

# Electrical Engineering

## Study Year 1, Academic Year 2013/14 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	13/14	13/14	13/14	13/14
								sp1	sp2	sp3	sp4
<a href="#">FMAA05</a>	15	G1	-	S	Calculus in One Variable		<a href="#">KS KE U W T</a>	1	2		
<a href="#">ESS010</a>	15	G1	-	S	Electronics		<a href="#">KS KE U W T</a>	1	2	3	
<a href="#">EDA017</a>	9	G1	-	S	Programming, First Course		<a href="#">KS KE U W T</a>		2	3	
<a href="#">FMA420</a>	6	G1	-	S	Linear Algebra		<a href="#">KS KE U W T</a>			3	
<a href="#">FMA430</a>	6	G1	-	S	Calculus in Several Variables		<a href="#">KS KE U W T</a>				4
<a href="#">EFAA01</a>	9	G1	-	S	Physics - Mechanics and Waves		<a href="#">KS KE U W T</a>				4

**Study Year 2, 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
<a href="#">FAFA35</a>	6	G1	-	S	Physics - Thermodynamics and Atomic Physics		<a href="#">KS KE U W T</a>	1			
<a href="#">EIT020</a>	9	G2	-	S	Design of Digital Circuits – A Systems Approach		<a href="#">KS KE U W T</a>	1	2		
<a href="#">EDAA01</a>	7.5	G1	-	S	Programming - Second Course		<a href="#">KS KE U W T</a>	1	2		
<a href="#">MIO012</a>	6	G1	-	S	Managerial Economics, Basic Course	X	<a href="#">KS KE U W T</a>		2		
<a href="#">ESSF01</a>	8	G2	-	S	Analogue Circuits		<a href="#">KS KE U W T</a>		2	3	4
<a href="#">EIT070</a>	6	G2	-	S	Computer Organization		<a href="#">KS KE U W T</a>			3	
<a href="#">EMAF01</a>	7	G2	-	S	Mathematics - Analytic Functions		<a href="#">KS KE U W T</a>			3	

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links					
							14/15 sp1	14/15 sp2	14/15 sp3	14/15 sp4		
<a href="#">EMAF05</a>	7	G2	-	S	Mathematics - Systems and Transforms		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	4
<a href="#">ESS030</a>	4.5	G2	-	S	Physics of Devices		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	4

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

### Study Year 3, 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
<a href="#">ERT010</a>	7.5	G2	-	S	Automatic Control, Basic Course		<a href="#">KS KE U W T</a>	1			
<a href="#">ESS040</a>	6	G2	X	S	Systems and Signals		<a href="#">KS KE U W T</a>	1			
<a href="#">ESS050</a>	9	G2	X	E	Electromagnetic Fields		<a href="#">KS KE U W T</a>	1	2		
<a href="#">FMSE20</a>	7.5	G2	-	S	Mathematical Statistics, Basic Course		<a href="#">KS KE U W T</a>		2		
<a href="#">ETSF15</a>	5	G2	-	S	Communication Systems and Networks		<a href="#">KS KE U W T</a>			3	
<a href="#">ESSE15</a>	5	G2	-	S	Electrical Engineering		<a href="#">KS KE U W T</a>			3	
<a href="#">ESSE10</a>	5	G2	-	S	Electrical Measurements		<a href="#">KS KE U W T</a>			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			
<a href="#">BMEF01</a>	5	G2	-	S	Project in Electronics		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">EMN050</a>	6	G2	X	E1	Numerical Analysis		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		4
<a href="#">EMIF35</a>	4	G2	-	S	Sustainable Development from an Electro-technological Perspective		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		4

### Study Year 3, 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			
<a href="#">ETI265</a>	7.5	G1	X	S	Signal Processing in Multimedia	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		4

