

Computer Science and Engineering

Study Year 1, Academic Year 2014/15 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	14/15	14/15	14/15	14/15
								sp1	sp2	sp3	sp4
EDA070	3	G1	-	S	Computer Introduction		KS KE U W T	1			
EDAA05	8	G1	-	S	Computers in Systems		KS KE U W T	1	2		
EDA016	7.5	G1	-	S	Programming, First Course		KS KE U W T	1	2		
EMAA01	15	G1	-	S	Calculus in One Variable		KS KE U W T	1	2	3	
ETIA01	8	G1	-	S	Electronics		KS KE U W T		2	3	4
EDAA01	7.5	G1	-	S	Programming - Second Course		KS KE U W T			3	
EMA420	6	G1	-	S	Linear Algebra		KS KE U W T				4

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links								
							14/15 sp1	14/15 sp2	14/15 sp3	14/15 sp4					
ETSA01	5	G1	-	S	Software Engineering Process - Methodology		KS	KE	U	W	T				4

Study Year 2, Academic Year 2015/16 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	15/16	15/16	15/16	15/16
								sp1	sp2	sp3	sp4
ETS052	4.5	G2	-	S	Computer Communication		KS KE U W T	1			
EIT020	9	G2	-	S	Design of Digital Circuits – A Systems Approach		KS KE U W T	1	2		
EDAF10	7.5	G2	-	S	Object-oriented Modeling and Discrete Structures		KS KE U W T	1	2		
EMA430	6	G1	-	S	Calculus in Several Variables		KS KE U W T		2		
EDA260	6	G2	-	S	Software Development in Teams – Project		KS KE U W T		2	3	
EMAF10	5	G2	-	S	Applied Mathematics - Linear systems	X	KS KE U W T			3	
EIT070	6	G2	-	S	Computer Organization		KS KE U W T			3	

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links					
							15/16 sp1	15/16 sp2	15/16 sp3	15/16 sp4		
EDAF05	5	G2	X	E1	Algorithms, Data Structures and Complexity		KS	KE	U	W	T	4
ETI265	7.5	G1	X	S	Signal Processing in Multimedia	X	KS	KE	U	W	T	4
ETSA05	4	G1	-	S	Software Engineering Process - Soft Issues		KS	KE	U	W	T	4

[EMAF10](#) Applied Mathematics - Linear systems: *Can be replaced by [EMAF01](#) and [EMAF05](#) together. Only one of the courses [EMAF10](#) and [EMAF05](#) may be included in a degree.*

[ETI265](#) Signal Processing in Multimedia: *Students admitted to the China specialisation takes this course in the autumn of year three, in China.*

Study Year 2, Academic Year 2015/16 (Elective Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links							
							15/16 sp1	15/16 sp2	15/16 sp3	15/16 sp4				
EMAF01	7	G2	-	S	Mathematics - Analytic Functions	X	KS	KE	U	W	T		3	
EMAF05	7	G2	-	S	Mathematics - Systems and Transforms	X	KS	KE	U	W	T			4

[EMAF01](#) Mathematics - Analytic Functions: *Can together with [EMAF05](#) replace [EMAF10](#). Can also be taken as an elective course in the 4th or 5th year.*

[EMAF05](#) Mathematics - Systems and Transforms: *Can together with [EMAF01](#) replace [EMAF10](#). Only one of the courses [EMAF05](#) and [EMAF10](#) may be included in a degree.*

Study Year 3, Academic Year 2016/17 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	16/17	16/17	16/17	16/17
								sp1	sp2	sp3	sp4
ERT010	7.5	G2	-	S	Automatic Control, Basic Course		KS KE U W T	1			
EDA040	6	G2	X	E1	Concurrent Programming		KS KE U W T	1	2		
EMS012	9	G2	-	S	Mathematical Statistics, Basic Course		KS KE U W T	1	2		
TEK210	4.5	G1	-	S	Cognition		KS KE U W T		2		
FAFF25	11	G2	-	S	Physics		KS KE U W T		2	3	
EIT060	7.5	G1	X	S	Computer Security		KS KE U W T			3	
EMN011	6	G2	X	E1	Numerical Analysis		KS KE U W T				4

