

# Computer Science and Engineering, M Sc in Engineering

300 credits

Civilingenjör i datateknik

6CDDD

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
<b>Period 1</b>					
TANA15	Numerical Linear Algebra	6	A1X	1	E
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TATA54	Number Theory	6	G2X	2	E
TATA64	Graph Theory	6*	A1X	2	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TBMT02	Medical Imaging	6	A1F	3	E
TBMT09	Physiological Pressures and Flows	6	A1X	1	E
TBMT32	Perspectives on Biomedical Engineering	2*	G1X	3	E
TDDA69	Data and Program Structures	6*	G2X	3	E
TDDD17	Information Security, Second Course	6*	A1X	4	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
TDDD50	Green Computing	4	G2X	4	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
TDDD97	Web Programming	6	G2X	3	E
TDDE05	AI Robotics	6*	A1X	4	E
TDDE06	Large-Scale Software Development - Structures and Processes	6*	A1X	4	E
TDDE09	Natural Language Processing	6	A1X	2	E
TDTS07	System Design and Methodology	6	A1X	1	E
TEIE88	Computer Law	4	G1X	1	E
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	E
TGTU01	Technology and Ethics	6	G1X	1	E

Course code	Course name	Credits	Level	Timetable module	ECV
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
TKMJ15	Environmental Management Strategies	6	G1X	3	E
TNM048	Information Visualisation	6	A1X	3	E
TSBB15	Computer Vision	12*	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1X	2	E
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E
TSEK06	VLSI Design	12*	A1X	4	E
TSFS04	Electrical Drives	6	G2X	4	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
TSTE14	Analog Filters	6	A1X	2	E
<b>Period 2</b>					
TATA53	Linear Algebra, Honours Course	6*	G2X	-	E
TATA64	Graph Theory	6*	A1X	2	E
TBME08	Biomedical Modeling and Simulation	6	A1X	3	E
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	E
TBMT32	Perspectives on Biomedical Engineering	2*	G1X	3	E
TDDA69	Data and Program Structures	6*	G2X	1	E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDD05	Component Based Software	6	A1X	1	E
TDDD14	Formal Languages and Automata Theory	6	G2X	2	E
TDDD17	Information Security, Second Course	6*	A1X	4	E
TDDD27	Advanced Web Programming	6	A1X	3	E
TDDD29	IT-Project Management	6	A1X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E
TDDD48	Automated Planning	6	A1X	1	E

Course code	Course name	Credits	Level	Timetable module	ECV
TDDD95	Algorithmic Problem Solving	6*	A1X	4	E
TDDE05	AI Robotics	6*	A1X	4	E
TDDE06	Large-Scale Software Development - Structures and Processes	6*	A1X	4	E
TDDE07	Bayesian Learning	6	A1X	2	E
TDEI35	Strategy and Management Control	6	A1X	2	E
TEIE44	Intellectual Property Rights	4	G1X	1	E
TEIE95	Civil and Commercial Law	4	G1X	2	E
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	E
TGTU76	Philosophy of Science	6	G1X	4	E
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
TNM079	Modelling and Animation	6	A1X	2	E
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSEK06	VLSI Design	12*	A1X	4	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSKS14	Multiple Antenna Communications	6	A1X	2	E
TSRT14	Sensor Fusion	6	A1X	2	E
TSTE06	Digital Filters	6	A1X	3	E
TSTE87	Application-Specific Integrated Circuits	6	A1X	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
TDDD41	Data Mining - Clustering and Association Analysis	6	A1X	3	E
TDDD95	Algorithmic Problem Solving	6*	A1X	1	E
TDDE05	AI Robotics	6*	A1X	4	E
TDDE09	Natural Language Processing	6	A1X	2	E
TSRT07	Industrial Control Systems	6	A1X	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*	A1X	4	E
TDDE07	Bayesian Learning	6	A1X	2	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1X	2	E

*Specialisation: Biomedical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TBMI03	Medical Information Models and Ontologies	6	A1X	4	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TBMT02	Medical Imaging	6	A1F	3	E
TBMT09	Physiological Pressures and Flows	6	A1X	1	E
<b>Period 2</b>					
TBME08	Biomedical Modeling and Simulation	6	A1X	3	E
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	E

