

# Computer Science and Software Engineering, M Sc in Engineering

300 credits

Civilingenjör i mjukvaruteknik

6CMJU

Valid from: 2016 Spring semester

**Determined by**

Board of Studies for Computer Science  
and Media Technology

**Date determined**

2016-01-19

## Entry requirements

### Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp

## Curriculum

### Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD78	Object Oriented Programming and Java	6*	G1X	1	C
TDDD79	Professionalism for Engineers, part 2	1*	G1X	-	C
TDDD80	Project: Mobile and Social Applications	11*	G1X	3/4	C
TSEA28	Computer Hardware and Architecture Y	6*	G1X	2	C
<b>Period 2</b>					
TDDD78	Object Oriented Programming and Java	6*	G1X	1	C
TDDD79	Professionalism for Engineers, part 2	1*	G1X	-	C
TDDD80	Project: Mobile and Social Applications	11*	G1X	4	C
TDDD85	Formal Languages and Automata Theory	6	G1X	2	C
TSEA28	Computer Hardware and Architecture Y	6*	G1X	3	C

### Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TATA24	Linear Algebra	8*	G1X	4	C
TDDC93	Software Engineering Theory	4	G2X	1	C
TDDD84	Professionalism for Engineers, part 3	1*	G1X	-	C
TDDD86	Data Structures, Algorithms and Programming Paradigms	11*	G1X	2	C
TATA40	Perspectives on Mathematics	1*	G1X	-	V
<b>Period 2</b>					
TATA24	Linear Algebra	8*	G1X	4	C
TATA79	Introductory Course in Calculus	6	G1X	2	C
TDDD84	Professionalism for Engineers, part 3	1*	G1X	-	C
TDDD86	Data Structures, Algorithms and Programming Paradigms	11*	G1X	3	C
TATA40	Perspectives on Mathematics	1*	G1X	-	V

## Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TATA41	Calculus in One Variable 1	6	G1X	4	C
TDDB68	Concurrent Programming and Operating Systems	6	G2X	3	C
TDDD79	Professionalism for Engineers, part 2	1*	G1X	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1X	-	C
TDDD98	Professionalism for Engineers, part 6	1*	G1X	-	C
TDDE35	Large-Scale Distributed Systems and Networks	11*	G1X	2	C
THEN18	English	6*	G1N	1	E
TATA40	Perspectives on Mathematics	1*	G1X	-	V
TGTU63	Visits to Industry	1*	G1X	-	V
<b>Period 2</b>					
TATA91	Calculus in One and Several Variables	6	G1X	4	C
TDDD79	Professionalism for Engineers, part 2	1*	G1X	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1X	-	C
TDDD98	Professionalism for Engineers, part 6	1*	G1X	-	C
TDDE35	Large-Scale Distributed Systems and Networks	11*	G1X	2	C
THEN18	English	6*	G1N	3	E
TPTE06	Industrial Placement	6	G1X	-	E
TATA40	Perspectives on Mathematics	1*	G1X	-	V
TGTU63	Visits to Industry	1*	G1X	-	V

## Semester 5 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDAB01	Probability and Statistics	6	G2X	1	C
TDDC17	Artificial Intelligence	6	G2X	3	C
TDDD91	Professionalism for Engineers, part 5	1*	G1X	-	C
TDDD92	Artificial Intelligence - Project	5*	G2X	4	C
TGTU63	Visits to Industry	1*	G1X	-	V
<b>Period 2</b>					
TDDD37	Database Technology	6	G2X	1	C
TDDD91	Professionalism for Engineers, part 5	1*	G1X	-	C
TDDD92	Artificial Intelligence - Project	5*	G2X	4	C
TGTU63	Visits to Industry	1*	G1X	-	V

