

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

300 credits

Civilingenjör i industriell ekonomi - internationell 6CIEI

Valid from:

**Determined by** 

**Date determined** 

## **Entry requirements**

# Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp



### Curriculum

### Semester 8 (Spring 2017)

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	Е
TAMS29	Stochastic Processes Applied to Financial Models	6	A1F	3	E
TATA53	Linear Algebra, Honours Course	6*	G2F	-	Е
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TDDB68	Concurrent Programming and Operating Systems	6	G2X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD38	Advanced Programming in C++	6*	A1N	2	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1N	3	E
TDDD51	Service Design and Innovation	6	A1X	3	E
TDDD57	Physical Interaction and Game Programming	6	A1N	1	E
TDDD75	Effect-Driven Development and Human- Centered Design of Interactive Systems	6	G2X	3	E
TDDD97	Web Programming	6	G2F	3	E
TDEI70	Economic Perspectives on IT Use - for Individual, Organisation and Society	6	A1X	4	E
TDTS04	Computer Networks and Distributed Systems	8	G2F	2	E
TEIE88	Computer Law	4	G1X	1	Е
TEIM09	International Business	6	A1X	2	E
TEIO13	Leadership and Organizational Change	6	A1X	4	Е
TETS32	Logistics Analysis - Tools and Models	6	A1X	2	Е
TFYA45	Biotechnology Project	6*	A1X	-	Е
TFYA62	Introduction to Biosensor Technology	6	G2X	4	E
TGTU01	Technology and Ethics	6	G1X	1	Е
TGTU91	Oral and Written Communication	6	G1F	2	E
TKMJ15	Environmental Management Strategies	6	G1X	3	Е