[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	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
												sp1	sp2	sp3	sp4	
<a href="#">EDA221</a>	7.5	G2	V		4 - 16/17	4	X	E	Computer Graphics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EMAN20</a>	7.5	A	V		4 - 16/17	4	X	E1	Image Analysis		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EITN55</a>	7.5	A	V		4 - 16/17	4	X	E1	Signal Separation - Independent Components		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">FMSF10</a>	7.5	G2	V		4 - 16/17	4	X	E1	Stationary Stochastic Processes	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">FMA120</a>	6	A	V		4 - 16/17	4	X	E1	Matrix Theory		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2			
<a href="#">EDAN35</a>	7.5	A	V		4 - 16/17	4	X	E	High Performance Computer Graphics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			
<a href="#">FAFF20</a>	7.5	G2	V		4 - 16/17	4	X	E	Multi-spectral Imaging		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
			V								sp1	sp2	sp3	sp4
<a href="#">EITN60</a>	7.5	A	V	4 - 16/17	4	X	E	Optimum and Adaptive Signal Processing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EMSN20</a>	7.5	A	V	4 - 16/17	4	X	E1	Spatial Statistics with Image Analysis		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EMA270</a>	6	A	V	4 - 16/17	4	X	E1	Computer Vision		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">ETIF10</a>	7.5	G2	V	4 - 16/17	4	X	E1	Signal Processing - Design and Implementation		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EMNN35</a>	6	A	V	5 - 17/18	4	X	E1	Numerical Methods in CAGD	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			

[FMSE10](#) Stationary Stochastic Processes: *Only one of the courses [EMS045](#) and [FMSE10](#) may be included in a degree.*

[EMNN35](#) Numerical Methods in CAGD: *Please note that the contents of the course are partly (3 credits) the same as in [FMA135](#) Geometry.*

## Specialisation em - Energy and Environment



Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
<a href="#">EIEN15</a>	7.5	A	V	4 - 16/17	4	X	E1	Electric Power Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MIE100</a>	7.5	A	V	4 - 16/17	4	X	E1	Hybrid Vehicle Drive Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">FMI050</a>	7.5	A	V	4 - 16/17	4	-	S	Energy Systems Analysis: Energy, Environment and Natural Resources		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">FMI055</a>	7.5	A	V	4 - 16/17	4	-	S	Environmental Systems Studies: Life Cycle Analysis		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">EIEN10</a>	7.5	A	V	4 - 16/17	4	X	E1	Wind Power Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">AEB020</a>	7.5	G2	V	4 - 16/17	4	X	E	Photovoltaic Systems, Basic Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">FMI040</a>	7.5	A	V	4 - 16/17	4	-	S	Energy Systems Analysis: Renewable Sources of Energy		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
<a href="#">EIEN25</a>	15	A	V	4 - 16/17	4	X	E1	Power Electronics - Devices, Converters, Control and Applications	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">MVKN15</a>	7.5	A	V	4 - 16/17	4	-	S	Energy Supply Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">MVKN30</a>	7.5	A	V	5 - 17/18	4	-	S	Advanced Efficient Energy Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">EIEN30</a>	7.5	A	V	5 - 17/18	4	X	E1	Project in Industrial Electrical Engineering and Automation		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">EIEN20</a>	7.5	A	V	5 - 17/18	4	X	E1	Design of Electrical Machines	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">EIEN30</a>	7.5	A	V	5 - 17/18	4	X	E1	Project in Industrial Electrical Engineering and Automation		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4

[EIEN25](#) Power Electronics - Devices, Converters, Control and Applications: *may not be included in a degree together with either [EIE015](#), [EIE023](#) or [EIE042](#)*

[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.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
										sp1	sp2	sp3	sp4
<a href="#">ETIF05</a>	7.5	G2	V	4 - 16/17	4	X	E	Basic Wireless Communication Technique	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">ETIN20</a>	7.5	A	V	4 - 16/17	4	X	E	Digital IC-design	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">FAFF01</a>	7.5	G2	V	4 - 16/17	4	X	E	Optics and Optical Design	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">FFF110</a>	7.5	G2	V	4 - 16/17	4	X	E	Processing and Device Technology	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">ETIN25</a>	7.5	A	V	4 - 16/17	4	X	E	Analogue IC-design	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">ETEN10</a>	7.5	A	V	4 - 16/17	4	X	E	Antenna Technology	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">FAFN01</a>	7.5	A	V	4 - 16/17	4	X	E	Lasers	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
<a href="#">ETIN50</a>	7.5	A	V	4 - 16/17	4	X	E	RF Amplifier Design		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">ETIN30</a>	7.5	A	V	4 - 16/17	4	X	E	Integrated Radio Electronics	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">FFFN25</a>	7.5	A	V	4 - 16/17	4	X	E	Optoelectronics and Optical Communication		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">FAFN10</a>	7.5	A	V	4 - 16/17	4	X	E	Advanced Optics and Lasers		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">ETEN01</a>	7.5	A	V	4 - 16/17	4	X	E1	Microwave Theory		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">FFF160</a>	7.5	A	V	4 - 16/17	4	X	E1	Nanoelectronics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">FFF115</a>	7.5	A	V	4 - 16/17	4	X	E1	High Speed Devices	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	Course on hold			