## Semester 6 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD79	Professionalism for Engineers, part 2	1*	G1X	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1X	-	C
TDDD96	Software Engineering - Bachelor Project	15*	G2X	2/3	C
TDDD98	Professionalism for Engineers, part 6	1*	G1X	-	C
TSKS21	Signals, Information and Images	8	G2X	1	C
TSRT04	Introduction in Matlab	2	G1X	2	E
<b>Period 2</b>					
TDDD79	Professionalism for Engineers, part 2	1*	G1X	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1X	-	C
TDDD96	Software Engineering - Bachelor Project	15*	G2X	2/4	C
TDDD98	Professionalism for Engineers, part 6	1*	G1X	-	C
TSRT19	Automatic Control	6	G2X	1	C

## Semester 7 (Autumn 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TAOP33	Combinatorial Optimization, Introductory Course	4	G2X	2	C/E
TANA21	Scientific Computing	6	G1X	3	E
TATA55	Abstract Algebra	6*	G2X	3	E
TBME04	Anatomy and Physiology	6	G2X	3	E
TBMI19	Medical Information Systems	6*	A1X	2	E
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1X	3	E
TDDD04	Software Testing	6	A1X	2	E
TDDD08	Logic Programming	6	A1X	4	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
TDDD53	Advanced Interaction Design	6	A1X	1	E
TDDE45	Software Design and Construction	6	A1X	4	E
TEIO32	Project Management and Organization	6*	G2X	3	E
TGTU91	Oral and Written Communication	6	G1X	2	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
TSBB08	Digital Image Processing	6	A1X	4	E
TSDT14	Signal Theory	6	A1X	1	E
TSIT03	Cryptology	6	A1X	2	E
TSRT62	Modelling and Simulation	6	A1X	3	E
<b>Period 2</b>					
TAMS22	Probability Theory and Bayesian Networks	6	A1X	1	E
TANA09	Numerical Algorithms in Computer Science	4	G2X	1	E
TATA55	Abstract Algebra	6*	G2X	3	E
TBMI19	Medical Information Systems	6*	A1X	3	E
TDDC73	Interaction Programming	6	G2X	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
TDDD49	Programming in C# and .NET Framework	4	G2X	3	E

Course code	Course name	Credits	Level	Timetable module	ECV
TDDE01	Machine Learning	6	A1X	1	E
TDDE02	Software Entrepreneurship	6	A1X	2	E
TEAE01	Industrial Economics, Basic Course	6	G1X	2	E
TEIM03	Intercultural Communication	4	G1X	4	E
TEIO32	Project Management and Organization	6*	G2X	1	E
TGTU04	Leadership	6	G2X	2	E
TGTU49	History of Technology	6	G1X	3	E
TKMJ24	Environmental Engineering	6	G1N	3	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSIT02	Computer Security	6	G2F	2	E
TSK511	Networks: Models, Algorithms and Applications	6	G2X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E

*Specialisation: AI and Machine Learning*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDC17	Artificial Intelligence	6	G2X	3	C
TBMI19	Medical Information Systems	6*	A1X	2	E
TDDD08	Logic Programming	6	A1X	4	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
TSBB08	Digital Image Processing	6	A1X	4	E
<b>Period 2</b>					
TDDE01	Machine Learning	6	A1X	1	C
TBMI19	Medical Information Systems	6*	A1X	3	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E

*Specialisation: Computer Games Programming*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD23	Design and Programming of Computer Games	6	A1X	2	C
TDDC17	Artificial Intelligence	6	G2X	3	E
TDDD53	Advanced Interaction Design	6	A1X	1	E
<b>Period 2</b>					
TDDC73	Interaction Programming	6	G2X	1	C
TDDE02	Software Entrepreneurship	6	A1X	2	E

*Specialisation: Industrial Economics*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEAE01	Industrial Economics, Basic Course	6	G1X	2	C
TEIO32	Project Management and Organization	6*	G2X	3	C
<b>Period 2</b>					
TDDE02	Software Entrepreneurship	6	A1X	2	C
TEIO32	Project Management and Organization	6*	G2X	1	C