TKMJ47 Environmental Systems Analysis 6* A1X 2 E TMES17 Building Energy Systems 6 A1X 3 E TMES43 Analysis and Modelling of Industrial Energy Systems 6 A1X 1 E TMES43 Systems 6 A1X 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 TMQJ31 Statistical Quality Control 6 A1X 2 E TPPE32 Financial Risk Management 6 A1X 2 E TPPE54 Advanced Planning and Scheduling 6 A1X 1 E TSBB15 Computer Vision 12* A1X 1 E TSBK07 Computer Graphics 6* A1X 4 E TSBK08 Data Compression 6 A1A 2 E TSKS13 Wireless Communications 6 A1A 2 E TSRT09 Industrial Control Systems 6 A1X 2 E TSTE08 Analog and Discrete-Time Integrated Circuits 6 A1X 3 E TVCB11 Cellbiological Methodology 6 A1X 1 E TDDC78 Programming of Parallel Computers - Methods and Tools TDDD078 Programming of Parallel Computers - Methods and Tools TDDD078 Component Based Software 6 A1X 1 E TDDD17 Information Security, Second Course 6* A1X 1 E TDDD17 Information Security, Second Course 6* A1X 1 E TDDD17 Information Security, Second Course 6* A1X 1 E TDDD18 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E TDE121 Strategy and Management Control 6 A1X 2 E TEIE05 Civil and Commercial Law 4 G1X 2 E	Course code	Course name	Credits	Level	Timetable module	ECV
TMES43         Analysis and Modelling of Industrial Energy Systems         6         A1X         1         E           TMKA04         Wood - Innovation         6         A1X         1         E           TMKT48         Design Optimization         6         A1X         3         E           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         1         E           TPPE34         Advanced Planning and Scheduling         6         A1X         1         E           TSB815         Computer Vision         12*         A1X         1         E           TSBK07         Computer Graphics         6*         A1X         4         E           TSBK08         Data Compression         6         A1X         4         E           TSK031         Wireless Communications         6         A1X         2         E           TSRT07         Industrial Control Systems         6<	TKMJ47	Environmental Systems Analysis	6*	A1X	2	Е
IMES43         Systems         6         AIX         1         E           TMKA04         Wood - Innovation         6         A1X         1         E           TMK748         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           TPPE34         Advanced Planning and Scheduling         6         A1X         1         E           TSB805         Computer Vision         12*         A1X         1         E           TSBK07         Computer Graphics         6*         A1X         4         E           TSBK08         Data Compression         6         A1X         4         E           TSK031         Wireless Communications         6         A1X         2         E           TSRT07         Industrial Control Systems         6         A1X         2	TMES17	Building Energy Systems	6	A1X	3	Е
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         1         E           TPPE54         Advanced Planning and Scheduling         6         A1X         1         E           TSBB15         Computer Vision         12*         A1X         1         E           TSBK07         Computer Graphics         6*         A1X         4         E           TSBK08         Data Compression         6         A1N         2         E           TSK513         Wireless Communications         6         A1F         4         E           TSRT07         Industrial Control Systems         6         A1X         2         E           TSRT09         Control Theory         6         A1X         3         E           TVCB11         Cellbiological Methodology         6         G2X	TMES43	,	6	A1X	1	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 1 E TPPE54 Advanced Planning and Scheduling 6 A1X 1 E TSBB15 Computer Vision 12* A1X 1 E TSBK07 Computer Graphics 6* A1X 4 E TSBK08 Data Compression 6 A1N 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 TELE06 Corporate Planning 6* A1X - C TATA53 Linear Algebra, Honours Course 6* G2F - E TDDC78 Programming of Parallel Computers - Methods and Tools TDDD05 Component Based Software 6 A1X 1 E TDDD14 Formal Languages and Automata Theory 6 G2F 2 E TDDD17 Information Security, Second Course 6* A1X 4 E TDDD27 Advanced Web Programming in C++ 6* A1N - E TDE121 Strategic Organisational Application of IT-Workflow and Knowledge Management TDE135 Strategy and Management Control 6 A1X 2 E	TMKA04	Wood - Innovation	6	A1X	1	Е
