

Electrical Engineering

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

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links								
							14/15 sp1	14/15 sp2	14/15 sp3	14/15 sp4					
FMAA05	15	G1	-	S	Calculus in One Variable		KS	KE	U	W	T				
ESS010	15	G1	-	S	Electronics		KS	KE	U	W	T				
EDA017	9	G1	-	S	Programming, First Course		KS	KE	U	W	T				
FMA420	6	G1	-	S	Linear Algebra		KS	KE	U	W	T				
FMA430	6	G1	-	S	Calculus in Several Variables		KS	KE	U	W	T				
FAFA01	9	G1	-	S	Physics - Mechanics and Waves		KS	KE	U	W	T				

Study Year 2, 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					
FAFA35	6	G1	-	S	Physics - Thermodynamics and Atomic Physics		KS	KE	U	W	T				
EIT020	9	G2	-	S	Design of Digital Circuits – A Systems Approach		KS	KE	U	W	T				
EDAA01	7.5	G1	-	S	Programming - Second Course		KS	KE	U	W	T				
MIO012	6	G1	-	S	Managerial Economics, Basic Course	X	KS	KE	U	W	T				
ESSF01	8	G2	-	S	Analogue Circuits		KS	KE	U	W	T				
EIT070	6	G2	-	S	Computer Organization		KS	KE	U	W	T				
FMAF01	7	G2	-	S	Mathematics - Analytic Functions		KS	KE	U	W	T				
FMAF05	7	G2	-	S	Mathematics - Systems and Transforms		KS	KE	U	W	T				
ESS030	4.5	G2	-	S	Physics of Devices		KS	KE	U	W	T				

[MIO012](#) Managerial Economics, Basic Course: *Only one of the courses [MIO012](#) and [MIOA01](#) 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 sp1	16/17 sp2	16/17 sp3	16/17 sp4					
FRT010	7.5	G2	-	S		Automatic Control, Basic Course		KS	KE	U	W	T				
ESS040	6	G2	X	S		Systems and Signals		KS	KE	U	W	T				
ESS050	9	G2	X	E		Electromagnetic Fields		KS	KE	U	W	T				
FMSF20	7.5	G2	-	S		Mathematical Statistics, Basic Course		KS	KE	U	W	T				
ETSF15	5	G2	-	S		Communication Systems and Networks		KS	KE	U	W	T				
ESSF15	5	G2	-	S		Electrical Engineering		KS	KE	U	W	T				
ESSF10	5	G2	-	S		Electrical Measurements		KS	KE	U	W	T				
BMEF01	5	G2	-	S		Project in Electronics		KS	KE	U	W	T				
FMN050	6	G2	X	E1		Numerical Analysis		KS	KE	U	W	T				
EMIE35	4	G2	-	S		Sustainable Development from an Electro-technological Perspective		KS	KE	U	W	T				

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

Course Code	Credits	Cycle	S.Ex. stud.	Language		Course Name	Footnote	Links								
								16/17 sp1	16/17 sp2	16/17 sp3	16/17 sp4					
ETI265	7.5	G1	X	S		Signal Processing in Multimedia	X	KS	KE	U	W	T				

[ETI265](#) 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	Mand./ Elect.		Year	From year	S.Ex. stud.	Language		Course Name	Footnote	Links								
		Cycle										sp1	sp2	sp3	sp4				
EDAF80	7.5	G2	V	4 - 17/18	4	X	E		Computer Graphics		KS	KE	U	W	T				
EMAN20	7.5	A	V	4 - 17/18	4	X	E1		Image Analysis		KS	KE	U	W	T				
EITN55	7.5	A	V	4 - 17/18	4	X	E1		Signal Separation - Independent Components		KS	KE	U	W	T				
FMSE10	7.5	G2	V	4 - 17/18	4	X	E1		Stationary Stochastic Processes	X	KS	KE	U	W	T			3	
EMAN70	6	A	V	4 - 17/18	4	X	E1		Matrix Theory		KS	KE	U	W	T				
EDAN35	7.5	A	V	4 - 17/18	4	X	E		High Performance Computer Graphics		KS	KE	U	W	T				
FAFF20	7.5	G2	V	4 - 17/18	4	X	E		Multi-spectral Imaging		KS	KE	U	W	T				
EITN60	7.5	A	V	4 - 17/18	4	X	E		Optimum and Adaptive Signal Processing		KS	KE	U	W	T				
FMSE20	7.5	A	V	4 - 17/18	4	X	E1		Spatial Statistics with Image Analysis		KS	KE	U	W	T				
EMAN85	6	A	V	4 - 17/18	4	X	E1		Computer Vision		KS	KE	U	W	T				
ETIF10	7.5	G2	V	4 - 17/18	4	X	E1		Signal Processing - Design and Implementation		KS	KE	U	W	T				