*Specialisation: International Software Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD04	Software Testing	6	A1X	2	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDE45	Software Design and Construction	6	A1X	4	E
<b>Period 2</b>					
TEAE01	Industrial Economics, Basic Course	6	G1X	2	C
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDE02	Software Entrepreneurship	6	A1X	2	E
TDEI19	Management Control	6	A1X	2	E
TEIM03	Intercultural Communication	4	G1X	4	E
TSIT02	Computer Security	6	G2F	2	E



*Specialisation: Large Scale Software Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
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
<b>Period 2</b>					
TDDD37	Database Technology	6	G2X	1	E
TDDE02	Software Entrepreneurship	6	A1X	2	E

*Specialisation: Programming and Algorithms Specialization*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDC17	Artificial Intelligence	6	G2X	3	E
TDDD04	Software Testing	6	A1X	2	E
TDDD08	Logic Programming	6	A1X	4	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDE45	Software Design and Construction	6	A1X	4	E
<b>Period 2</b>					
TDDC90	Software Security	6	A1X	1	E
TDDD37	Database Technology	6	G2X	1	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TSIT02	Computer Security	6	G2F	2	E
TSKS11	Networks: Models, Algorithms and Applications	6	G2X	3	E

*Specialisation: Secure Systems*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE45	Software Design and Construction	6	A1X	4	C
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDS06	Computer Networks	6	G2X	1	E
TSIT03	Cryptography	6	A1X	2	E
<b>Period 2</b>					
TDDC90	Software Security	6	A1X	1	C
TSIT02	Computer Security	6	G2F	2	C
TDDD37	Database Technology	6	G2X	1	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E

**Semester 8 (Spring 2020)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TAOP07	Introduction to Optimization	6	G1X	3	C/E
TANA15	Numerical Linear Algebra	6	A1X	1	E
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TATA54	Number Theory	6*	G2X	3	E
TATA64	Graph Theory	6*	A1X	2	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TDDA69	Data and Program Structures	6*	G2X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD20	Design and Analysis of Algorithms	6	A1X	3	E
TDDD25	Distributed Systems	6	A1X	2	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1X	3	E
TDDD57	Physical Interaction and Game Programming	6	A1X	1	E
TDDD75	Effect-Driven Development and Human-Centered Design of Interactive Systems	6	G2X	3	E
TDDD95	Algorithmic Problem Solving	6*	A1X	1	E

Course code	Course name	Credits	Level	Timetable module	ECV
TDDD97	Web Programming	6	G2X	3	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE06	Large-Scale Software Development - Structures and Processes	6*	A1X	4	E
TDDE09	Natural Language Processing	6	A1X	2	E
TDDE46	Software Quality	6*	A1N	2	E
TDS07	System Design and Methodology	6	A1X	1	E
TDS21	Advanced Networking	6*	A1X	1	E
TEIE88	Computer Law	4	G1X	1	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TEIO94	Entrepreneurship and Idea Development	6*	G2X	4	E
TGTU94	Technology and Ethics	6	G1X	1	E
TKMJ15	Environmental Management Strategies	6	G1F	3	E
TNM048	Information Visualisation	6	A1X	3	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1N	2	E
TSRT07	Industrial Control Systems	6	A1N	2	E
<b>Period 2</b>					
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TATA54	Number Theory	6*	G2X	1	E
TATA64	Graph Theory	6*	A1X	2	E
TDDA69	Data and Program Structures	6*	G2X	1	E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD27	Advanced Web Programming	6	A1N	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDD48	Automated Planning	6	A1X	1	E
TDDD95	Algorithmic Problem Solving	6*	A1X	4	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE06	Large-Scale Software Development - Structures and Processes	6*	A1X	4	E
TDDE07	Bayesian Learning	6	A1F	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TDDE31	Big Data Analytics	6	A1X	3	E
TDDE34	Software Verification	6	A1X	1	E
TDDE41	Software Architectures	6	A1X	1	E
TDDE46	Software Quality	6*	A1N	2	E
TDTS21	Advanced Networking	6*	A1X	1	E
TEAE13	Civil and Commercial Law	6	G1X	2	E
TEIE44	Intellectual Property Rights	4	G1X	1	E
TEIO06	Innovative Entrepreneurship	6	A1X	2	E
TEIO94	Entrepreneurship and Idea Development	6*	G2X	4	E
TGTU95	Philosophy of Science and Technology	6	G1X	4	E
TNM079	Modelling and Animation	6	A1X	2	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1N	2	E