[ETIN30](#) Integrated Radio Electronics: *The course is offered every other academic year and will be given in 2016/17, 2018/19.*

[FFF115](#) High Speed Devices: *The course is offered every other academic year and will next be offered in 2017/18.*

**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	
<a href="#">ETIN20</a>	7.5	A	V	4 - 16/17	4	X	E	Digital IC-design		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EITE35</a>	7.5	G2	V	4 - 16/17	4	X	E	Introduction to Structured VLSI Design		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">FFF110</a>	7.5	G2	V	4 - 16/17	4	X	E	Processing and Device Technology		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">FFF021</a>	7.5	A	V	4 - 16/17	4	X	E1	Semiconductor Physics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">ETIN40</a>	7.5	A	V	4 - 16/17	4	X	E	IC-project 2		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2			
<a href="#">ETIN25</a>	7.5	A	V	4 - 16/17	4	X	E	Analogue IC-design		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			
<a href="#">EEMN05</a>	7.5	A	V	4 - 16/17	4	X	E1	EMC, Noise and Noise Reduction		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
			V								sp1	sp2	sp3	sp4
<a href="#">ETIN55</a>	7.5	A	V	4 - 16/17	4	X	E	Integrated A/D and D/A Converters		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EITF40</a>	7.5	G2	V	4 - 16/17	4	X	E1	Digital and Analogue Projects		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">ETIN45</a>	7.5	A	V	4 - 16/17	4	X	E	DSP-design		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">ETIN30</a>	7.5	A	V	4 - 16/17	4	X	E	Integrated Radio Electronics	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">ETIN35</a>	7.5	A	V	4 - 16/17	4	X	E	IC-project 1		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">EDAN15</a>	7.5	A	V	4 - 16/17	4	X	E	Design of Embedded Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EDAN85</a>	7.5	A	V	5 - 17/18	4	X	E	Design of Embedded Systems, Advanced Course	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			



[ETIN30](#) Integrated Radio Electronics: *The course is offered every other academic year and will be given in 2016/17, 2018/19.*

[EDAN85](#) Design of Embedded Systems, Advanced Course: *The course is offered every other academic year and will be given in 2017/18, 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
<a href="#">ETT051</a>	7.5	G2	V		4 - 16/17	4	X	E	Digital Communications	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">ETT15</a>	7.5	A	V		4 - 16/17	4	X	E	Modern Wireless Systems - LTE and Beyond	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">ETSF05</a>	9	G2	V		4 - 16/17	4	-	E1	Internet Protocols	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">EDIN01</a>	7.5	A	V		4 - 16/17	4	X	E1	Cryptography	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">ETT101</a>	7.5	A	V		4 - 16/17	4	X	E	Digital Communications, Advanced Course	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EDI042</a>	7.5	A	V		4 - 16/17	4	X	E	Error Control Coding	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">ETSN01</a>	7.5	A	V		4 - 16/17	4	X	E	Advanced Telecommunication	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
										sp1	sp2	sp3	sp4
<a href="#">ETIN10</a>	7.5	A	V	4 - 16/17	4	X	E	Channel Modelling for Wireless Communication	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">EITN30</a>	7.5	A	V	4 - 16/17	4	-	S	Internet Inside	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">EITN45</a>	7.5	A	V	4 - 16/17	4	X	E	Information Theory	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">ETS075</a>	4.5	G2	V	4 - 16/17	4	X	S	Queuing System	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">ETIN15</a>	7.5	A	V	4 - 16/17	4	X	E	Radio Systems	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">ETS061</a>	7.5	A	V	4 - 16/17	4	X	E1	Simulation	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EITN21</a>	7.5	A	V	5 - 17/18	5	X	E	Project in Wireless Communications	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		