[FMSE10](#) Stationary Stochastic Processes: *Only one of the courses [FMS045](#) and [FMSE10](#) may be included in a degree.*

Specialisation em - Energy and Environment

Course Code	Credits	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links								
		Cycle								sp1	sp2	sp3	sp4					
EIEN15	7.5	A	V	4 - 17/18	4	X	E1	Electric Power Systems		KS	KE	U	W	T				
EIEN40	7.5	A	V	4 - 17/18	4	X	E1	Hybrid Vehicle Drive Systems		KS	KE	U	W	T				
FMIN25	7.5	A	V	4 - 17/18	4	-	S	Energy Systems Analysis: Energy, Environment and Natural Resources		KS	KE	U	W	T				
FMIN30	7.5	A	V	4 - 17/18	4	-	S	Environmental Systems Studies: Life Cycle Analysis		KS	KE	U	W	T				
EIEN10	7.5	A	V	4 - 17/18	4	X	E1	Wind Power Systems		KS	KE	U	W	T				
AEBF30	7.5	G2	V	4 - 17/18	4	X	E	Photovoltaic Systems, Basic Course		KS	KE	U	W	T				
FMIN20	7.5	A	V	4 - 17/18	4	-	S	Energy Systems Analysis: Renewable Sources of Energy		KS	KE	U	W	T				
EIEN25	15	A	V	4 - 17/18	4	X	E1	Power Electronics - Devices, Converters, Control and Applications	X	KS	KE	U	W	T				
MVKN15	7.5	A	V	4 - 17/18	4	-	S	Energy Supply Systems		KS	KE	U	W	T				
MVKN30	7.5	A	V	5 - 18/19	4	-	S	Advanced Efficient Energy Systems		KS	KE	U	W	T				
EIEN30	7.5	A	V	5 - 18/19	4	X	E1	Project in Industrial Electrical Engineering and Automation		KS	KE	U	W	T				
EIEN30																		
EIEN20	7.5	A	V	5 - 18/19	4	X	E1	Design of Electrical Machines	X	KS	KE	U	W	T	Course on hold			

[EIEN25](#) Power Electronics - Devices, Converters, Control and Applications: *may not be included in a degree together with [ETEF10](#)*

[EIEN20](#) Design of Electrical Machines: *The course is offered every other academic year and will be offered in 2017/18, 2019/20.*

Specialisation fh - Photonics and High-Frequency Electronics

Course Code	Credits	Cycle	Mand./ Elect.		Language				Course Name	Footnote	Links			
			Year	From year	S.Ex. stud.							sp1	sp2	sp3
EITF50	7.5	G2	V	4 - 17/18	4	X	E	An Introduction to Wireless Systems		KS KE U W T				
ETIN20	7.5	A	V	4 - 17/18	4	X	E	Digital IC-design		KS KE U W T				
FAFF01	7.5	G2	V	4 - 17/18	4	X	E	Optics and Optical Design		KS KE U W T				
FFFF10	7.5	G2	V	4 - 17/18	4	X	E	Processing and Device Technology		KS KE U W T				
ETIN25	7.5	A	V	4 - 17/18	4	X	E	Analogue IC-design		KS KE U W T				
ETEN10	7.5	A	V	4 - 17/18	4	X	E	Antenna Technology		KS KE U W T				
FAFN01	7.5	A	V	4 - 17/18	4	X	E	Lasers		KS KE U W T				
ETIN50	7.5	A	V	4 - 17/18	4	X	E	RF Amplifier Design		KS KE U W T				
EITP01	7.5	A	V	4 - 17/18	4	X	E1	High Speed Devices	X	KS KE U W T				
FFFN25	7.5	A	V	4 - 17/18	4	X	E	Optoelectronics and Optical Communication		KS KE U W T				
FAFN10	7.5	A	V	4 - 17/18	4	X	E	Advanced Optics and Lasers		KS KE U W T				
EITN80	7.5	A	V	4 - 17/18	4	X	E1	Electrodynamics		KS KE U T				
EITP05	7.5	A	V	4 - 17/18	4	X	E1	Nanoelectronics		KS KE U W T				
ETIN30	7.5	A	V	4 - 17/18	4	X	E	Integrated Radio Electronics	X	KS KE U W T	Course on hold			