TMPS42 Production System Automation 6 A1X 1 E TMQU31 Statistical Quality Control 6 A1X 2 E TPPE32 Financial Risk Management 6 A1X 2 E TPPE54 Advanced Planning and Scheduling 6 A1X 1 E TSBB15 Computer Vision 12* A1X 1 E TSBB15 Computer Graphics 6* A1X 4 E TSBK07 Computer Graphics 6* A1X 4 E TSBK08 Data Compression 6 A1N 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 - C TATA53 Linear Algebra, Honours Course 6* G2F - E TDDC78 Programming of Parallel Computers - Methods and Tools TDDD05 Component Based Software 6 A1X 1 E TDDD14 Formal Languages and Automata Theory 6 G2F 2 E TDDD17 Information Security, Second Course 6* A1X 4 E TDDD17 Advanced Web Programming in C++ 6* A1N 3 E TDE121 Strategic Organisational Application of IT-Workflow and Knowledge Management TDE135 Strategy and Management Control 6 A1X 2 E	TMKT48	Design Optimization	6	A1X	3	E
TMQU31 Statistical Quality Control 6 A1X 2 E TPPE32 Financial Risk Management 6 A1X 2 E TPPE54 Advanced Planning and Scheduling 6 A1X 1 E TSBB15 Computer Vision 12* A1X 1 E TSBK07 Computer Graphics 6* A1X 4 E TSBK08 Data Compression 6 A1N 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 - C TATA53 Linear Algebra, Honours Course 6* G2F - E TDDC78 Programming of Parallel Computers - Methods and Tools TDDD05 Component Based Software 6 A1X 1 E TDDD14 Formal Languages and Automata Theory 6 G2F 2 E TDDD17 Information Security, Second Course 6* A1X 4 E TDDD17 Information Security, Second Course 6* A1X 4 E TDDD18 Advanced Web Programming in C++ 6* A1N - E TDE121 Strategic Organisational Application of IT-Workflow and Knowledge Management TDE135 Strategy and Management Control 6 A1X 2 E	TMMS21	Mechatronics	6	G2X	1	E
TPPE32 Financial Risk Management  TPPE54 Advanced Planning and Scheduling  6 A1X 1 E  TSBB15 Computer Vision  12* A1X 1 E  TSBR07 Computer Graphics  6* A1X 4 E  TSBK08 Data Compression  6 A1N 2 E  TSKS13 Wireless Communications  6 A1F 4 E  TSRT07 Industrial Control Systems  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 - C  TATA53 Linear Algebra, Honours Course  6 A1X 3 E  TDDC78 Programming of Parallel Computers - Methods and Tools  FDD05 Component Based Software  6 A1X 1 E  TDDD14 Formal Languages and Automata Theory  6 A1X 1 E  TDDD17 Information Security, Second Course  6* A1X 4 E  TDDD27 Advanced Web Programming in C++  6* A1N - E  TDDD38 Advanced Programming in C++  6* A1N - E  TDE121 Strategic Organisational Application of IT-Workflow and Knowledge Management  6 A1X 2 E  E  TDE135 Strategy and Management Control 6 A1X 2 E	TMPS42	Production System Automation	6	A1X	1	Е
TPPE54 Advanced Planning and Scheduling 6 A1X 1 E TSBB15 Computer Vision 12* A1X 1 E TSBK07 Computer Graphics 6* A1X 4 E TSBK08 Data Compression 6 A1N 2 E TSKS13 Wireless Communications 6 A1F 4 E TSRT07 Industrial Control Systems 6 A1X 2 E TSRT09 Control Theory 6 A1X 3 E TVCB11 Cellbiological Methodology 6 G2X 1/4 E  Period 2  TEIE06 Corporate Planning 6* A1X - C TATA53 Linear Algebra, Honours Course 6* A1X 3 E TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E TDDD14 Formal Languages and Automata Theory 6 G2F 2 E TDDD17 Information Security, Second Course 6* A1X 4 E TDDD27 Advanced Web Programming in C++ 6* A1N - E TDDD38 Advanced Programming in C++ 6* A1N - E TDDD38 Strategic Organisational Application of IT Workflow and Knowledge Management 6 A1X 4 E TDE135 Strategy and Management Control 6 A1X 2 E	TMQU31	Statistical Quality Control	6	A1X	2	E
TSBB15 Computer Vision 12* A1X 1 E TSBK07 Computer Graphics 6* A1X 4 E TSBK08 Data Compression 6 A1N 2 E TSK513 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 - C TATA53 Linear Algebra, Honours Course 6* G2F - E TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E TDDD14 Formal Languages and Automata Theory 6 G2F 2 E TDDD17 Information Security, Second Course 6* A1X 4 E TDDD27 Advanced Web Programming in C++ 6* A1N - E TDDD38 Advanced Programming in C++ 6* A1N - E TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E	TPPE32	Financial Risk Management	6	A1X	2	Е
TSBK07 Computer Graphics 6* A1X 4 E TSBK08 Data Compression 6 A1N 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 - C TATA53 Linear Algebra, Honours Course 6* G2F - E TDDC78 Programming of Parallel Computers - Methods and Tools TDDD05 Component Based Software 6 A1X 1 E TDDD14 Formal Languages and Automata Theory 6 G2F 2 E TDDD17 Information Security, Second Course 6* A1X 4 E TDDD27 Advanced Web Programming in C++ 6* A1N 3 E TDDD38 Advanced Programming in C++ 6* A1N - E TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E	TPPE54	Advanced Planning and Scheduling	6	A1X	1	Е