*Specialisation: AI and Machine Learning*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TDDD20	Design and Analysis of Algorithms	6	A1X	3	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1X	3	E
TDDD95	Algorithmic Problem Solving	6*	A1X	1	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE09	Natural Language Processing	6	A1X	2	E
TSRT07	Industrial Control Systems	6	A1N	2	E
<b>Period 2</b>					
TDDD48	Automated Planning	6	A1X	1	E
TDDD95	Algorithmic Problem Solving	6*	A1X	4	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE07	Bayesian Learning	6	A1F	2	E
TDDE31	Big Data Analytics	6	A1X	3	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1N	2	E

*Specialisation: Computer Games Programming*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD57	Physical Interaction and Game Programming	6	A1X	1	C
TSBK07	Computer Graphics	6*	A1X	4	C
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
<b>Period 2</b>					
TSBK07	Computer Graphics	6*	A1X	1	C
TNM079	Modelling and Animation	6	A1X	2	E

*Specialisation: Industrial Economics*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO13	Leadership and Organizational Change	6	A1X	4	C
<b>Period 2</b>					
TEIO06	Innovative Entrepreneurship	6	A1X	2	C

*Specialisation: Large Scale Software Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE06	Large-Scale Software Development - Structures and Processes	6*	A1X	4	E
TDDE46	Software Quality	6*	A1N	2	E
<b>Period 2</b>					
TDDE06	Large-Scale Software Development - Structures and Processes	6*	A1X	4	E
TDDE34	Software Verification	6	A1X	1	E
TDDE41	Software Architectures	6	A1X	1	E
TDDE46	Software Quality	6*	A1N	2	E

*Specialisation: Programming and Algorithms Specialization*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDA69	Data and Program Structures	6*	G2X	3	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
TDDD95	Algorithmic Problem Solving	6*	A1X	1	E
TDDE09	Natural Language Processing	6	A1X	2	E
<b>Period 2</b>					
TDDA69	Data and Program Structures	6*	G2X	1	E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDD14	Formal Languages and Automata Theory	6	G2X	2	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDD95	Algorithmic Problem Solving	6*	A1X	4	E
TDDE34	Software Verification	6	A1X	1	E
TDDE41	Software Architectures	6	A1X	1	E

*Specialisation: Secure Systems*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD17	Information Security, Second Course	6*	A1X	4	C
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD97	Web Programming	6	G2X	3	E
TDDE46	Software Quality	6*	A1N	2	E
TDTS21	Advanced Networking	6*	A1X	1	E
<b>Period 2</b>					
TDDD17	Information Security, Second Course	6*	A1X	4	C
TDDD27	Advanced Web Programming	6	A1N	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDE46	Software Quality	6*	A1N	2	E
TDTS21	Advanced Networking	6*	A1X	1	E