[EITP01](#) High Speed Devices: *The course is offered every other academic year and will be given in 2017/18, 2019/20.*

[ETIN30](#) Integrated Radio Electronics: *The course is offered every other academic year and will next be offered in 2018/19.*

Specialisation is - Integrated 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				
EITE35	7.5	G2	V		4 - 17/18	4	X	E		Introduction to Structured VLSI Design		KS	KE	U	W	T				
FFFF10	7.5	G2	V		4 - 17/18	4	X	E		Processing and Device Technology		KS	KE	U	W	T				
FFFN30	7.5	A	V		4 - 17/18	4	X	E1		Semiconductor Physics		KS	KE	U	W	T				
ETIN40	7.5	A	V		4 - 17/18	4	X	E		IC-project 2		KS	KE	U	W	T				
ETIN25	7.5	A	V		4 - 17/18	4	X	E		Analogue IC-design		KS	KE	U	W	T				
EEMN05	7.5	A	V		4 - 17/18	4	X	E1		EMC, Noise and Noise Reduction		KS	KE	U	W	T				
ETIN55	7.5	A	V		4 - 17/18	4	X	E		Integrated A/D and D/A Converters		KS	KE	U	W	T				
EITE40	7.5	G2	V		4 - 17/18	4	X	E1		Digital and Analogue Projects		KS	KE	U	W	T				
ETIN45	7.5	A	V		4 - 17/18	4	X	E		DSP-design		KS	KE	U	W	T				
ETIN35	7.5	A	V		4 - 17/18	4	X	E		IC-project 1		KS	KE	U	W	T				
EDAN15	7.5	A	V		4 - 17/18	4	X	E		Design of Embedded Systems		KS	KE	U	W	T				
ETIN30	7.5	A	V		4 - 17/18	4	X	E		Integrated Radio Electronics	X	KS	KE	U	W	T	Course on hold			

[ETIN30](#) Integrated Radio Electronics: *The course is offered every other academic year and will next be offered in 2018/19.*

Specialisation ks - Communication Systems

Course Code	Credits	Mand./ Elect.		Year	From year	S.Ex. stud.	Language		Course Name	Footnote	Links			
		Cycle										sp1	sp2	sp3
EITG05	7.5	G2	V	4 - 17/18	4	X	E		Digital Communications	KS KE U W T				
ETTN15	7.5	A	V	4 - 17/18	4	X	E		Modern Wireless Systems - LTE and Beyond	KS KE U W T				
ETSF05	9	G2	V	4 - 17/18	4	-	E1		Internet Protocols	KS KE U W T				
EITN70	7.5	A	V	4 - 17/18	4	X	E		Channel Coding for Reliable Communication	KS KE U W T				
EDIN01	7.5	A	V	4 - 17/18	4	X	E1		Cryptography	KS KE U W T				
ETTN01	7.5	A	V	4 - 17/18	4	X	E		Digital Communications, Advanced Course	KS KE U W T				
EITN30	7.5	A	V	4 - 17/18	4	-	S		Internet Inside	KS KE U W T				
ETSN10	7.5	A	V	4 - 17/18	4	X	E		Network Architecture and Performance	KS KE U W T				
EITN85	7.5	A	V	4 - 17/18	4	X	E		Wireless Communication Channels	KS KE U W T				
EITN45	7.5	A	V	4 - 17/18	4	X	E		Information Theory	KS KE U W T				
EITF95	4.5	G2	V	4 - 17/18	4	X	S		Queuing System	KS KE U W T				
EITN95	7.5	A	V	4 - 17/18	4	X	E1		Simulation	KS KE U W T				
EITN75	7.5	A	V	4 - 17/18	4	X	E		Wireless System Design Principles	KS KE U W T				
EITN21	7.5	A	V	5 - 18/19	5	X	E		Project in Wireless Communication	KS KE U W T				