## 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	
<a href="#">BMEN05</a>	7.5	A	V		4 - 16/17	4	X	E	Biomechanics	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EMAN20</a>	7.5	A	V		4 - 16/17	4	X	E1	Image Analysis		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EEMN21</a>	7.5	A	V		4 - 16/17	4	X	E1	Introduction to Microfluidics and Lab-on-a-chip Systems	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EITN55</a>	7.5	A	V		4 - 16/17	4	X	E1	Signal Separation - Independent Components		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EEM031</a>	7.5	G2	V		4 - 16/17	4	-	S	Transducer Technology	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">TNX097</a>	7.5	G2	V		4 - 16/17	4	-	S	Rehabilitation Engineering		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2			
<a href="#">EEMF05</a>	7.5	G2	V		4 - 16/17	4	X	E1	Biomedical Measurements	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			2		

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4				
<a href="#">EEMN05</a>	7.5	A	V		4 - 16/17	4	X	E1	EMC, Noise and Noise Reduction		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			
<a href="#">EMAN30</a>	7.5	A	V		4 - 16/17	4	X	E1	Medical Image Analysis		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			
<a href="#">EEMN15</a>	7.5	A	V		4 - 16/17	4	X	E1	Ultrasound Physics and Technology	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3		
<a href="#">BMEN01</a>	7.5	A	V		4 - 16/17	4	X	E1	Biomedical Signal Processing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">FAF150</a>	7.5	A	V		4 - 16/17	4	X	E	Medical Optics	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">EMAN01</a>	7.5	A	V		4 - 16/17	4	X	E1	Biomathematics	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	Course on hold				

[BMEN05](#) Biomechanics: *Replaces the course [FHLF05](#).*

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

[EEM031](#) 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.*

[FAF150](#) Medical Optics: *Examination for higher grade after agreement with the course coordinator.*

[EMAN01](#) Biomathematics: *The course is offered every other academic year and will next be offered in 2017/18.*

## 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
<a href="#">MTTF01</a>	5	G2	V	4 - 16/17	4	-	S	Logistics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MION25</a>	7.5	A	V	4 - 16/17	4	-	S	Technology Strategy	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MIOE15</a>	7.5	G2	V	4 - 16/17	4	-	S	Marketing	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">MIOE10</a>	7.5	G2	V	4 - 16/17	4	X	E	Production and Inventory Control	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">MION20</a>	7.5	A	V	4 - 16/17	4	-	S	Applied Business Analysis	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">MTT045</a>	7.5	A	V	4 - 16/17	4	X	E	International Physical Distribution	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">MION01</a>	7.5	A	V	4 - 16/17	4	X	E	Management of Production and Inventory Systems	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	



Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4			
<a href="#">MIO040</a>	6	G2	V	4 - 16/17	4	-	S	Managerial Economics, Advanced Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">MIO040</a>														4
<a href="#">MION45</a>	7.5	A	V	4 - 16/17	4	X	E	Operations Strategy		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">MTT240</a>	7.5	A	V	4 - 16/17	4	X	E	Supply Chain Management		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">MION30</a>	7.5	A	V	5 - 17/18	4	-	S	Industrial Management		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MTTN20</a>	7.5	A	V	5 - 17/18	5	X	E	Supply Chain Information Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MION05</a>	7.5	A	V	5 - 17/18	4	-	S	Business Marketing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links								
										sp1	sp2	sp3	sp4					
<a href="#">MTTN75</a>	7.5	A	V	5 - 17/18	4	X	E	Industrial Purchasing		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	2			

