

Computer Science and Engineering

Study Year 1, Academic Year 2015/16 (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									
								F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S					
EDA070	3	G1	-	S	Computer Introduction		KS KE U W T	16	0	10	0	50																				
EMAA05	15	G1	-	S	Calculus in One Variable		KS KE U W T	42	24	0	0	147	42	24	0	0	121															
EDA016	7.5	G1	-	S	Programming, First Course		KS KE U W T	18	14	8	0	30	28	12	12	0	80															
TEK210	4.5	G1	-	S	Cognition		KS KE U W T						24	12	0	0	80															
FAFA60	5	G1	-	S	Photonics		KS KE U W T											24	12	12	0	80										
EDAA01	7.5	G1	-	S	Programming - Second Course		KS KE U W T											26	12	14	0	148										
EDAA35	7	G1	-	S	Evaluation of Software Systems		KS KE U T											16	0	6	0	20	6	12	0	4	123					
EDAA40	5	G1	-	E	Discrete Structures in Computer Science		KS KE U T																18	4	6	0	92					
FMA420	6	G1	-	S	Linear Algebra		KS KE U W T																36	16	0	0	108					

Study Year 2, Academic Year 2016/17 (Mandatory Courses)

Course Code	Credits	Cycle	Language		Course Name	Footnote	Links	16/17				16/17				16/17				16/17								
			S.Ex. stud.					sp1	sp2	sp3	sp4	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O
FMA430	6	G1	-	S	Calculus in Several Variables		KS KE U W T	42	16	2	0	102																
EDA061	4.5	G2	-	S	Object-oriented Modelling and Design		KS KE U W T	14	6	0	0	98																
EIT020	9	G2	-	S	Design of Digital Circuits – A Systems Approach		KS KE U W T	28	28	8	0	75	14	14	16	0	55											
EITF45	7.5	G2	-	S	Computer Communication		KS KE U W T						18	16	8	2	156											
EDAF45	7.5	G2	-	S	Software Development in Teams - Project		KS KE U W T						20	0	10	0	50	2	16	48	0	54						
FMAF10	5	G2	-	S	Applied Mathematics - Linear systems	X	KS KE U W T										26	10	4	0	93							
EIT070	6	G2	-	S	Computer Organization		KS KE U W T										14	8	16	0	122							
EDAF05	5	G2	X	E1	Algorithms, Data Structures and Complexity		KS KE U W T															20	0	12	0	100		
EITA10	5	G1	-	S	Electronics		KS KE U W T															18	10	8	0	97		
EDAF40	5	G2	X	E1	Functional Programming	X	KS KE U W T															20	6	0	0	110		
ETI265	7.5	G1	X	S	Signal Processing in Multimedia	X	KS KE U W T	Course on hold																				

[FMAF10](#) Applied Mathematics - Linear systems: *Can be replaced by [FMAF01](#) and [FMAF05](#) together. Only one of the courses [FMAF10](#) and [FMAF05](#) may be included in a degree.*

[EDAF40](#) Functional Programming: *Can be replaced by [EDAN40](#).*

[ETI265](#) Signal Processing in Multimedia: *The course shall move from year 2 to year 3 and is not scheduled for the D programme in the academic year 2016/2017. Students admitted to the China specialisation takes this course in the autumn of year three, in China.*

Study Year 2, Academic Year 2016/17 (Elective Mandatory Courses)

Course Code	Credits	Cycle	Language		Course Name	Footnote	Links	16/17				16/17				16/17				16/17								
			S.Ex. stud.					sp1	sp2	sp3	sp4	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O
FMAF01	7	G2	-	E1	Mathematics - Analytic Functions	X	KS KE U W T						40	16	0	1	127											
EDAN40	7.5	A	X	E	Functional Programming	X	KS KE U W T															24	6	0	0	170		
FMAF05	7	G2	-	E1	Mathematics - Systems and Transforms	X	KS KE U W T															40	16	0	1	127		

[FMAF01](#) Mathematics - Analytic Functions: *Can together with [FMAF05](#) replace [FMAF10](#). Can also be taken as an elective course in the 4th or 5th year.*