Specialisation mt - Biomedical Engineering

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
											sp1	sp2	sp3	sp4		
BMEN05	7.5	A	V		4 - 17/18	4	X	E	Biomechanics	X	KS	KE	U	W	T	3
FMAN20	7.5	A	V		4 - 17/18	4	X	E1	Image Analysis		KS	KE	U	W	T	
EEMN21	7.5	A	V		4 - 17/18	4	X	E1	Introduction to Microfluidics and Lab-on-a-chip Systems	X	KS	KE	U	W	T	3
EITN55	7.5	A	V		4 - 17/18	4	X	E1	Signal Separation - Independent Components		KS	KE	U	W	T	
BMEF10	7.5	G2	V		4 - 17/18	4	-	S	Transducer Technology	X	KS	KE	U	W	T	3
TNSF05	7.5	G2	V		4 - 17/18	4	-	S	Rehabilitation Engineering		KS	KE	U	W	T	
EEMF05	7.5	G2	V		4 - 17/18	4	X	E1	Biomedical Measurements	X	KS	KE	U	W	T	4
EEMN05	7.5	A	V		4 - 17/18	4	X	E1	EMC, Noise and Noise Reduction		KS	KE	U	W	T	
FMAN30	7.5	A	V		4 - 17/18	4	X	E1	Medical Image Analysis		KS	KE	U	W	T	
EEMN15	7.5	A	V		4 - 17/18	4	X	E1	Ultrasound Physics and Technology	X	KS	KE	U	W	T	
FMAN01	7.5	A	V		4 - 17/18	4	X	E1	Biomathematics	X	KS	KE	U	W	T	
BMEN01	7.5	A	V		4 - 17/18	4	X	E1	Biomedical Signal Processing		KS	KE	U	W	T	
FAFN35	7.5	A	V		4 - 17/18	4	X	E	Medical Optics	X	KS	KE	U	W	T	

[BMEN05](#) Biomechanics: *Replaces the course [FHLE05](#).*

[EEMN21](#) Introduction to Microfluidics and Lab-on-a-chip Systems: *Replaces [EEM055](#) Microfluidics*

[BMEF10](#) Transducer Technology: *Re-examination set by agreement.*

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

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

[EMAN01](#) Biomathematics: *The 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.*

Specialisation pla - Production, Logistics and Business

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1	sp2	sp3	sp4
MTTF01	5	G2	V		4 - 17/18	4	-	S	Logistics		KS KE U W T				
MION25	7.5	A	V		4 - 17/18	4	-	S	Technology Strategy		KS KE U W T				
MIOF15	7.5	G2	V		4 - 17/18	4	-	S	Marketing		KS KE U W T				
MIOF10	7.5	G2	V		4 - 17/18	4	X	E	Production and Inventory Control		KS KE U W T				
MION20	7.5	A	V		4 - 17/18	4	-	S	Applied Business Analysis		KS KE U W T				
MTTN70	7.5	A	V		4 - 17/18	4	X	E	International Physical Distribution		KS KE U W T				
MION01	7.5	A	V		4 - 17/18	4	X	E	Management of Production and Inventory Systems		KS KE U W T				
MIOF25	6	G2	V		4 - 17/18	4	-	S	Managerial Economics, Advanced Course		KS KE U W T				
MIOF25															
MION45	7.5	A	V		4 - 17/18	4	X	E	Operations Strategy		KS KE U W T				
MTTN80	7.5	A	V		4 - 17/18	4	X	E	Supply Chain Management		KS KE U W T				
MION30	7.5	A	V		5 - 18/19	4	-	S	Industrial Management		KS KE U W T				
MTTN20	7.5	A	V		5 - 18/19	5	X	E	Supply Chain Information Systems		KS KE U W T				
MION05	7.5	A	V		5 - 18/19	4	-	S	Business Marketing		KS KE U W T				
MTTN75	7.5	A	V		5 - 18/19	4	X	E	Industrial Purchasing		KS KE U W T				