TSBK08 Data Compression 6 A1N 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 - C  TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDC05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming in C++ 6* A1N - E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E	TSBB15	Computer Vision	12*	A1X	1	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 - C TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E	TSBK07	Computer Graphics	6*	A1X	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 - C  TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming in C++ 6* A1N - E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management Control 6 A1X 2 E	TSBK08	Data Compression	6	A1N	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 - C  TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming in C++ 6* A1N - E  TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management  TDE135 Strategy and Management Control 6 A1X 2 E	TSKS13	Wireless Communications	6	A1F	4	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 - C  TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E	TSRT07	Industrial Control Systems	6	A1X	2	E
TVCB11 Cellbiological Methodology 6 G2X 1/4 E  Period 2  TEIE06 Corporate Planning 6* A1X - C  TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDE121 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E  TDE135 Strategy and Management Control 6 A1X 2 E	TSRT09	Control Theory	6	A1X	3	E
TEIEO6 Corporate Planning 6* A1X - C TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E  TDEI35 Strategy and Management Control 6 A1X 2 E	TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	E
TEIE06 Corporate Planning 6* A1X - C  TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E	TVCB11	Cellbiological Methodology	6	G2X	1/4	E
TATA53 Linear Algebra, Honours Course 6* G2F - E  TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E  TDEI35 Strategy and Management Control 6 A1X 2 E	Period 2					
TDDC78 Programming of Parallel Computers - Methods and Tools  TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 2 E  TDEI35 Strategy and Management Control 6 A1X 2 E	TEIE06	Corporate Planning	6*	A1X	-	С
TDDD05 Component Based Software 6 A1X 1 E  TDDD14 Formal Languages and Automata Theory 6 G2F 2 E  TDDD17 Information Security, Second Course 6* A1X 4 E  TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 4 E  TDEI35 Strategy and Management Control 6 A1X 2 E	TATA53	Linear Algebra, Honours Course	6*	G2F	-	E
TDDD14Formal Languages and Automata Theory6G2F2ETDDD17Information Security, Second Course6*A1X4ETDDD27Advanced Web Programming6A1N3ETDDD38Advanced Programming in C++6*A1N-ETDEI21Strategic Organisational Application of IT - Workflow and Knowledge Management6A1X4ETDEI35Strategy and Management Control6A1X2E	TDDC78		6	A1X	3	E
TDDD17Information Security, Second Course6*A1X4ETDDD27Advanced Web Programming6A1N3ETDDD38Advanced Programming in C++6*A1N-ETDEI21Strategic Organisational Application of IT - Workflow and Knowledge Management6A1X4ETDEI35Strategy and Management Control6A1X2E	TDDD05	Component Based Software	6	A1X	1	E
TDDD27 Advanced Web Programming 6 A1N 3 E  TDDD38 Advanced Programming in C++ 6* A1N - E  TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 4 E  TDEI35 Strategy and Management Control 6 A1X 2 E	TDDD14	Formal Languages and Automata Theory	6	G2F	2	Е
TDDD38 Advanced Programming in C++ 6* A1N - E  TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 4 E  TDEI35 Strategy and Management Control 6 A1X 2 E	TDDD17	Information Security, Second Course	6*	A1X	4	Е
TDEI21 Strategic Organisational Application of IT - Workflow and Knowledge Management 6 A1X 4 E  TDEI35 Strategy and Management Control 6 A1X 2 E	TDDD27	Advanced Web Programming	6	A1N	3	E
TDEI35 Strategy and Management Control 6 A1X 2 E	TDDD38	Advanced Programming in C++	6*	A1N	-	Е
	TDEI21		6	A1X	4	E
TEIE95 Civil and Commercial Law 4 G1X 2 E	TDEI35	Strategy and Management Control	6	A1X	2	Е
	TEIE95	Civil and Commercial Law	4	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	Е
TEIO41	Corporate Social Responsibility	6	A1X	4	E
TETS36	Sustainable Logistics Systems	6	A1X	4	Е
TETS56	Logistics and Quality in Health Care	6	A1X	4	Е
TFYA45	Biotechnology Project	6*	A1X	-	E
TGTU76	Philosophy of Science	6	G1X	4	Е
TKMJ47	Environmental Systems Analysis	6*	A1X	2	E
TMES21	Industrial Energy Systems	6	A1X	3	Е
TMHL61	Damage Mechanics and Life Analysis	6	A1X	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
TPPE19	Analysing and Improving Manufacturing Operation	6	A1X	4	E
TPPE33	Portfolio Management	6	A1X	2	E
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	Е
TSBK07	Computer Graphics	6*	A1X	1	Е
TSFS06	Diagnosis and Supervision	6	A1N	1	Е
TSKS14	Multiple Antenna Communications	6	A1F	2	Е
TSRT14	Sensor Fusion	6	A1X	2	Е
TSTE06	Digital Filters	6	A1X	3	E