[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.*

[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 2017/18 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	17/18																			
								sp1	sp2			sp3			sp4												
								F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
ERTF05	7.5	G2	-	S	Automatic Control, Basic Course		KS KE U W T	30	30	12	0	128															
EDAF55	6	G2	X	E1	Concurrent Programming		KS KE U W T	14	14	6	0	40	4	6	0	6	70										
FMSF45	9	G2	-	S	Mathematical Statistics, Basic Course		KS KE U W T	18	14	4	0	85	18	14	4	0	85										
ETSF25	7.5	G2	-	S	The Business of Software		KS KE U T						20	12	0	3	165										
EITA25	7.5	G1	X	S	Computer Security		KS KE U W T											28	0	12	2	160					
FMNF05	6	G2	X	E1	Numerical Analysis		KS KE U W T											48	12	0	3	100					
FMIF45	4	G2	-	S	Sustainability and Resource Use with Perspectives on Information and Communication Technology		KS KE U W T											12	2	0	0	26	12	8	0	1	46
EITF95	4.5	G2	X	S	Queuing System		KS KE U W T																14	22	8	0	76
EITA50	7.5	G1	X	S	Signal Processing in Multimedia	X	KS KE U W T																32	24	8	0	136

[EITA50](#) Signal Processing in Multimedia: *Students admitted to the China specialisation takes this course in the autumn of year three, in China.*

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									
											F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O
EDAF80	7.5	G2	V	4-18/19	4	X	E	Computer Graphics		KS KE U W T	26	0	10	0	160																	
EMAN20	7.5	A	V	4-18/19	4	X	E1	Image Analysis		KS KE U W T	32	0	0	2	166																	
MAMN25	7.5	A	V	4-18/19	4	-	S	Interaction Design		KS KE U W T	30	14	0	14	142																	
EMSE10	7.5	G2	V	4-18/19	4	X	E	Stationary Stochastic Processes		KS KE U W T	22	16	6	0	145																	
FMAN70	6	A	V	4-18/19	4	X	E1	Matrix Theory		KS KE U W T	18	10	0	1	56	12	4	0	1	58												
EDAN95	7.5	A	V	4-18/19	4	X	E	Applied Machine Learning		KS KE U W T						28	0	14	0	156												
EXTQ40	7.5	A	V	4-18/19	4	X	E1	Introduction to Artificial Neural Networks and Deep Learning		KS KE U W T						34	10	30	0	126												
FMAN40	3	A	V	4-18/19	4	X	E1	Project in Applied Mathematics		KS KE U W T						0	0	0	10	70												
FMAN85	6	A	V	4-18/19	4	X	E1	Computer Vision		KS KE U W T											26	0	0	2	132							
MAMF45	7.5	G2	V	4-18/19	4	-	S	Virtual Reality in Theory and Practice		KS KE U W T											16	16	0	0	68	4	4	0	22	70		
MAMN01	7.5	A	V	4-18/19	4	-	S	Advanced Interaction Design		KS KE U T															7	14	0	0	179			
FMAN45	7.5	A	V	4-18/19	4	-	E	Machine Learning		KS KE U W T															28	0	0	2	170			
FMAN40	3	A	V	4-18/19	4	X	E1	Project in Applied Mathematics		KS KE U W T															0	0	0	10	70			
ETIF10	7.5	G2	V	4-18/19	4	X	E1	Signal Processing - Design and Implementation		KS KE U W T															22	22	8	0	148			
EDAN35	7.5	A	V	4-18/19	4	X	E	High Performance Computer Graphics	X	KS KE U W T	Course on hold																					
FMSN20	7.5	A	V	5-19/20	4	X	E	Spatial Statistics with Image Analysis		KS KE U W T						28	0	21	4	120												

[EDAN35](#) High Performance Computer Graphics: *The course will next be offered in 2019/20.*