Specialisation pv - Software

Course Code	Credits	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links								
		Cycle								sp1	sp2	sp3	sp4					
EDAN55	7.5	A	V	4 - 17/18	4	X	E	Advanced Algorithms		KS	KE	U	W	T				
EMNN25	7.5	A	V	4 - 17/18	4	X	E1	Advanced Course in Numerical Algorithms with Python/SciPy		KS	KE	U	W	T				
EDAN65	7.5	A	V	4 - 17/18	4	X	E1	Compilers	X	KS	KE	U	W	T			3	
EDAF60	4.5	G2	V	4 - 17/18	4	-	S	Object-oriented Modelling and Design	X	KS	KE	U	W	T			3	
ETSN05	7.5	A	V	4 - 17/18	4	-	S	Software Development for Large Systems		KS	KE	U	W	T				
EDAF55	6	G2	V	4 - 17/18	4	X	E1	Concurrent Programming		KS	KE	U	W	T				
EDAN10	7.5	A	V	4 - 17/18	4	X	E1	Configuration Management		KS	KE	U	W	T				
ETSN15	7.5	A	V	4 - 17/18	4	X	S	Requirements Engineering		KS	KE	U	W	T				
EDAF45	7.5	G2	V	4 - 17/18	4	-	S	Software Development in Teams - Project		KS	KE	U	W	T				
ETSN20	7.5	A	V	4 - 17/18	4	X	E	Software Testing		KS	KE	U	W	T				
EDAF50	7.5	G2	V	4 - 17/18	4	X	S	C++ Programming		KS	KE	U	W	T				
EDAF75	7.5	G2	V	4 - 17/18	4	X	S	Database Technology		KS	KE	U	W	T				
EDAN40	7.5	A	V	4 - 17/18	4	X	E	Functional Programming		KS	KE	U	W	T				
EDAF35	7.5	G2	V	4 - 17/18	4	X	S	Operating Systems		KS	KE	U	W	T				

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

[EDAF60](#) Object-oriented Modelling and Design: Only one of the courses [EDA061](#) / [EDAF60](#) and [EDAF10](#) may be included in a degree.

Specialisation ra - Control and Automation

Course Code	Credits	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
		Cycle								sp1	sp2	sp3	sp4
EIEN15	7.5	A	V	4 - 17/18	4	X	E1	Electric Power Systems	KS KE U W T				
FRTN10	7.5	A	V	4 - 17/18	4	X	E1	Multivariable Control	KS KE U W T				
EIEF01	10	G2	V	4 - 17/18	4	X	E1	Applied Mechatronics	KS KE U W T				
EMAN70	6	A	V	4 - 17/18	4	X	E1	Matrix Theory	KS KE U W T				
FRTN35	7.5	A	V	4 - 17/18	4	X	E1	System Identification	KS KE U W T				
FRTN05	7.5	A	V	4 - 17/18	4	X	E1	Non-Linear Control and Servo Systems	KS KE U W T				
FRTN40	7.5	A	V	4 - 17/18	4	X	E1	Project in Automatic Control	KS KE U W T				
EIEF45	7.5	G2	V	4 - 17/18	4	X	E1	Automation	KS KE U W T				
EIEN01	10	A	V	4 - 17/18	4	X	E1	Mechatronics, Industrial Product Design	KS KE U W T				
FRTN15	7.5	A	V	4 - 17/18	4	X	E1	Predictive Control	KS KE U W T				
FRTN01	10	A	V	4 - 17/18	4	X	E	Real-Time Systems	KS KE U W T				
EIEN35	7.5	A	V	4 - 17/18	4	X	E1	Automation for Complex Systems	KS KE U W T				
FRTN30	7.5	A	V	4 - 17/18	4	X	E	Network Dynamics	KS KE U T				