*Specialisation: Communication*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSBK08	Data Compression	6	A1X	2	E
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E
TSKS13	Wireless Communications	6	A1F	4	E
<b>Period 2</b>					
TSBK02	Image and Audio Coding	6	A1X	4	E
TSKS14	Multiple Antenna Communications	6	A1X	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: Computer Systems Architecture*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDA69	Data and Program Structures	6*	G2X	3	E
TDDD25	Distributed Systems	6	A1X	2	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD97	Web Programming	6	G2X	3	E
TDS07	System Design and Methodology	6	A1X	1	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
TDDD05	Component Based Software	6	A1X	1	E
TDDD14	Formal Languages and Automata Theory	6	G2X	2	E
TDDD27	Advanced Web Programming	6	A1X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E

*Specialisation: Electronics*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	C
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E
TSEK06	VLSI Design	12*	A1X	4	E
TSTE14	Analog Filters	6	A1X	2	E
TSTE93	Analog Circuits	6*	G2X	1	E
<b>Period 2</b>					
TSTE87	Application-Specific Integrated Circuits	6	A1X	2	C
TSEK06	VLSI Design	12*	A1X	4	E
TSTE06	Digital Filters	6	A1X	3	E
TSTE93	Analog Circuits	6*	G2X	1	E



*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
<b>Period 2</b>					
TDDD05	Component Based Software	6	A1X	1	E
TDDE06	Large-Scale Software Development - Structures and Processes	6*	A1X	4	E

*Specialisation: Programming and Algorithms*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDA69	Data and Program Structures	6*	G2X	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
TDDD05	Component Based Software	6	A1X	1	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

*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
<b>Period 2</b>					
TDDD17	Information Security, Second Course	6*	A1X	4	C
TDDD27	Advanced Web Programming	6	A1X	3	E
TDDD38	Advanced Programming in C++	6*	A1X	-	E

*Specialisation: Signal and Image Processing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TBMT02	Medical Imaging	6	A1F	3	E
TNM048	Information Visualisation	6	A1X	3	E
TSBB15	Computer Vision	12*	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
TSBK08	Data Compression	6	A1X	2	E
<b>Period 2</b>					
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E
TSRT14	Sensor Fusion	6	A1X	2	E

*Specialisation: System-on-Chip*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDS07	System Design and Methodology	6	A1X	1	C
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E
TSEK06	VLSI Design	12*	A1X	4	E
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	E
TSTE14	Analog Filters	6	A1X	2	E
<b>Period 2</b>					
TEIE44	Intellectual Property Rights	4	G1X	1	E
TSEK06	VLSI Design	12*	A1X	4	E
TSTE06	Digital Filters	6	A1X	3	E
TSTE87	Application-Specific Integrated Circuits	6	A1X	2	E

*Specialisation: Systems Technology*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDS07	System Design and Methodology	6	A1X	1	C
TDDD25	Distributed Systems	6	A1X	2	C/E
TSBK08	Data Compression	6	A1X	2	C/E
TSRT07	Industrial Control Systems	6	A1X	2	C/E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
<b>Period 2</b>					
TDDD05	Component Based Software	6	A1X	1	C/E
TSFS06	Diagnosis and Supervision	6	A1N	1	C/E

**Semester 9 (Autumn 2017)**

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TANA21	Scientific Computing	6	G1X	3	C/E
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	E

Course code	Course name	Credits	Level	Timetable module	ECV
TBMT36	Biomedical Optics	6	A1X	1	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	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*	A1X	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
TDS06	Computer Networks	6	G2X	1	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
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
TSBB17	Visual Object Recognition and Detection	6	A1X	2	E
TSBK03	Advanced Game Programming	6*	A1X	1	E
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	E
TSEK38	Radio Frequency Transceiver Design	6	A1X	2	E
TSIN01	Information Networks	6	A1X	3	E
TSKS05	Communication Systems, Project Course	12*	A1X	4	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1X	1	E
TSRT10	Automatic Control - Project Course	12*	A1X	4	E
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE25	Power Electronics	6	A1X	3	E
<b>Period 2</b>					
TDDD89	Scientific Method	6	A1X	3	C
TANA09	Numerical Algorithms in Computer Science	4	G2X	1	C/E