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links					
							16/17 sp1	16/17 sp2	16/17 sp3	16/17 sp4		
ETS075	4.5	G2	X	S	Queuing System		KS	KE	U	W	T	4
ETSF01	4	G2	-	S	Software Engineering Process - Economy and Quality		KS	KE	U	W	T	4

Specialisation bg - Images and Computer Graphics

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1	sp2	sp3	sp4
EDAF80	7.5	G2	V	4 - 17/18	4	X	E	Computer Graphics		KS KE U W T	1			
EMAN20	7.5	A	V	4 - 17/18	4	X	E1	Image Analysis		KS KE U W T	1			
MAMN25	7.5	A	V	4 - 17/18	4	-	S	Interaction Design		KS KE U W T	1			
FMSF10	7.5	G2	V	4 - 17/18	4	X	E1	Stationary Stochastic Processes		KS KE U W T	1			
EMAN70	6	A	V	4 - 17/18	4	X	E1	Matrix Theory		KS KE U W T	1	2		
EDAN35	7.5	A	V	4 - 17/18	4	X	E	High Performance Computer Graphics		KS KE U W T		2		
EMAN45	7.5	A	V	4 - 17/18	4	-	E	Machine Learning		KS KE U W T		2		

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
											sp1	sp2	sp3	sp4
EAFF20	7.5	G2	V		4 - 17/18	4	X	E	Multi-spectral Imaging	KS KE U W T		2		
EMAN40	3	A	V		4 - 17/18	4	X	E1	Project in Applied Mathematics	KS KE U W T		2		
EMAN85	6	A	V		4 - 17/18	4	X	E1	Computer Vision	KS KE U W T			3	
MAMF45	7.5	G2	V		4 - 17/18	4	-	S	Virtual Reality in Theory and Practice	KS KE U W T			3	4
MAMN01	7.5	A	V		4 - 17/18	4	-	S	Advanced Interaction Design	KS KE U T				4
EMAN40	3	A	V		4 - 17/18	4	X	E1	Project in Applied Mathematics	KS KE U W T				4
ETIF10	7.5	G2	V		4 - 17/18	4	X	E1	Signal Processing - Design and Implementation	KS KE U W T				4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links								
										sp1	sp2	sp3	sp4					
EMSN20	7.5	A	V	5 - 18/19	4	X	E	Spatial Statistics with Image Analysis		KS	KE	U	W	T	2			

Specialisation dpd - Design of Processors and Digital Systems

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
ETIN20	7.5	A	V	4 - 17/18	4	X	E	Digital IC-design		KS KE U W T	1			
EITF35	7.5	G2	V	4 - 17/18	4	X	E	Introduction to Structured VLSI Design		KS KE U W T	1			
ETIN70	7.5	A	V	4 - 17/18	4	X	E1	Modern Electronics		KS KE U W T	1			
EITF80	9	G2	V	4 - 17/18	4	X	E	Electromagnetic Fields		KS KE U W T	1	2		
EITF20	7.5	G2	V	4 - 17/18	4	X	E1	Computer Architecture		KS KE U W T		2		
EITF40	7.5	G2	V	4 - 17/18	4	X	E1	Digital and Analogue Projects		KS KE U W T			3	
ETIN45	7.5	A	V	4 - 17/18	4	X	E	DSP-design		KS KE U W T			3	

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
ESSE10	5	G2	V	4 - 17/18	4	-	S	Electrical Measurements		KS KE U W T			3	
ETIN35	7.5	A	V	4 - 17/18	4	X	E	IC-project 1		KS KE U W T			3	4
EDAN15	7.5	A	V	4 - 17/18	4	X	E	Design of Embedded Systems		KS KE U W T				4
ETIN40	7.5	A	V	5 - 18/19	4	X	E	IC-project 2		KS KE U W T	1	2		
ETIN55	7.5	A	V	5 - 18/19	4	X	E	Integrated A/D and D/A Converters		KS KE U W T		2		