Specialisation dpd - Design of Processors and Digital Systems

Course Code	Credits	Cycle	Mand./ Elect.	Year	Language			Course Name	Footnote	Links	sp1				sp2				sp3				sp4							
					From year	S.Ex. stud.					F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
ETIN20	7.5	A	V	4-18/19	4	X	E	Digital IC-design		KS KE U W T	24	12	12	0	150															
EITE35	7.5	G2	V	4-18/19	4	X	E	Introduction to Structured VLSI Design		KS KE U W T	28	0	48	0	124															
ETIN70	7.5	A	V	4-18/19	4	X	E1	Modern Electronics		KS KE U W T	28	14	8	0	150															
EITF80	9	G2	V	4-18/19	4	X	E	Electromagnetic Fields		KS KE U W T	12	12	0	0	48	28	28	0	0	112										
EITF20	7.5	G2	V	4-18/19	4	X	E1	Computer Architecture		KS KE U W T						20	0	16	0	164										
EITF40	7.5	G2	V	4-18/19	4	X	E1	Digital and Analogue Projects		KS KE U W T											6	0	2	10	180					
ETIN45	7.5	A	V	4-18/19	4	X	E	DSP-design		KS KE U W T											28	12	8	6	140					
ESSF10	5	G2	V	4-18/19	4	-	S	Electrical Measurements		KS KE U W T											6	20	20	3	70					
ETIN35	7.5	A	V	4-18/19	4	X	E	IC-project 1		KS KE U W T											5	0	20	5	70	0	0	0	5	95
EDAN15	7.5	A	V	4-18/19	4	X	E	Design of Embedded Systems		KS KE U W T																24	4	14	0	150
ETIN40	7.5	A	V	5-19/20	4	X	E	IC-project 2		KS KE U W T	2	0	0	3	95	2	0	0	2	96										
ETIN55	7.5	A	V	5-19/20	4	X	E	Integrated A/D and D/A Converters		KS KE U W T						24	2	12	0	162										

Specialisation is - Embedded Systems

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp																				
											sp1	sp2			sp3			sp4													
												F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
EDAN65	7.5	A	V	4-18/19	4	X	E1	Compilers		KS KE U W T	28	0	12	0	160																
EITE35	7.5	G2	V	4-18/19	4	X	E	Introduction to Structured VLSI Design		KS KE U W T	28	0	48	0	124																
EIEF01	10	G2	V	4-18/19	4	X	E1	Applied Mechatronics		KS KE U W T	22	0	12	8	90	14	4	12	14	90											
EITE20	7.5	G2	V	4-18/19	4	X	E1	Computer Architecture		KS KE U W T						20	0	16	0	164											
FRTN40	7.5	A	V	4-18/19	4	X	E1	Project in Automatic Control		KS KE U W T						0	0	0	50	150											
ETIN80	7.5	A	V	4-18/19	4	X	E1	Algorithms in Signal Processors - Project Course		KS KE U W T											8	4	0	6	182						
EITN30	7.5	A	V	4-18/19	4	-	S	Internet Inside		KS KE U W T											10	0	28	2	160						
FRTN01	10	A	V	4-18/19	4	X	E	Real-Time Systems		KS KE U W T											28	18	4	0	70	6	4	8	8	70	
EDAF15	5	G2	V	4-18/19	4	-	S	Algorithm Implementation		KS KE U W T																24	12	12	0	85	
EDAA25	3	G1	V	4-18/19	4	X	S	C Programming		KS KE U W T																14	0	0	0	70	
EDAN15	7.5	A	V	4-18/19	4	X	E	Design of Embedded Systems		KS KE U W T																24	4	14	0	150	
EDAF35	7.5	G2	V	4-18/19	4	X	E1	Operating Systems		KS KE U W T																28	8	8	0	165	
EDAN26	7.5	A	V	5-19/20	4	-	S	Multicore Programming	X	KS KE U W T	24	0	12	0	150																
EDAN75	7.5	A	V	5-19/20	4	X	S	Optimising Compilers	X	KS KE U W T	Course on hold																				

[EDAN26](#) Multicore Programming: *The course is offered every other academic year and will be given in 2019/20, 2021/22.*

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

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							
											F	O	L	S	F	O	L	S	F	O	L	S	F	O	L	S				
EITN50	7.5	A	V	4 - 18/19	4	X	E	Advanced Computer Security		KS KE U W T	26	0	0	4	170															
EITG05	7.5	G2	V	4 - 18/19	4	X	E	Digital Communications		KS KE U W T	24	28	4	0	144															
FMSF15	7.5	G2	V	4 - 18/19	4	X	E	Markov Processes		KS KE U W T	26	16	6	0	140															
EITF05	4	G2	V	4 - 18/19	4	-	S	Web Security		KS KE U W T	14	6	0	3	84															
EITN41	7.5	A	V	4 - 18/19	4	-	S	Advanced Web Security		KS KE U W T						14	0	4	2	180										
EDIN01	7.5	A	V	4 - 18/19	4	X	E1	Cryptography		KS KE U W T						36	14	0	2	148										
ETTN01	7.5	A	V	4 - 18/19	4	X	E	Digital Communications, Advanced Course		KS KE U W T						20	24	4	5	147										
EITP10	7.5	A	V	4 - 18/19	4	X	E	High Performance Fiber Networks		KS KE U T						20	14	0	0	166										
ETSF10	7.5	G2	V	4 - 18/19	4	X	E1	Internet Protocols		KS KE U W T						13	6	0	4	177										
EMAN10	7.5	A	V	4 - 18/19	4	X	E1	Algebraic Structures		KS KE U W T											28	10	0	0	162					
EITN30	7.5	A	V	4 - 18/19	4	-	S	Internet Inside		KS KE U W T											10	0	28	2	160					
ETSN10	7.5	A	V	4 - 18/19	4	X	E	Network Architecture and Performance		KS KE U W T											26	13	2	13	146					
EITN45	7.5	A	V	4 - 18/19	4	X	E	Information Theory		KS KE U W T																26	14	0	0	160
EITN95	7.5	A	V	4 - 18/19	4	X	E1	Simulation		KS KE U W T																18	6	0	4	172