### Specialisation: Master Profile Automatic Control

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSRT07	Industrial Control Systems	6	A1X	2	Е
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 Computer Science and Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 2					
TDDD05	Component Based Software	6	A1X	1	С

### Specialisation: Master Profile Economic Information Systems

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDEI70	Economic Perspectives on IT Use - for Individual, Organisation and Society	6	A1X	4	E
Period 2					
TDEI21	Strategic Organisational Application of IT - Workflow and Knowledge Management	6	A1X	4	E
TDEI35	Strategy and Management Control	6	A1X	2	E

### Specialisation: Master Profile Energy Engineering

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



### Specialisation: Master Profile Finance

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 Industrial Marketing

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 Logistics Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TETS32	Logistics Analysis - Tools and Models	6	A1X	2	C/E
Period 2					
TETS36	Sustainable Logistics Systems	6	A1X	4	Е
TETS56	Logistics and Quality in Health Care	6	A1X	4	Е

### Specialisation: Master Profile Manufacturing

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



Specialisation: Master Profile Manufacturing Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TPPE54	Advanced Planning and Scheduling	6	A1X	1	Е
Period 2					
TPPE19	Analysing and Improving Manufacturing Operation	6	A1X	4	E

### Specialisation: Master Profile Product Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKT48	Design Optimization	6	A1X	3	С
Period 2					
TMKT57	Product Modelling	6	A1X	3	С

### 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	4	E

### Specialisation: Master Profile Quality Technology and Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TMQU31	Statistical Quality Control	6	A1X	2	Е
Period 2					
TDEI35	Strategy and Management Control	6	A1X	2	E
TETS56	Logistics and Quality in Health Care	6	A1X	4	E
TMQU04	Six Sigma Quality	6	A1X	2	E
TPPE19	Analysing and Improving Manufacturing Operation	6	A1X	4	E



Specialisation: Master Profile Signal and Image Processing

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TSBB15	Computer Vision	12*	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
Period 2					
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E

### Specialisation: Master Profile Strategic Management and Control

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIM09	International Business	6	A1X	2	Е
TEIO13	Leadership and Organizational Change	6	A1X	4	E
Period 2					
TDEI21	Strategic Organisational Application of IT - Workflow and Knowledge Management	6	A1X	4	E
TEIM07	Industrial Market Research	6	A1X	2	Е
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	A1N	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	A1F	2	E



### Specialisation: Master Profile Wood Technology

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	Е
TMPS27	Production Systems	6	A1X	3	E

### Specialisation: Specialization Biotechnical Engineering

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
TKMJ47	Environmental Systems Analysis	6*	A1X	2	E
Period 2					
TFYA45	Biotechnology Project	6*	A1X	-	E
TKMJ47	Environmental Systems Analysis	6*	A1X	2	E



### Specialisation: Specialization Computer Science and Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDB68	Concurrent Programming and Operating Systems	6	G2X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD38	Advanced Programming in C++	6*	A1N	2	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1N	3	E
TDDD75	Effect-Driven Development and Human- Centered Design of Interactive Systems	6	G2X	3	E
TDTS04	Computer Networks and Distributed Systems	8	G2F	2	E
Period 2					
TDDD05	Component Based Software	6	A1X	1	E
TDDD14	Formal Languages and Automata Theory	6	G2F	2	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD27	Advanced Web Programming	6	A1N	3	E
TDDD38	Advanced Programming in C++	6*	A1N	-	E



### Specialisation: Specialization Electrical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TSBB15	Computer Vision	12*	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1N	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					
TSBB15	Computer Vision	12*	A1X	3	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	A1F	2	E
TSRT14	Sensor Fusion	6	A1X	2	E
TSTE06	Digital Filters	6	A1X	3	E

### Specialisation: Specialization Energy Engineering

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



### Specialisation: Specialization Mechanical Engineering

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	Е
Period 2					
TMHL61	Damage Mechanics and Life Analysis	6	A1X	2	Е
TMKT57	Product Modelling	6	A1X	3	E
TMME11	Road Vehicle Dynamics	6	A1X	1	E
TMPS27	Production Systems	6	A1X	3	E

### Semester 9 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS39	Multivariate Statistical Methods	6	A1N	4	E
TAMS46	Probability Theory, Second Course	6	A1N	3	E
TDDB84	Design Patterns	6	A1X	4	Е
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1X	3	E
TDDD04	Software Testing	6	A1N	2	E
TDEI09	Strategic Application of IT: E-business and Knowledge Management	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
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	E
TETS38	Logistics Project	12*	A1X	4	Е
TKMJ31	Biofuels for Transportation	6	A1X	1	Е
TMME40	Vibration Analysis of Structures	6	A1X	3	Е
TMMS11	Models of Mechanics	6*	A1X	3	E
TMMV01	Aerodynamics	6	A1X	2	E