Specialisation is - Embedded Systems

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
												sp1	sp2	sp3	sp4
EDAA25	3	G1	V		4 - 17/18	4	X	S	C Programming		KS KE U W T	1			
EDAN65	7.5	A	V		4 - 17/18	4	X	E1	Compilers	X	KS KE U W T	1			
EITE35	7.5	G2	V		4 - 17/18	4	X	E	Introduction to Structured VLSI Design		KS KE U W T	1			
EIEF01	10	G2	V		4 - 17/18	4	X	E1	Applied Mechatronics		KS KE U W T	1	2		
EITE20	7.5	G2	V		4 - 17/18	4	X	E1	Computer Architecture		KS KE U W T		2		
ERTN40	7.5	A	V		4 - 17/18	4	X	E1	Project in Automatic Control		KS KE U W T		2		
ETIN80	7.5	A	V		4 - 17/18	4	X	E1	Algorithms in Signal Processors – Project Course		KS KE U W T			3	

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4			
EITN30	7.5	A	V	4 - 17/18	4	-	S	Internet Inside		KS KE U W T			3	
ERTN01	10	A	V	4 - 17/18	4	X	E	Real-Time Systems		KS KE U W T			3	4
EDAN15	7.5	A	V	4 - 17/18	4	X	E	Design of Embedded Systems		KS KE U W T				4
EDAE35	7.5	G2	V	4 - 17/18	4	X	S	Operating Systems		KS KE U W T				4
EDAN75	7.5	A	V	5 - 18/19	4	X	S	Optimising Compilers	X	KS KE U W T	1			
EDAN26	7.5	A	V	5 - 18/19	4	-	S	Multicore Programming	X	KS KE U W T	Course on hold			

[EDAN65](#) Compilers: Replaces [EDA180](#) Compiler Construction

[EDAN75](#) Optimising Compilers: The course is offered every other academic year and will be given in 2018/19, 2020/21.

[EDAN26](#) Multicore Programming: The course is offered every other academic year and will next be offered in 2019/20.

Specialisation ks - Communication Systems

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
												sp1	sp2	sp3	sp4	
EITN50	7.5	A	V		4 - 17/18	4	X	E	Advanced Computer Security	X	KS KE U W T	1				
EITG05	7.5	G2	V		4 - 17/18	4	X	E	Digital Communications		KS KE U W T	1				
EMSE15	7.5	G2	V		4 - 17/18	4	X	E1	Markov Processes		KS KE U W T	1				
EITF05	4	G2	V		4 - 17/18	4	-	S	Web Security		KS KE U W T	1				
EITN41	7.5	A	V		4 - 17/18	4	-	S	Advanced Web Security		KS KE U W T		2			
EDIN01	7.5	A	V		4 - 17/18	4	X	E1	Cryptography		KS KE U W T		2			
ETTN01	7.5	A	V		4 - 17/18	4	X	E	Digital Communications, Advanced Course		KS KE U W T		2			

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
			V								sp1	sp2	sp3	sp4
ETSF10	7.5	G2	V	4 - 17/18	4	X	E1	Internet Protocols		KS KE U W T		2		
EMAN10	7.5	A	V	4 - 17/18	4	X	E1	Algebraic Structures	X	KS KE U W T			3	
EITN30	7.5	A	V	4 - 17/18	4	-	S	Internet Inside		KS KE U W T			3	
ETSN10	7.5	A	V	4 - 17/18	4	X	E	Network Architecture and Performance		KS KE U W T			3	
EITN45	7.5	A	V	4 - 17/18	4	X	E	Information Theory		KS KE U W T				4
EITN95	7.5	A	V	4 - 17/18	4	X	E1	Simulation		KS KE U W T				4
EITN70	7.5	A	V	5 - 18/19	4	X	E	Channel Coding for Reliable Communication		KS KE U W T		2		

[EITN50](#) Advanced Computer Security: *Only one of the courses [EITN50](#) and [EIT015](#) may be included in a degree.*

[EMAN10](#) Algebraic Structures: *The date and time of the exam is announced by the course lecturer. The course is to be studied together with MATM11, which is given by the division for Mathematics of the Faculty of Science.*