[EMAN10](#) Algebraic Structures:

Specialisation pv - Software

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1	sp2	sp3	sp4
EDAN75	7.5	A	V	5 - 19/20	4	X	S	Optimising Compilers	X	KS KE U WT	F O L H S F O L H S F O L H S F O L H S			
											Course on hold			

[EDAN26](#) Multicore Programming: *The course is offered every other academic year and will be given in 2019/20, 2021/22.*

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

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								
											F	O	L	S	F	O	L	S	F	O	L	S	F	O	L	S					
EITN50	7.5	A	V	4-18/19	4	X	E	Advanced Computer Security		KS KE U W T	26	0	0	4	170																
MAMN25	7.5	A	V	4-18/19	4	-	S	Interaction Design		KS KE U W T	30	14	0	14	142																
MIOA12	6	G1	V	4-18/19	4	-	S	Managerial Economics, Basic Course	X	KS KE U W T	50	12	5	0	93																
ETSN05	7.5	A	V	4-18/19	4	-	S	Software Development for Large Systems		KS KE U W T	10	8	4	10	168																
EDAN10	7.5	A	V	4-18/19	4	X	E	Configuration Management		KS KE U W T						28	14	12	2	144											
EDAN01	7.5	A	V	4-18/19	4	X	E	Constraint Programming		KS KE U W T						20	0	12	0	160											
MIOA12	6	G1	V	4-18/19	4	-	S	Managerial Economics, Basic Course	X	KS KE U W T						50	12	5	0	93											
ETSN20	7.5	A	V	4-18/19	4	X	E	Software Testing		KS KE U W T						16	3	8	1	170											
EDAN80	9	A	V	4-18/19	4	-	S	Coaching of Programming Teams		KS KE U W T						14	0	0	0	26	14	16	48	4	118						
ETSN15	7.5	A	V	4-18/19	4	X	S	Requirements Engineering		KS KE U W T											16	10	8	14	150						
EDAF50	7.5	G2	V	4-18/19	4	X	S	C++ Programming		KS KE U W T											24	0	8	0	100	0	0	0	0	60	
EDAF75	7.5	G2	V	4-18/19	4	X	S	Database Technology		KS KE U W T											24	2	8	0	112	0	0	0	0	50	
FRTN01	10	A	V	4-18/19	4	X	E	Real-Time Systems		KS KE U W T											28	18	4	0	70	6	4	8	8	70	
MIOF20	6	G2	V	4-18/19	4	-	S	Management Organization		KS KE U W T																42	0	14	1	104	
MAMF50	7.5	G2	V	5-19/20	4	-	S	Usability Evaluation		KS KE U W T	20	8	0	30	142																

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

Specialisation mai - Machine Intelligence

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1				sp2				sp3				sp4									
											F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S		
FRTN50	7.5	A	V	5 - 19/20	4	X	E	Optimization for Learning		KS KE U W T	28	28	0	10	130																	
FRTN35	7.5	A	V	5 - 19/20	4	X	E1	System Identification		KS KE U W T	28	14	14	0	70	0	0	14	0	70												