Course code	Course name	Credits	Level	Timetable module	ECV
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TBMI02	Medical Image Analysis	6	A1X	1	E
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	E
Tddb44	Compiler Construction	6	A1X	1	E
TDDC90	Software Security	6	A1X	1	E
TDDD07	Real Time Systems	6	A1X	4	E
TDDD30	Advanced Software Engineering	6	A1X	4	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	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*	A1X	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
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
TSBK03	Advanced Game Programming	6*	A1X	-	E
TSEA44	Computer Hardware - a System on Chip	6	A1F	1	E
TSIN02	Internetworking	6	A1N	1	E
TSKS05	Communication Systems, Project Course	12*	A1X	4	E
TSRT10	Automatic Control - Project Course	12*	A1X	4	E
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE26	Powergrid and Technology for Renewable Production	6	A1X	3	E
TSTE85	Low Power Electronics	6	A1X	2	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*	A1X	4	C
TDDE15	Advanced Machine Learning	6	A1X	1	E
TSBB17	Visual Object Recognition and Detection	6	A1X	2	E
TSRT62	Modelling and Simulation	6	A1X	3	E
<b>Period 2</b>					
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1X	4	C
TDDE13	Multi Agent Systems	6	A1X	1	E
TDDE16	Text Mining	6	A1X	2	E

*Specialisation: Biomedical Engineering*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	C
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TBMT36	Biomedical Optics	6	A1X	1	E
<b>Period 2</b>					
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	C
TBMI02	Medical Image Analysis	6	A1X	1	E

*Specialisation: Communication*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSIN01	Information Networks	6	A1X	3	C
TSEK38	Radio Frequency Transceiver Design	6	A1X	2	E
TSIT03	Cryptology	6	A1X	2	E
TSKS05	Communication Systems, Project Course	12*	A1X	4	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1X	1	E
<b>Period 2</b>					
TSKS05	Communication Systems, Project Course	12*	A1X	4	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: Computer Systems Architecture*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDD43	Advanced Data Models and Databases	6*	A1X	2	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1X	4	E
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSIT03	Cryptography	6	A1X	2	E
TSKS01	Digital Communication	6*	A1X	4	E
<b>Period 2</b>					
Tddb44	Compiler Construction	6	A1X	1	E
TDDC90	Software Security	6	A1X	1	E
TDDD37	Database Technology	6	G2X	1	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1X	4	E
TSIN02	Internetworking	6	A1N	1	E
TSKS01	Digital Communication	6*	A1X	4	E

*Specialisation: Electronics*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	E
TSEK38	Radio Frequency Transceiver Design	6	A1X	2	E
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE25	Power Electronics	6	A1X	3	E
<b>Period 2</b>					
TSEA44	Computer Hardware - a System on Chip	6	A1F	1	E
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE26	Powergrid and Technology for Renewable Production	6	A1X	3	E
TSTE85	Low Power Electronics	6	A1X	2	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
TDD884	Design Patterns	6	A1X	4	E
TDDD38	Advanced Programming in C++	6*	A1X	2	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	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
TDDD30	Advanced Software Engineering	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>					
TDDD30	Advanced Software Engineering	6	A1X	4	E
TDDE14	Large-Scale Software Development: Contributions and Evolution	6*	A1X	4	E

*Specialisation: Programming and Algorithms*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
Tddb84	Design Patterns	6	A1X	4	E
TDDD08	Logic Programming	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>					
Tddb84	Design Patterns	6	A1X	4	C
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
TSIT03	Cryptology	6	A1X	2	E
<b>Period 2</b>					
TDDC90	Software Security	6	A1X	1	C
TDDD30	Advanced Software Engineering	6	A1X	4	E
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

*Specialisation: Signal and Image Processing*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TNM067	Scientific Visualization	6	A1X	3	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
TSBB17	Visual Object Recognition and Detection	6	A1X	2	E
TSBK03	Advanced Game Programming	6*	A1X	1	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
<b>Period 2</b>					
TBMI02	Medical Image Analysis	6	A1X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TNM086	Virtual Reality Techniques	6	A1X	2	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
TSBK03	Advanced Game Programming	6*	A1X	-	E

*Specialisation: System-on-Chip*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	E
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
<b>Period 2</b>					
Tddb44	Compiler Construction	6	A1X	1	E
TSEA44	Computer Hardware - a System on Chip	6	A1F	1	E
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE85	Low Power Electronics	6	A1X	2	E

*Specialisation: Systems Technology*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TSRT62	Modelling and Simulation	6	A1X	3	C/E
Tddb84	Design Patterns	6	A1X	4	E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	E
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1X	4	E
<b>Period 2</b>					
Tddb44	Compiler Construction	6	A1X	1	C/E
TDDD43	Advanced Data Models and Databases	6*	A1X	2	E
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1X	4	E

**Semester 10 (Spring 2018)**

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