Specialisation pv - Software

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
											sp1	sp2	sp3	sp4	
EDAN55	7.5	A	V	4 - 17/18	4	X	E	Advanced Algorithms		KS KE U W T	1				
EDAA25	3	G1	V	4 - 17/18	4	X	S	C Programming		KS KE U W T	1				
EDAN65	7.5	A	V	4 - 17/18	4	X	E1	Compilers	X	KS KE U W T	1				
EDAN20	7.5	A	V	4 - 17/18	4	X	E	Language Technology		KS KE U W T	1				
EDAN01	7.5	A	V	4 - 17/18	4	X	E	Constraint Programming		KS KE U W T		2			
EMAA25	7.5	G1	V	4 - 17/18	4	X	E1	Discrete Mathematics		KS KE U W T		2			
EMAN45	7.5	A	V	4 - 17/18	4	-	E	Machine Learning		KS KE U W T		2			

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
											sp1	sp2	sp3	sp4
EDAN70	7.5	A	V		4 - 17/18	4	X	E1	Project in Computer Science	KS KE U W T		2		
EDAF70	7.5	G2	V		4 - 17/18	4	X	E	Applied Artificial Intelligence	KS KE U W T			3	
EMAE35	6	G2	V		4 - 17/18	4	X	E1	Linear and Combinatorial Optimization	KS KE U W T			3	
EDAF50	7.5	G2	V		4 - 17/18	4	X	S	C++ Programming	KS KE U W T			3	4
EDAF75	7.5	G2	V		4 - 17/18	4	X	S	Database Technology	KS KE U W T			3	4
EDAF15	5	G2	V		4 - 17/18	4	-	S	Algorithm Implementation	KS KE U W T				4
EMAA25	7.5	G1	V		4 - 17/18	4	X	E1	Discrete Mathematics	KS KE U W T				4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4			
EDAN40	7.5	A	V	4 - 17/18	2	X	E	Functional Programming	X	KS KE U W T				4
EDAN70	7.5	A	V	4 - 17/18	4	X	E1	Project in Computer Science		KS KE U W T				4
EDAN75	7.5	A	V	5 - 18/19	4	X	S	Optimising Compilers	X	KS KE U W T	1			
EDAN26	7.5	A	V	5 - 18/19	4	-	S	Multicore Programming	X	KS KE U W T	Course on hold			

[EDAN65](#) Compilers: Replaces [EDA180](#) Compiler Construction

[EDAN40](#) Functional Programming: Part of the specialisation *pv* for students admitted autumn 2014 and earlier. Alternate compulsory with [EDAF40](#) for students admitted autumn 2015 and later.

[EDAN75](#) Optimising Compilers: The course is offered every other academic year and will be given in 2018/19, 2020/21.

[EDAN26](#) Multicore Programming: The course is offered every other academic year and will next be offered in 2019/20.

Specialisation se - Software Engineering

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
												sp1	sp2	sp3	sp4	
EITN50	7.5	A	V		4 - 17/18	4	X	E	Advanced Computer Security	X	KS KE U W T	1				
MAMN25	7.5	A	V		4 - 17/18	4	-	S	Interaction Design		KS KE U W T	1				
MIOA12	6	G1	V		4 - 17/18	4	-	S	Managerial Economics, Basic Course	X	KS KE U W T	1				
ETSN05	7.5	A	V		4 - 17/18	4	-	S	Software Development for Large Systems		KS KE U W T	1				
EDAN10	7.5	A	V		4 - 17/18	4	X	E1	Configuration Management		KS KE U W T		2			
EDAN01	7.5	A	V		4 - 17/18	4	X	E	Constraint Programming		KS KE U W T		2			
MIOA12	6	G1	V		4 - 17/18	4	-	S	Managerial Economics, Basic Course	X	KS KE U W T		2			

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
											sp1	sp2	sp3	sp4	
ETSN15	7.5	A	V	4 - 17/18	4	X	S	Requirements Engineering		KS KE U W T		2			
EDAN80	9	A	V	4 - 17/18	4	-	S	Coaching of Programming Teams		KS KE U W T		2	3		
ETSN20	7.5	A	V	4 - 17/18	4	X	E	Software Testing		KS KE U W T				3	
EDAF50	7.5	G2	V	4 - 17/18	4	X	S	C++ Programming		KS KE U W T				3	4
EDAF75	7.5	G2	V	4 - 17/18	4	X	S	Database Technology		KS KE U W T				3	4
FRTN01	10	A	V	4 - 17/18	4	X	E	Real-Time Systems		KS KE U W T				3	4
MIOF20	6	G2	V	4 - 17/18	4	-	S	Management Organization		KS KE U W T					4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
										sp1	sp2	sp3	sp4
MAMF50	7.5	G2	V	5 - 18/19	4	-	S	Usability Evaluation	KS KE U W T	1			