Course code	Course name	Credits	Level	Timetable module	ECV
TMMV12	Gas Turbine Engines	6	A1X	4	E
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	E
ТМРМ08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E
TMQU13	Customer Focused Product and Service Development	6	A1X	4	E
TMQU27	Quality Management - Project Course	12*	A1X	2	Е
TPPE53	Financial Valuation Methodology	6	A1X	2	E
TPPE73	Operations Management - Project Course	12*	A1X	4	Е
TPPE99	Simulation in Production and Logistics	6	A1X	3	Е
TSIN01	Information Networks	6	A1X	3	Е
TSIT03	Cryptology	6	A1X	2	Е
TSKS12	Modern Channel Coding, Inference and Learning	6	A1N	1	E
Period 2					
TAOP18	Supply Chain Optimization	6	A1F	1	Е
TDDB44	Compiler Construction	6	A1X	1	E
TDDC90	Software Security	6	A1N	1	E
TDDD30	Advanced Software Engineering	6	A1X	4	E
TDDD56	Multicore and GPU Programming	6	A1N	2	E
TDDD89	Scientific Method	6	A1F	3	E
TEAE12	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	Е
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	E
TETS31	Logistics Strategies	6	A1X	4	Е
TETS38	Logistics Project	12*	A1X	2	E
TFBI17	Advanced Project Course in Ecosystem Service Valuation	6	A1X	-	E
TKMJ32	Integrated Product Service Engineering	6	A1X	3	Е



Course code	Course name	Credits	Level	Timetable module	ECV
TMKA03	Industrial Design	6	G2X	1	E
TMMS11	Models of Mechanics	6*	A1X	4	E
TMMS20	Structural Optimization	6	A1X	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: Master Profile Aut	omatic (	Contro	!	
Course code	Course name	Credits	Level	Timetable module	ECV

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

### Specialisation: Master Profile Computer Science and Engineering

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Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDB84	Design Patterns	6	A1X	4	С
TDDD04	Software Testing	6	A1N	2	С
Period 2					
TDDD89	Scientific Method	6	A1F	3	С

### Specialisation: Master Profile Economic Information Systems

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 Energy Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ31	Biofuels for Transportation	6	A1X	1	Е
TMMV12	Gas Turbine Engines	6	A1X	4	Е
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	Е
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
Period 2					
TPPE61	Financial Optimization	6	A1X	2	E
TPPE66	Investment Valuation	6	A1X	4	E

### Specialisation: Master Profile Industrial Marketing

Course code	Course name	Credits	Level	Timetable module	ECV
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 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 Manufacturing Management

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

### Specialisation: Master Profile Product Development

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*	A1X	4	С
Period 2					
TEIO89	Innovation and Entrepreneurship - Project Course	12*	A1X	4	С



### Specialisation: Master Profile Quality Technology and Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMQU27	Quality Management - Project Course	12*	A1X	2	С
TMQU13	Customer Focused Product and Service Development	6	A1X	4	E
Period 2					
TMQU27	Quality Management - Project Course	12*	A1X	4	С

### Specialisation: Master Profile Strategic Management and Control

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEAE12	Strategic Analysis and Methods for Strategic Change	12*	A1F	2	С
TDEI09	Strategic Application of IT: E-business and Knowledge Management	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

### $Specialisation: Master {\it Profile Telecommunication}$

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSIN01	Information Networks	6	A1X	3	Е
TSIT03	Cryptology	6	A1X	2	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1N	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

### Specialisation: Specialization Biotechnical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 2	!				
TFBI17	Advanced Project Course in Ecosystem Service Valuation	6	A1X	-	E

#### Specialisation: Specialization Computer Science and Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDB84	Design Patterns	6	A1X	4	E
TDDD04	Software Testing	6	A1N	2	E
TSIT03	Cryptology	6	A1X	2	E

### Specialisation: Specialization Electrical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSIN01	Information Networks	6	A1X	3	E
TSIT03	Cryptology	6	A1X	2	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1N	1	Е
Period 2					
TSRT08	Optimal Control	6	A1X	3	E



### Specialisation: Specialization Energy Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ31	Biofuels for Transportation	6	A1X	1	E
TMMV12	Gas Turbine Engines	6	A1X	4	E
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E
Period 2					
TKMJ32	Integrated Product Service Engineering	6	A1X	3	E
TMPE01	Project Course Advanced - Energy Engineering	12*	A1X	-	E

### Specialisation: Specialization Mechanical Engineering

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Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMME40	Vibration Analysis of Structures	6	A1X	3	Е
TMMS11	Models of Mechanics	6*	A1X	3	E
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	A1X	3	Е
TMKA03	Industrial Design	6	G2X	1	Е
TMMS11	Models of Mechanics	6*	A1X	4	E
TMMS20	Structural Optimization	6	A1X	1	Е
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	E
ТМРМ08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	E
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### Semester 10 (Spring 2018)

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



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