	E
TSKS14	Multiple Antenna Communications	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKA04	Wood - Innovation	6	A1X	1	С
Period 2					
TMKT57	Product Modelling	6	A1X	3	E
TMPS27	Production Systems	6	A1X	3	E

# Specialisation: Master Profile Wood Technology

# Specialisation: Mechanical Engineering Specialization

	1	0	51			
Course code	Course name		Credits	Level	Timetable module	ECV
Period 1						
TMKA04	Wood - Innovation		6	A1X	1	E
TMKT48	Design Optimization		6	A1X	3	E
TMMS21	Mechatronics		6	G2X	1	E
TMPS42	Production System Automation		6	A1X	1	E
Period 2						
TMKT57	Product Modelling		6	A1X	3	E
TMME11	Road Vehicle Dynamics		6	A1X	1	E
TMPS27	Production Systems		6	A1X	3	E
TMKT48 TMMS21 TMPS42 Period 2 TMKT57 TMME11	Design Optimization Mechatronics Production System Automation Product Modelling Road Vehicle Dynamics		6 6 6 6 6 6	A1X G2X A1X A1X A1X	3 1 1 3 1	E E E

# Semester 9 (Autumn 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TATM38	Mathematical Models in Biology	6	A1X	3	E
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1X	3	E
TDDD04	Software Testing	6	A1X	2	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*	A1F	2	E
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E



				module	ECV
1E1089	Innovation and Entrepreneurship - Project Course	12*	A1F	4	E
TETS38	Logistics Project	12*	A1X	4	E
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMMV01	Aerodynamics	6	A1X	2	E
TMMV12	Gas Turbine Engines	6	A1X	4	E
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E
	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	E
INPNOX	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E
TMQU27	Quality Management - Project Course	12*	A1X	2	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
	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSIT03	Cryptology	6	A1X	2	E
156512	Modern Channel Coding, Inference and Learning	6	A1X	1	E
Period 2					
TAOP18	Supply Chain Optimization	6	A1X	1	E
TDDB44	Compiler Construction	6	A1X	1	E
TDDC90	Software Security	6	A1X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TDDD89	Scientific Method	6	A1X	3	E
	Strategic Analysis and Methods for Strategic Change	12*	A1F	2	E
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	E
TEIM10	Industrial Service Development	6	A1X	2	E
	Innovation and Entrepreneurship - Project Course	12*	A1F	4	E



Course code	Course name	Credits	Level	Timetable module	ECV
TETS31	Logistics Strategies	6	A1X	4	E
TETS38	Logistics Project	12*	A1X	2	E
TFBI17	Advanced Project Course in Ecosystem Service Valuation	6	A1X	-	E
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMES51	International Energy Markets	6	A1N	1	E
TMKA03	Industrial Design	6	G2X	1	E
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E
TMPM05	Project Course Advanced - Design Engineering and Product Development	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: Biotechnical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATM38	Mathematical Models in Biology	6	A1X	3	Е
Period 2					
TFBI17	Advanced Project Course in Ecosystem Service Valuation	6	A1X	-	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD04	Software Testing	6	A1X	2	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

# Specialisation: Computer Science and Engineering Specialization

# Specialisation: Electrical Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
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
Period 2					
TSRT08	Optimal Control	6	A1X	3	E

# Specialisation: Energy Engineering Specialization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMMV12	Gas Turbine Engines	6	A1X	4	E
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E
Period 2					
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E

# Specialisation: Master Profile Automatic Control

Course code	Course name	Credits	Level	Timetable module	ECV
Period 2					
TSRT08	Optimal Control	6	A1X	3	E



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD04	Software Testing	6	A1X	2	С
TDDE45	Software Design and Construction	6	A1X	4	С
Period 2					
TDDD89	Scientific Method	6	A1X	3	С

# Specialisation: Master Profile Computer Science and Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1X	3	E

# Specialisation: Master Profile Digitisation and Management

# Specialisation: Master Profile Energy Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMMV12	Gas Turbine Engines	6	A1X	4	E
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E
Period 2					
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E

# Specialisation: Master Profile Finance

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



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	С
Period 2					
TEIM04	Industrial Market and Technology Strategies	12*	A1X	2	С

# Specialisation: Master Profile Industrial Marketing

#### Specialisation: Master Profile Logistics Management

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

# Specialisation: Master Profile Manufacturing

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	С
Period 2					
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	С

# Specialisation: Master Profile Operations Management

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



			-			
Course code	Course name	Credits	Level	Timetable module	ECV	
Period 1						
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	С	
Period 2						
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	С	
Specialisation: Master Profile Project, Innovation and Entrepreneurship						
Course code	Course name	Credits	Level	Timetable module	ECV	
Period 1						
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1F	4	С	
Period 2						
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1F	4	С	
Sr	pecialisation: Master Profile Quality Tech	noloau a	nd Ma	naaement		
Course code	Course name	Credits	Level	Timetable module	ECV	
Period 1						
TMQU27	Quality Management - Project Course	12*	A1X	2	С	
Period 2						
TMQU27	Quality Management - Project Course	12*	A1X	4	С	

# Specialisation: Master Profile Product Development



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEAE12	Strategic Analysis and Methods for Strategic Change	12*	A1F	2	С
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	E
Period 2					
TEAE12	Strategic Analysis and Methods for Strategic Change	12*	A1F	2	С
TEIM10	Industrial Service Development	6	A1X	2	E
TMQU12	Lean Production	6	A1X	2	E

# Specialisation: Master Profile Strategic Management and Control

# Specialisation: Master Profile Telecommunication

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSKS12	Modern Channel Coding, Inference and Learning	6	A1X	1	E

# Specialisation: Master Profile Wood Technology

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	С
Period 2					
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	С



Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMMV01	Aerodynamics	6	A1X	2	E
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	E
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E
Period 2					
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMKA03	Industrial Design	6	G2X	1	E
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	E
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E

# Specialisation: Mechanical Engineering Specialization

# Semester 10 (Spring 2020)

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