[EITN50](#) Advanced Computer Security: *Only one of the courses [EITN50](#) and [EIT015](#) may be included in a degree.*

[MIOA12](#) Managerial Economics, Basic Course: *Only one of the courses [MIO012](#), [MIOA12](#) and [MIOA01](#) may be included in a degree.*

Specialisation ssr - Systems, Signals and Control

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
										sp1	sp2	sp3	sp4
EITG05	7.5	G2	V	4 - 17/18	4	X	E	Digital Communications	KS KE U W T	1			
ERTN10	7.5	A	V	4 - 17/18	4	X	E1	Multivariable Control	KS KE U W T	1			
EITN55	7.5	A	V	4 - 17/18	4	X	E1	Signal Separation - Independent Components	KS KE U W T	1			
FMSF10	7.5	G2	V	4 - 17/18	4	X	E1	Stationary Stochastic Processes	KS KE U W T	1			
EMAN70	6	A	V	4 - 17/18	4	X	E1	Matrix Theory	KS KE U W T	1	2		
ETTNO1	7.5	A	V	4 - 17/18	4	X	E	Digital Communications, Advanced Course	KS KE U W T		2		
FMSN45	7.5	A	V	4 - 17/18	4	X	E1	Mathematical Statistics, Time Series Analysis	KS KE U W T		2		

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
EITN60	7.5	A	V	4 - 17/18	4	X	E	Optimum and Adaptive Signal Processing		KS KE U W T		2		
ERTN40	7.5	A	V	4 - 17/18	4	X	E1	Project in Automatic Control		KS KE U W T		2		
ETIN80	7.5	A	V	4 - 17/18	4	X	E1	Algorithms in Signal Processors – Project Course		KS KE U W T			3	
FRTN15	7.5	A	V	4 - 17/18	4	X	E1	Predictive Control		KS KE U W T			3	4
FRTN01	10	A	V	4 - 17/18	4	X	E	Real-Time Systems		KS KE U W T			3	4
BMEN01	7.5	A	V	4 - 17/18	4	X	E1	Biomedical Signal Processing		KS KE U W T				4
ETIF10	7.5	G2	V	4 - 17/18	4	X	E1	Signal Processing - Design and Implementation		KS KE U W T				4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4	
ERTN35	7.5	A	V	5 - 18/19	4	X	E1	System Identification		KS	KE	U	W	T

Elective Courses - D

Course Code	Credits	Cycle	Language			S.Ex. stud.	Course Name	Footnote	Links	sp1 sp2 sp3 sp4			
			Year	From year						sp1	sp2	sp3	sp4
EXTA10	3	G1	2 - 15/16	2	-	S	Introduction to Chinese Society, Culture and Language	X	KS KE U T	1	2		
EXTA35	15	G1	2 - 15/16	2	-	S	Introductory Course in Chinese for Engineers	X	KS KE U T			3	4
EMNN25	7.5	A	4 - 17/18	4	X	E1	Advanced Course in Numerical Algorithms with Python/SciPy		KS KE U W T	1			
EITE50	7.5	G2	4 - 17/18	4	X	E	An Introduction to Wireless Systems		KS KE U W T	1			
MMKF15	7.5	G2	4 - 17/18	4	X	E	Applied Robotics		KS KE U W T	1			
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course		KS KE U W	1			
EMIN25	7.5	A	4 - 17/18	4	-	S	Energy Systems Analysis: Energy, Environment and Natural Resources		KS KE U W T	1	2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
EMAN15	7.5	A	4 - 17/18	4	X	E	Nonlinear Dynamical Systems		KS KE U W T	1	2		
EIEN30	7.5	A	4 - 17/18	4	X	E1	Project in Industrial Electrical Engineering and Automation		KS KE U W T	1	2		
TNSF05	7.5	G2	4 - 17/18	4	-	S	Rehabilitation Engineering		KS KE U W T	1	2		
MAMN40	7.5	A	4 - 17/18	4	-	S	Working Environment, Project		KS KE U W T	1	2		
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course		KS KE U W		2		
EXTQ40	7.5	A	4 - 17/18	4	X	E1	Introduction to Artificial Neural Networks and Deep Learning	X	KS KE U W T		2		
EMAN30	7.5	A	4 - 17/18	4	X	E1	Medical Image Analysis		KS KE U W T		2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
ERTN05	7.5	A	4 - 17/18	4	X	E1	Non-Linear Control and Servo Systems		KS KE U W T		2		
EMAN60	6	A	4 - 17/18	4	X	E1	Optimization	X	KS KE U W T		2		
EMAN35	3	A	4 - 17/18	4	X	E1	Project in Mathematics		KS KE U W T		2		
MMKN30	7.5	A	4 - 17/18	4	X	E1	Service Robotics		KS KE U W T		2		
EIEF45	7.5	G2	4 - 17/18	4	X	E1	Automation		KS KE U W T			3	
ERTF15	3	G2	4 - 17/18	4	-	S	Control Theory		KS KE U W T				3
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course		KS KE U W				3