## Semester 9 (Autumn 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD53	Advanced Interaction Design	6	A1X	1	E
TDDE14	Large-Scale Software Development: Contributions and Evolution	6*	A1X	4	E
TDDE15	Advanced Machine Learning	6	A1X	1	E
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	E
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1X	4	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1X	4	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
TEIM11	Industrial Marketing	6	G2X	3	E
TEIO90	Innovation Management	6	A1X	2	E
TNCG15	Advanced Global Illumination and Rendering	6	A1X	4	E
TNM067	Scientific Visualization	6	A1X	3	E
TNM095	Artificial Intelligence for Interactive Media	6	A1X	2	E
TSBB17	Visual Object Recognition and Detection	6	A1X	2	E
TSBK03	Advanced Game Programming	6*	A1X	1	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSIN01	Information Networks	6	A1X	3	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1N	1	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1X	3	E
<b>Period 2</b>					
TDDD89	Scientific Method	6	A1X	3	C
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TBMI02	Medical Image Analysis	6	A1N	1	E
Tddb44	Compiler Construction	6	A1X	1	E



Course code	Course name	Credits	Level	Timetable module	ECV
TDDC90	Software Security	6	A1X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TDDE13	Multi Agent Systems	6	A1X	1	E
TDDE14	Large-Scale Software Development: Contributions and Evolution	6*	A1X	4	E
TDDE16	Text Mining	6	A1X	2	E
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	E
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1X	4	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1X	4	E
TNM086	Virtual Reality Techniques	6	A1X	2	E
TSBK03	Advanced Game Programming	6*	A1X	-	E
TSIN02	Internetworking	6	A1N	1	E

*Specialisation: AI and Machine Learning*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	C
TDDE15	Advanced Machine Learning	6	A1X	1	E
TSBB17	Visual Object Recognition and Detection	6	A1X	2	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1X	3	E
<b>Period 2</b>					
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	C
TDDE13	Multi Agent Systems	6	A1X	1	E
TDDE16	Text Mining	6	A1X	2	E

*Specialisation: Computer Games Programming*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSBK03	Advanced Game Programming	6*	A1X	1	C
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1X	4	E
TNCG15	Advanced Global Illumination and Rendering	6	A1X	4	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
<b>Period 2</b>					
TSBK03	Advanced Game Programming	6*	A1X	-	C
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1X	4	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
TSIN02	Internetworking	6	A1N	1	E

*Specialisation: Industrial Economics*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIM11	Industrial Marketing	6	G2X	3	C
TEIO90	Innovation Management	6	A1X	2	C
TDEI72	Strategy and Digitisation - Technology, Standards and Network Effects	6	A1X	4	E

*Specialisation: International Software Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1X	3	C
TDDD69	Software Engineering - Company Project	6*	A1N	1	C
TDDD04	Software Testing	6	A1X	2	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	E
TDDE45	Software Design and Construction	6	A1X	4	E
TDEI13	Enterprise Resource Planning Systems: Process and Implementation	6	A1X	2	E
<b>Period 2</b>					
TDDD69	Software Engineering - Company Project	6*	A1N	1	C
TDDC90	Software Security	6	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
TDEI19	Management Control	6	A1X	2	E
TEIM03	Intercultural Communication	4	G1X	4	E

*Specialisation: Large Scale Software Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE14	Large-Scale Software Development: Contributions and Evolution	6*	A1X	4	E
<b>Period 2</b>					
TDDE14	Large-Scale Software Development: Contributions and Evolution	6*	A1X	4	E

*Specialisation: Programming and Algorithms Specialization*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD08	Logic Programming	6	A1X	4	E
TDDE45	Software Design and Construction	6	A1X	4	E
TSIT03	Cryptology	6	A1X	2	E
<b>Period 2</b>					
Tddb44	Compiler Construction	6	A1X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E

*Specialisation: Secure Systems*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD04	Software Testing	6	A1X	2	C
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1X	4	E
TDTS06	Computer Networks	6	G2X	1	E
TSIT03	Cryptology	6	A1X	2	E
<b>Period 2</b>					
TDDC90	Software Security	6	A1X	1	C
TDDD37	Database Technology	6	G2X	1	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1X	4	E

**Semester 10 (Spring 2021)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C
<b>Period 2</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory / Voluntary

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