Elective Courses - D

Course Code	Credits	Cycle	Year	Language			Course Name	Footnote	Links	sp1				sp2				sp3				sp4									
				From year	S.Ex. stud.					F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S		
FMNN25	7.5	A	4-18/19	4	X	E1	Advanced Course in Numerical Algorithms with Python/SciPy	KS KE U W T	28	0	0	3	169																		
EITE50	7.5	G2	4-18/19	4	X	E	An Introduction to Wireless Systems	KS KE U W T	18	18	12	0	152																		
MMKF15	7.5	G2	4-18/19	4	X	E	Applied Robotics	KS KE U W T	28	22	8	20	100																		
IYT000	15	G2	4-18/19	3	-	S	Engineering Training Course	KS KE U W	0	0	0	0	400																		
EMIN25	7.5	A	4-18/19	4	-	S	Energy Systems Analysis: Energy, Environment and Natural Resources	KS KE U W T	18	6	0	0	76	18	6	0	0	76													
EMAN15	7.5	A	4-18/19	4	X	E	Nonlinear Dynamical Systems	KS KE U W T	16	6	0	0	78	14	8	0	0	78													
EIEN30	7.5	A	4-18/19	4	X	E1	Project in Industrial Electrical Engineering and Automation	KS KE U W T	0	0	0	21	88	0	0	0	21	88													
TNSF05	7.5	G2	4-18/19	4	-	S	Rehabilitation Engineering	KS KE U W T	16	0	6	2	96	0	4	0	12	64													
MAMN40	7.5	A	4-18/19	4	-	S	Working Environment, Project	KS KE U W T	0	0	0	20	60	0	0	0	20	60													
EDAN90	7.5	A	4-18/19	4	X	E1	Advanced Project in Computer Science	KS KE U W T						2	4	0	12	182													
IYT000	15	G2	4-18/19	3	-	S	Engineering Training Course	KS KE U W						0	0	0	0	400													
EMAN30	7.5	A	4-18/19	4	X	E1	Medical Image Analysis	KS KE U W T						32	0	0	3	165													
FRTN05	7.5	A	4-18/19	4	X	E1	Non-Linear Control and Servo Systems	KS KE U W T						28	28	12	0	112													
EMAN60	6	A	4-18/19	4	X	E1	Optimization	X KS KE U W T						32	14	4	1	109													
EMAN35	3	A	4-18/19	4	X	E1	Project in Mathematics	KS KE U W T						0	0	0	10	70													
MMKN30	7.5	A	4-18/19	4	X	E1	Service Robotics	KS KE U W T						12	6	15	15	150													
EIEF45	7.5	G2	4-18/19	4	X	E1	Automation	KS KE U W T											42	10	12	8	135								

Course Code	Credits	Cycle	Language			Course Name	Footnote	Links	sp1	sp2	sp3	sp4								
			From year	S.Ex. year	stud.							F	O	L	H	S	F	O	L	H
FRTE15	3	G2	4-18/19	4	-	S	Control Theory	KS KE U W T			12	12	0	12	76					
IYT000	15	G2	4-18/19	3	-	S	Engineering Training Course	KS KE U W			0	0	0	0	400					
MIOF25	6	G2	4-18/19	4	-	S	Managerial Economics, Advanced Course	KS KE U W T			36	14	8	1	101					
MIOA01	9	G1	4-18/19	4	-	S	Managerial Economics, Basic Course	X KS KE U W T			60	12	5	1	162					
EMAN65	6	A	4-18/19	4	-	S	Mathematical Structures	KS KE U W T			28	14	0	0	118					
EMSN50	7.5	A	4-18/19	4	X	E	Monte Carlo and Empirical Methods for Stochastic Inference	KS KE U W T			26	0	14	5	120					
ETIA10	7.5	G1	4-18/19	4	X	E	Patent and Intellectual Property Rights	KS KE U W T			28	6	3	0	160					
FMNN05	7.5	A	4-18/19	4	X	E1	Simulation Tools	KS KE U W T			28	0	0	3	169					
EXTG45	7.5	G2	4-18/19	4	-	S	Technology Supported Communication	KS KE U W T			20	50	0	0	150					
EDAF90	7.5	G2	4-18/19	4	X	S	Web Programming	KS KE U T			20	0	8	4	168					
EITN85	7.5	A	4-18/19	4	X	E	Wireless Communication Channels	KS KE U W T			28	14	0	0	158					
EMAN55	7.5	A	4-18/19	4	-	S	Applied Mathematics	KS KE U W T			24	12	2	0	62	22	14	2	0	62
EMAN25	7.5	A	4-18/19	4	X	E1	Calculus of Variations	KS KE U W T			18	0	0	0	82	16	0	0	0	84
FMIN20	7.5	A	4-18/19	4	-	S	Energy Systems Analysis: Renewable Sources of Energy	KS KE U W T			28	12	0	1	92	14	4	0	1	48
EITA05	4.5	G1	4-18/19	1	-	S	History of Technology	KS KE U W T			14	0	0	0	40	14	7	0	0	40
EIEN01	10	A	4-18/19	4	X	E1	Mechatronics, Industrial Product Design	KS KE U W T			0	0	0	14	120	0	0	0	14	120
EIEN30	7.5	A	4-18/19	4	X	E1	Project in Industrial Electrical Engineering and Automation	KS KE U W T			0	0	0	21	88	0	0	0	21	88