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
									sp1	sp2	sp3	sp4		
MIOF25	6	G2	4 - 17/18	4	-	S	Managerial Economics, Advanced Course		KS	KE	U	W	T	3
MIOA01	9	G1	4 - 17/18	4	-	S	Managerial Economics, Basic Course	X	KS	KE	U	W	T	3
EMAN65	6	A	4 - 17/18	4	-	S	Mathematical Structures		KS	KE	U	W	T	3
EMSN50	7.5	A	4 - 17/18	4	X	E1	Monte Carlo and Empirical Methods for Stochastic Inference		KS	KE	U	W	T	3
EDAF65	7.5	G2	4 - 17/18	4	-	S	Network Programming		KS	KE	U	W	T	3
ETIA10	7.5	G1	4 - 17/18	4	X	E	Patent and Intellectual Property Rights		KS	KE	U	W	T	3
EMNN05	7.5	A	4 - 17/18	4	X	E1	Simulation Tools		KS	KE	U	W	T	3

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links						
									sp1	sp2	sp3	sp4			
EMSN35	7.5	A	4 - 17/18	4	X	E	Stationary and Non-stationary Spectral Analysis	X	KS	KE	U	W	T	3	
EXTG45	7.5	G2	4 - 17/18	4	-	S	Technology Supported Communication		KS	KE	U	W	T	3	
EITN85	7.5	A	4 - 17/18	4	X	E	Wireless Communication Channels		KS	KE	U	W	T	3	
EMAN55	7.5	A	4 - 17/18	4	-	S	Applied Mathematics		KS	KE	U	W	T	3	4
EMAN25	7.5	A	4 - 17/18	4	X	E1	Calculus of Variations		KS	KE	U	W	T	3	4
EMIN20	7.5	A	4 - 17/18	4	-	S	Energy Systems Analysis: Renewable Sources of Energy		KS	KE	U	W	T	3	4
EITA05	4.5	G1	4 - 17/18	1	-	S	History of Technology		KS	KE	U	W	T	3	4

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
									sp1	sp2	sp3	sp4
EIEN01	10	A	4 - 17/18	4	X	E1	Mechatronics, Industrial Product Design	KS KE U W T			3	4
EIEN30	7.5	A	4 - 17/18	4	X	E1	Project in Industrial Electrical Engineering and Automation	KS KE U W T			3	4
TNSE10	7.5	G2	4 - 17/18	4	X	E1	Universal Design, Theory and Project	KS KE U W T			3	4
MAMN40	7.5	A	4 - 17/18	4	-	S	Working Environment, Project	KS KE U W T			3	4
EIEN35	7.5	A	4 - 17/18	4	X	E1	Automation for Complex Systems	KS KE U W T				4
FMSF65	7.5	G2	4 - 17/18	4	X	E1	Design of Experiments	KS KE U W T				4
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course	KS KE U W				4