Specialisation ss - Signals and Sensors

Course Code	Credits	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
		Cycle									sp1	sp2	sp3	sp4
EITN55	7.5	A	V	4 - 17/18	4	X	E1	Signal Separation - Independent Components		KS KE U W T				
FMSF10	7.5	G2	V	4 - 17/18	4	X	E1	Stationary Stochastic Processes	X	KS KE U W T			3	
BMEF10	7.5	G2	V	4 - 17/18	4	-	S	Transducer Technology	X	KS KE U W T			3	
FRTN35	7.5	A	V	4 - 17/18	4	X	E1	System Identification		KS KE U W T				
EEMN10	7.5	A	V	4 - 17/18	4	X	S	Computerised Measurement Systems	X	KS KE U W T			4	
EEMN05	7.5	A	V	4 - 17/18	4	X	E1	EMC, Noise and Noise Reduction		KS KE U W T				
EXTQ40	7.5	A	V	4 - 17/18	4	X	E1	Introduction to Artificial Neural Networks and Deep Learning	X	KS KE U W T			4	
FMSN45	7.5	A	V	4 - 17/18	4	X	E1	Mathematical Statistics, Time Series Analysis		KS KE U W T				
EITN60	7.5	A	V	4 - 17/18	4	X	E	Optimum and Adaptive Signal Processing		KS KE U W T				
ETIN80	7.5	A	V	4 - 17/18	4	X	E1	Algorithms in Signal Processors – Project Course		KS KE U W T				
FMSN35	7.5	A	V	4 - 17/18	4	X	E	Stationary and Non-stationary Spectral Analysis	X	KS KE U W T				
EEMN15	7.5	A	V	4 - 17/18	4	X	E1	Ultrasound Physics and Technology	X	KS KE U W T				
EEMN01	7.5	A	V	4 - 17/18	4	X	E1	Micro Sensors	X	KS KE U W T				
ETIF10	7.5	G2	V	4 - 17/18	4	X	E1	Signal Processing - Design and Implementation		KS KE U W T				

[FMSF10](#) Stationary Stochastic Processes: *Only one of the courses [FMS045](#) and [FMSF10](#) may be included in a degree.*

[BMEF10](#) Transducer Technology: *Re-examination set by agreement.*

[EEMN10](#) Computerised Measurement Systems: *Re-examination set by agreement.*

[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.*

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

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

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

Elective Courses - E

Course Code	Credits	Cycle	Language				Course Name	Footnote	Links				
			Year	From year	S.Ex. stud.				sp1	sp2	sp3	sp4	
EXTA10	3	G1	2 - 15/16	2	-	S	Introduction to Chinese Society, Culture and Language	X	KS KE U T				
EXTA35	15	G1	2 - 15/16	2	-	S	Introductory Course in Chinese for Engineers	X	KS KE U T				
MIO022	6	G2	3 - 16/17	3	-	S	Management Organization		KS KE U W T				
EITN50	7.5	A	4 - 17/18	4	X	E	Advanced Computer Security	X	KS KE U W T			3	
MMKF15	7.5	G2	4 - 17/18	4	X	E	Applied Robotics		KS KE U W T				
EDAA25	3	G1	4 - 17/18	4	X	S	C Programming		KS KE U W T				
EDAN65	7.5	A	4 - 17/18	4	X	E1	Compilers	X	KS KE U W T			3	
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course		KS KE U W				
FMSF15	7.5	G2	4 - 17/18	4	X	E1	Markov Processes		KS KE U W T				
EITN10	7.5	A	4 - 17/18	4	X	E	Multiple Antenna Systems		KS KE U W T				
FMFF15	7.5	G2	4 - 17/18	4	-	E1	Quantum Mechanics and Mathematical Methods		KS KE U W T				
AEBF25	7.5	G2	4 - 17/18	4	X	E	Solar Heating Technology, Basic Course		KS KE U W T				
FMIF20	7.5	G2	4 - 17/18	4	X	E	Environmental Issues		KS KE U W T				
MVKN05	7.5	A	4 - 17/18	2	-	S	Project - Formula Student		KS KE U W T				
EXTA65	4.5	G1	4 - 17/18	4	-	S	Cognition		KS KE U W T				
EITF20	7.5	G2	4 - 17/18	4	X	E1	Computer Architecture		KS KE U W T				
FMAA25	7.5	G1	4 - 17/18	4	X	E1	Discrete Mathematics		KS KE U W T				
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course		KS KE U W				
FKFN05	7.5	A	4 - 17/18	4	X	E1	Experimental Tools for Subatomic Physics		KS KE U W T				
EMAN60	6	A	4 - 17/18	4	X	E1	Optimization	X	KS KE U W T			4	
FAFA10	9	G1	4 - 17/18	4	-	S	Physics - Quantum Phenomena and Nanotechnology		KS KE U W T				