Course Code	Credits	Cycle	Year	Language			Course Name	Footnote	Links	sp1	sp2	sp3				sp4						
				From year	S.Ex. stud.							F	O	L	H	S	F	O	L	H	S	F
TNSF10	7.5	G2	4-18/19	4	X	E1	Universal Design, Theory and Project	KS KE U W T				10	8	4	8	128	0	8	0	4	30	
MAMF21	7.5	G2	4-18/19	4	-	S	Working Environment, Occupational Health and Safety	KS KE U W T				10	0	0	30	65	0	0	0	30	65	
MAMN40	7.5	A	4-18/19	4	-	S	Working Environment, Project	KS KE U W T				0	0	0	20	60	0	0	0	20	60	
EMAN90	7.5	A	4-18/19	4	X	E1	Advanced Course in a Selected Area of Mathematics	KS KE U W T										28	0	0	1	171
EDAN90	7.5	A	4-18/19	4	X	E1	Advanced Project in Computer Science	KS KE U W T										2	4	0	12	182
EIEN35	7.5	A	4-18/19	4	X	E1	Automation for Complex Systems	KS KE U W T										42	0	60	20	70
BMEN01	7.5	A	4-18/19	4	X	E1	Biomedical Signal Processing	KS KE U W T										14	14	0	7	165
FMSF65	7.5	G2	4-18/19	4	X	E	Design of Experiments	KS KE U W T										14	14	14	1	150
IYT000	15	G2	4-18/19	3	-	S	Engineering Training Course	KS KE U W										0	0	0	0	400
KIIF01	7.5	G2	4-18/19	4	X	E1	Industrial Environmental Management	KS KE U W T										28	0	0	32	80
FMSN30	7.5	A	4-18/19	4	X	E	Linear and Logistic Regression	KS KE U W T										24	0	26	2	120
MAMN30	7.5	A	4-18/19	4	-	S	Management, Work Organisation and Project Management	KS KE U W T										30	14	0	14	142
MIOF25	6	G2	4-18/19	4	-	S	Managerial Economics, Advanced Course	KS KE U W T										36	14	8	1	101
EEMN01	7.5	A	4-18/19	4	X	E1	Micro Sensors	X KS KE U W T										14	0	28	60	108
FRTN30	7.5	A	4-18/19	4	X	E	Network Dynamics	KS KE U W T										28	28	16	0	70
ESSF20	4.5	G2	4-18/19	4	-	S	Physics of Devices	KS KE U W T										30	12	8	0	70
EMAN35	3	A	4-18/19	4	X	E1	Project in Mathematics	KS KE U W T										0	0	0	10	70