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
									sp1	sp2	sp3	sp4		
KIIF01	7.5	G2	4 - 17/18	4	X	E1	Industrial Environmental Management		KS	KE	U	W	T	4
EMSN30	7.5	A	4 - 17/18	4	X	E1	Linear and Logistic Regression		KS	KE	U	W	T	4
MAMN30	7.5	A	4 - 17/18	4	-	S	Management, Work Organisation and Project Management		KS	KE	U	W	T	4
MIOF25	6	G2	4 - 17/18	4	-	S	Managerial Economics, Advanced Course		KS	KE	U	W	T	4
FAFN35	7.5	A	4 - 17/18	4	X	E	Medical Optics	X	KS	KE	U	W	T	4
EEMN01	7.5	A	4 - 17/18	4	X	E1	Micro Sensors	X	KS	KE	U	W	T	4
FRTN30	7.5	A	4 - 17/18	4	X	E	Network Dynamics		KS	KE	U	T		4

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
									sp1	sp2	sp3	sp4		
ESSE20	4.5	G2	4 - 17/18	4	-	S	Physics of Devices		KS	KE	U	W	T	4
EMAN35	3	A	4 - 17/18	4	X	E1	Project in Mathematics		KS	KE	U	W	T	4
EMSN55	7.5	A	4 - 17/18	4	X	E1	Statistical Modelling of Extreme Values		KS	KE	U	W	T	4
EITN75	7.5	A	4 - 17/18	4	X	E	Wireless System Design Principles		KS	KE	U	W	T	4
EITN35	7.5	A	5 - 18/19	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS	KE	U	W	T	1
MAMN10	7.5	A	5 - 18/19	4	-	S	Interaction 1: Neuro Modelling, Cognitive Robotics and Agents	X	KS	KE	U	W	T	1
ETT15	7.5	A	5 - 18/19	4	X	E	Modern Wireless Systems - LTE and Beyond		KS	KE	U	W	T	1

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
EITN10	7.5	A	5 - 18/19	4	X	E	Multiple Antenna Systems		KS KE U W T	1			
MION25	7.5	A	5 - 18/19	4	-	S	Technology Strategy		KS KE U W T	1			
BMEF10	7.5	G2	5 - 18/19	4	-	S	Transducer Technology		KS KE U W T	1			
EITN21	7.5	A	5 - 18/19	4	X	E	Project in Wireless Communication		KS KE U W T	1	2		
EITN35	7.5	A	5 - 18/19	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T		2		
EEMF05	7.5	G2	5 - 18/19	4	X	E1	Biomedical Measurements	X	KS KE U W T		2		
EEMN10	7.5	A	5 - 18/19	4	X	E1	Computerised Measurement Systems		KS KE U W T		2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
EEMN05	7.5	A	5 - 18/19	4	X	E1	EMC, Noise and Noise Reduction		KS KE U W T		2		
MAMN15	7.5	A	5 - 18/19	4	-	S	Interaction 2: Virtuality and Cognitive Modelling	X	KS KE U W T		2		
MIOE15	7.5	G2	5 - 18/19	4	-	S	Marketing		KS KE U W T		2		
EITN35	7.5	A	5 - 18/19	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T			3	
EEMN15	7.5	A	5 - 18/19	4	X	E1	Ultrasound Physics and Technology	X	KS KE U W T			3	
EITN35	7.5	A	5 - 18/19	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T				4

[EXTA10](#) Introduction to Chinese Society, Culture and Language: *Compulsory for students admitted to the China specialisation.*

[EXTA35](#) Introductory Course in Chinese for Engineers: *Compulsory for students admitted to the China specialisation.*

[EXTQ40](#) Introduction to Artificial Neural Networks and Deep Learning: *The course is offered every other academic year and will be given in 2017/18, 2019/20.*

[EMAN60](#) Optimization: *Written examination before Christmas so that exchange students may participate.*

[MIOA01](#) Managerial Economics, Basic Course: *Only one of the courses [MIO012](#), [MIOA12](#) and [MIOA01](#) may be included in a degree.*

[FMSN35](#) Stationary and Non-stationary Spectral Analysis: *he course is offered every other academic year and will be given in 2017/18, 2019/20.*

[FAFN35](#) Medical Optics: *Examination for higher grade after agreement with the course coordinator.*

[EEMN01](#) Micro Sensors: *Re-examination set by agreement*

[EITN35](#) Advanced Course in Electrical and Information Technology: *The course starts only after agreement with the department. The course is not linked to any specific study period. The information on hours depends on the course running over a study period. Individual study plans are to be set up and approved.*