Course Code	Credits	Cycle	Language				Course Name	Footnote	Links								
			Year	From year	S.Ex. stud.				sp1	sp2	sp3	sp4					
FMAN40	3	A	4 - 17/18	4	X	E1	Project in Applied Mathematics		KS	KE	U	W	T				
EDAN70	7.5	A	4 - 17/18	4	X	E1	Project in Computer Science		KS	KE	U	W	T				
FMAN35	3	A	4 - 17/18	4	X	E1	Project in Mathematics		KS	KE	U	W	T				
MMKN30	7.5	A	4 - 17/18	4	X	E1	Service Robotics		KS	KE	U	W	T				
FFFN35	7.5	A	4 - 17/18	4	X	E	The Physics of Low-dimensional Structures and Quantum Devices	X	KS	KE	U	W	T				4
EDAF70	7.5	G2	4 - 17/18	4	X	E	Applied Artificial Intelligence		KS	KE	U	W	T				
EITA25	7.5	G1	4 - 17/18	4	X	S	Computer Security		KS	KE	U	W	T				
MVKN20	7.5	A	4 - 17/18	4	-	S	Energy Utilization		KS	KE	U	W	T				
FHLA05	7.5	G1	4 - 17/18	4	X	E	Engineering Mechanics		KS	KE	U	W	T				
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course		KS	KE	U	W					
FMAF35	6	G2	4 - 17/18	4	X	E1	Linear and Combinatorial Optimization		KS	KE	U	W	T				
ETIA10	7.5	G1	4 - 17/18	4	X	E	Patent and Intellectual Property Rights		KS	KE	U	W	T				
EITN90	7.5	A	4 - 17/18	4	X	E	Radar and Remote Sensing		KS	KE	U	W	T				
EMFF30	4.5	G2	4 - 17/18	4	-	S	Theory of Relativity		KS	KE	U	W	T				
MAMF15	6	G2	4 - 17/18	4	-	S	Work Organization and Management		KS	KE	U	W	T				
FMAN55	7.5	A	4 - 17/18	4	-	S	Applied Mathematics		KS	KE	U	W	T				
EXTG15	7.5	G2	4 - 17/18	4	X	E1	Biology, Introductory Course		KS	KE	U	W	T				
FMAN25	7.5	A	4 - 17/18	4	X	E1	Calculus of Variations		KS	KE	U	W	T				
EITA05	4.5	G1	4 - 17/18	1	-	S	History of Technology		KS	KE	U	W	T				
BMEA01	6	G1	4 - 17/18	4	-	S	Medicine for Engineers	X	KS	KE	U	W	T				
FKFN35	7.5	A	4 - 17/18	4	X	E	Methods for Environmental Monitoring		KS	KE	U	W	T				
MAMF21	7.5	G2	4 - 17/18	4	-	S	Working Environment, Occupational Health and Safety		KS	KE	U	W	T				
EDAF05	5	G2	4 - 17/18	4	X	E1	Algorithms, Data Structures and Complexity		KS	KE	U	W	T				
FMSF65	7.5	G2	4 - 17/18	4	X	E1	Design of Experiments		KS	KE	U	W	T				
FMAA25	7.5	G1	4 - 17/18	4	X	E1	Discrete Mathematics		KS	KE	U	W	T				
IYT000	15	G2	4 - 17/18	3	-	S	Engineering Training Course		KS	KE	U	W					
FHLE20	7.5	G2	4 - 17/18	4	X	E	Finite Element Method		KS	KE	U	W	T				
KIIF01	7.5	G2	4 - 17/18	4	X	E1	Industrial Environmental Management		KS	KE	U	W	T				
FMAN40	3	A	4 - 17/18	4	X	E1	Project in Applied Mathematics		KS	KE	U	W	T				