Course Code	Credits	Cycle	Year	Language			Course Name	Footnote	Links	sp1	sp2	sp3	sp4						
				From year	S.Ex. stud.								F	O	L	H	S		
FMSN55	7.5	A	4-18/19	4	X	E	Statistical Modelling of Extreme Values		KS KE U W T				28	14	9	1	120		
EITN75	7.5	A	4-18/19	4	X	E	Wireless System Design Principles		KS KE U W T				28	14	4	0	154		
FMSN35	7.5	A	4-18/19	4	X	E	Stationary and Non-stationary Spectral Analysis	X	KS KE U W T	Course on hold									
EITN35	7.5	A	5-19/20	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T	0	0	0	0	200					
ETT15	7.5	A	5-19/20	4	X	E	Modern Wireless Systems - LTE and Beyond		KS KE U W T	28	14	6	8	144					
EITN10	7.5	A	5-19/20	4	X	E	Multiple Antenna Systems		KS KE U W T	26	14	0	0	160					
MION25	7.5	A	5-19/20	4	-	S	Technology Strategy		KS KE U W T	36	8	0	3	153					
BMEF10	7.5	G2	5-19/20	4	-	S	Transducer Technology		KS KE U W T	42	0	12	0	146					
EITN21	7.5	A	5-19/20	4	X	E	Project in Wireless Communication		KS KE U W T	10	0	0	12	78	4	0	0	24	72
EITN35	7.5	A	5-19/20	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T				0	0	0	0	200		
EEMF05	7.5	G2	5-19/20	4	X	E1	Biomedical Measurements	X	KS KE U W T				42	0	28	0	130		
EITN70	7.5	A	5-19/20	4	X	E	Channel Coding for Reliable Communication		KS KE U W T				28	14	0	2	156		
EEMN10	7.5	A	5-19/20	4	X	E1	Computerised Measurement Systems		KS KE U W T				0	28	12	60	85		
EEMN05	7.5	A	5-19/20	4	X	E1	EMC, Noise and Noise Reduction		KS KE U W T				14	14	12	60	85		
INNA01	7.5	G1	5-19/20	5	X	E	Entrepreneurship - how to Build a Scalable Start-up		KS KE U W T				20	42	0	0	145		
MIOF15	7.5	G2	5-19/20	4	-	S	Marketing		KS KE U W T				34	6	0	6	154		
EITN35	7.5	A	5-19/20	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T				0	0	0	0	200		

Course Code	Credits	Cycle	Year	Language			Course Name	Footnote	Links	sp1	sp2	sp3	sp4								
				From year	S.Ex. stud.																
EEMN15	7.5	A	5 - 19/20	4	X	E1	Ultrasound Physics and Technology	X	KS KE U W T			28	14	28	0	66					
EITN35	7.5	A	5 - 19/20	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T								0	0	0	0	200
MAMN10	7.5	A	5 - 19/20	4	-	S	Interaction 1: Neuro Modelling, Cognitive Robotics and Agents	X	KS KE U W T	Course on hold											
MAMN15	7.5	A	5 - 19/20	4	-	S	Interaction 2: Virtuality and Cognitive Modelling	X	KS KE U W T	Course on hold											

[FMAN60](#) 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.*

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

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

[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.*

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

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

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

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

Externally Elective Courses - D

Course Code	Credits	Cycle	Year	Language			Course Name	Footnote	Links	sp1				sp2				sp3				sp4							
				From year	S.Ex. stud.					F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
EXTA10	3	G1	2-16/17	2	-	S	Introduction to Chinese Society, Culture and Language	X	KS KE U W T	0	16	0	0	24	0	16	0	0	24										
EXTA35	15	G1	2-16/17	2	-	S	Introductory Course in Chinese for Engineers	X	KS KE U W T											0	40	0	0	160	0	35	0	0	170
EXTF60	15	G2	3-17/18	3	-	E	Introductory Course in Chinese for Engineers, Part 2	X	KS KE U W T	0	0	0	0	200	0	0	0	0	200										
GEMA20	7.5	G1	4-18/19	1	-	E	English for Engineers	X	KS KE U W T	30	0	0	0	30	20	0	0	0	30										
GEMA25	7.5	G1	4-18/19	1	-	S	German for Engineers	X	KS KE U W T	0	40	0	0	60	0	40	0	0	60										
GEMA60	7.5	G1	4-18/19	1	-	S	Law for Engineers, Introductory Course in Business Law	X	KS KE U W T	25	0	0	0	75	25	0	0	0	75										
GEMA70	15	G1	4-18/19	1	-	S	Japanese for Engineers	X	KS KE U W T	0	24	0	0	110	0	18	0	0	110	0	24	0	0	110					
GEMA65	7.5	G1	4-18/19	1	-	S	Chinese for Engineers	X	KS KE U W T											0	20	0	0	80	0	20	0	0	80
GEMA20	7.5	G1	4-18/19	1	-	E	English for Engineers	X	KS KE U W T											30	0	0	0	30	20	0	0	0	30
GEMA01	7.5	G1	4-18/19	1	-	S	French for Engineers: Language, Culture and Society, First Course	X	KS KE U W T											0	26	0	0	60	0	26	0	0	60

[EXTA10](#) Introduction to Chinese Society, Culture and Language: [EXTA10](#) counts as an external elective course in the degree requirements for students admitted autumn 2011 and later.

[EXTA35](#) Introductory Course in Chinese for Engineers: [EXTA35](#) counts as an external elective course in the degree requirements for students admitted autumn 2011 and later.

[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 W

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