[MAMN10](#) Interaction 1: Neuro Modelling, Cognitive Robotics and Agents: *The course is offered every other academic year and will be given in 2018/19, 2020/21.*

[EEMF05](#) Biomedical Measurements: *Reexam date to be set by agreement.*

[MAMN15](#) Interaction 2: Virtuality and Cognitive Modelling: *The course is offered every other academic year and will be given in 2018/19, 2020/21.*

[EEMN15](#) Ultrasound Physics and Technology: *Re-examination set by agreement.*

Externally Elective Courses - D

Course Code	Credits	Cycle	Language			S.Ex. stud.	Course Name	Footnote	Links				
			Year	From year						sp1	sp2	sp3	sp4
EXTF60	15	G2	3 - 16/17	3	-	E	Introductory Course in Chinese for Engineers, Part 2	X	KS KE U W T	1	2		
GEMA20	7.5	G1	4 - 17/18	1	-	E	English for Engineers	X	KS KE U W T	1	2		
GEMA25	7.5	G1	4 - 17/18	1	-	S	German for Engineers	X	KS KE U W T	1	2		
GEMA60	7.5	G1	4 - 17/18	1	-	S	Law for Engineers, Introductory Course in Business Law	X	KS KE U W T	1	2		
GEMA70	15	G1	4 - 17/18	1	-	S	Japanese for Engineers	X	KS KE U W T	1	2	3	
GEMA65	7.5	G1	4 - 17/18	1	-	S	Chinese for Engineers	X	KS KE U W T			3	4
GEMA20	7.5	G1	4 - 17/18	1	-	E	English for Engineers	X	KS KE U W T			3	4

Course Code	Credits	Cycle		From year	S.Ex. stud.	Language	Course Name	Footnote	Links								
		Year							sp1	sp2	sp3	sp4					
GEMA01	7.5	G1	4 - 17/18	1	-	S	French for Engineers: Language, Culture and Society, First Course	X	KS	KE	U	W	T			3	4

[EXTF60](#) Introductory Course in Chinese for Engineers, Part 2: [EXTF60](#) counts as an external elective course in the degree requirements for students admitted autumn 2011 and later.

[GEMA20](#) English for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA25](#) German for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA60](#) Law for Engineers, Introductory Course in Business Law: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA70](#) Japanese for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA65](#) Chinese for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA01](#) French for Engineers: Language, Culture and Society, First Course: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

Bachelor's Projects - D

The list contains the bachelor's projects that are included in the D programme.

Links

Course Code	Credits	Course Name	Links
FRTL01	15	Bachelor Project in Automatic Control	KS KE U
EDAL01	15	Bachelor Project in Computer Science	KS KE U W
EITL01	15	Bachelor Project in Electrical and Information Technology	KS KE U W
MAML15	15	Bachelor Project in Interaction Design	KS KE U
FMSL01	15	Bachelor Project in Mathematical Statistics	KS KE U W
FMAL01	15	Bachelor Project in Mathematics	KS KE U
FMNL01	15	Bachelor Project in Numerical Analysis	KS KE U

Degree Projects - D

The list contains the degree project courses that are included in the D programme.

Links

Course Code	Credits	Course Name	Links
FRTM01	30	Degree Project in Automatic Control	KS KE U W
EDAM05	30	Degree Project in Computer Sciences for Engineers	KS KE U W
EITM01	30	Degree Project in Electrical and Information Technology	KS KE U W
BMEM05	30	Degree Project in Electrical Measurements	KS KE U W
EIEM01	30	Degree Project in Industrial Electrical Engineering and Automation	KS KE U W
MAMM01	30	Degree Project in Interaction Design	KS KE U W
FMSM01	30	Degree Project in Mathematical Statistics for Engineers	KS KE U W
FMAM05	30	Degree Project in Mathematics for Engineers	KS KE U
FMNM01	30	Degree Project in Numerical Analysis	KS KE U W
PHYM01	30	Degree Project in Physics	KS KE U W
MIOM05	30	Degree Project in Production Management	KS KE U W
TNSM01	30	Degree Project in Rehabilitation Engineering	KS KE U W