Course Code	Credits	Cycle		Language			Course Name	Footnote	Links	Links			
		Year	From year	S.Ex. stud.	sp1	sp2				sp3	sp4		
EDAN70	7.5	A	4 - 17/18	4	X	E1	Project in Computer Science		KS KE U W T				
MIOF05	2	G2	4 - 17/18	4	-	S	Project in Managerial Economics, Advanced Course		KS KE U W T				
FMAN35	3	A	4 - 17/18	4	X	E1	Project in Mathematics		KS KE U W T				
EDAN75	7.5	A	4 - 17/18	4	X	S	Optimising Compilers	X	KS KE U W T	Course on hold			
EIEF40	9	G2	4 - 17/18	4	X	E1	Measurement Systems for Control	X	KS KE U W T	Course on hold			
EITN35	7.5	A	5 - 18/19	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T				
EITF05	4	G2	5 - 18/19	4	-	S	Web Security		KS KE U W T				
EITN35	7.5	A	5 - 18/19	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T				
EITN41	7.5	A	5 - 18/19	4	-	S	Advanced Web Security		KS KE U W T				
EXTP85	7.5	A	5 - 18/19	4	-	S	Quantitative Human Physiology		KS KE U W T				
EITN35	7.5	A	5 - 18/19	4	X	E1	Advanced Course in Electrical and Information Technology	X	KS KE U W T				
EITN35								X					
FMAN45	7.5	A	5 - 18/19	4	-	E	Machine Learning		KS KE U W T				

[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.*

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

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

[FMAN60](#) Optimization: *Written examination before Christmas so that exchange students may participate.*

[FFFN35](#) The Physics of Low-dimensional Structures and Quantum Devices: *Re-examination set by agreement.*

[BMEA01](#) Medicine for Engineers: *The course is offered every other academic year and will be given in 2017/18, 2019/20.*

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

[EIEF40](#) Measurement Systems for Control: *Exam date to be set by agreement. The course is offered every other academic year and will next be offered in 2018/19.*

[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.*

Externally Elective Courses - E

Course Code	Credits	Cycle	Language			Footnote	Links	Links					
			Year	From year	S.Ex. stud.			Course Name	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				
GEMA65	7.5	G1	3 - 16/17	1	-	S	Chinese for Engineers	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			3	4
GEMA25	7.5	G1	4 - 17/18	1	-	S	German for Engineers	X	KS KE U W T			3	4
GEMA60	7.5	G1	4 - 17/18	1	-	S	Law for Engineers, Introductory Course in Business Law	X	KS KE U W T			3	4
GEMA70	15	G1	4 - 17/18	1	-	S	Japanese 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				
GEMA01	7.5	G1	4 - 17/18	1	-	S	French for Engineers: Language, Culture and Society, First Course	X	KS KE U W T				

[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.

[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.

[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.*

[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 - E

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

Links

Course Code	Credits	Course Name	Links
FRTL01	15	Bachelor Project in Automatic Control	KS KE U
BMEL01	15	Bachelor Project in Biomedical Engineering	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
EEML01	15	Bachelor Project in Electrical Measurements	KS KE U
EIEL01	15	Bachelor Project in Industrial Electrical Engineering and Automation	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
PHYL01	15	Bachelor Project in Physics	KS KE U

Degree Projects - E

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

Links

Course Code	Credits	Course Name	Links
FRTM01	30	Degree Project in Automatic Control	KS KE U W
BMEM01	30	Degree Project in Biomedical Engineering	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
AEBM05	30	Degree Project in Energy and Building Design	KS KE U
VTAM01	30	Degree Project in Engineering Acoustics	KS KE U
MAMM10	30	Degree Project in Ergonomics	KS KE U W
EIEM01	30	Degree Project in Industrial Electrical Engineering and Automation	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