### Specialisation pv - Software

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
			V								sp1	sp2	sp3	sp4	
<a href="#">EDAN55</a>	7.5	A	V	4 - 16/17	4	X	E	Advanced Algorithms		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EMNN25</a>	7.5	A	V	4 - 16/17	4	X	E1	Advanced Course in Numerical Algorithms with Python/SciPy		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EDA061</a>	4.5	G2	V	4 - 16/17	4	-	S	Object-oriented Modelling and Design	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">ETSNO5</a>	7.5	A	V	4 - 16/17	4	-	S	Software Development for Large Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1				
<a href="#">EDA040</a>	6	G2	V	4 - 16/17	4	X	E1	Concurrent Programming		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2			
<a href="#">EDAN10</a>	7.5	A	V	4 - 16/17	4	X	E1	Configuration Management		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			
<a href="#">ETS170</a>	7.5	A	V	4 - 16/17	4	X	S	Requirements Engineering		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
			V								sp1	sp2	sp3	sp4	
<a href="#">EDAF45</a>	7.5	G2	V	4 - 16/17	4	-	S	Software Development in Teams - Project		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2	3		
<a href="#">ETS200</a>	7.5	A	V	4 - 16/17	4	X	E	Software Testing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3		
<a href="#">EDA031</a>	7.5	G2	V	4 - 16/17	4	X	S	C++ Programming		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4	
<a href="#">EDA216</a>	7.5	G2	V	4 - 16/17	4	X	S	Database Technology		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4	
<a href="#">EDAE35</a>	7.5	G2	V	4 - 16/17	4	X	S	Operating Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4

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

## Specialisation ra - Control and Automation

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
<a href="#">EIEN15</a>	7.5	A	V	4 - 16/17	4	X	E1	Electric Power Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">FRTN10</a>	7.5	A	V	4 - 16/17	4	X	E1	Multivariable Control		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">EIEF01</a>	10	G2	V	4 - 16/17	4	X	E1	Applied Mechatronics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">FMA120</a>	6	A	V	4 - 16/17	4	X	E1	Matrix Theory		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">FRT041</a>	7.5	A	V	4 - 16/17	4	X	E1	System Identification		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">FRTN05</a>	7.5	A	V	4 - 16/17	4	X	E1	Non-Linear Control and Servo Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">FRT090</a>	7.5	A	V	4 - 16/17	4	X	E1	Project in Automatic Control		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links						
										sp1	sp2	sp3	sp4			
<a href="#">MIE080</a>	7.5	G2	V	4 - 16/17	4	X	E1	Automation		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	
<a href="#">EIEN01</a>	10	A	V	4 - 16/17	4	X	E1	Mechatronics, Industrial Product Design		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">FRTN15</a>	7.5	A	V	4 - 16/17	4	X	E1	Predictive Control		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">FRTN01</a>	10	A	V	4 - 16/17	4	X	E1	Real-Time Systems		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">MIE090</a>	7.5	A	V	4 - 16/17	4	X	E1	Automation for Complex Systems		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		4
<a href="#">FRTN30</a>	7.5	A	V	4 - 16/17	4	X	E	Network Dynamics		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">T</a>			4

### Specialisation ss - Signals and Sensors

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
												sp1	sp2	sp3	sp4
<a href="#">EITN55</a>	7.5	A	V		4 - 16/17	4	X	E1	Signal Separation - Independent Components		<a href="#">KS KE U W T</a>	1			
<a href="#">EMSE10</a>	7.5	G2	V		4 - 16/17	4	X	E1	Stationary Stochastic Processes	X	<a href="#">KS KE U W T</a>	1			
<a href="#">EEM031</a>	7.5	G2	V		4 - 16/17	4	-	S	Transducer Technology	X	<a href="#">KS KE U W T</a>	1			
<a href="#">FRT041</a>	7.5	A	V		4 - 16/17	4	X	E1	System Identification		<a href="#">KS KE U W T</a>	1	2		
<a href="#">EEMN10</a>	7.5	A	V		4 - 16/17	4	X	S	Computerised Measurement Systems	X	<a href="#">KS KE U W T</a>		2		
<a href="#">EEMN05</a>	7.5	A	V		4 - 16/17	4	X	E1	EMC, Noise and Noise Reduction		<a href="#">KS KE U W T</a>		2		
<a href="#">FMS051</a>	7.5	A	V		4 - 16/17	4	X	E1	Mathematical Statistics, Time Series Analysis		<a href="#">KS KE U W T</a>		2		

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4				
<a href="#">EITN60</a>	7.5	A	V		4 - 16/17	4	X	E	Optimum and Adaptive Signal Processing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2			
<a href="#">ETIN80</a>	7.5	A	V		4 - 16/17	4	X	E1	Algorithms in Signal Processors – Project Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				3	
<a href="#">EEMN15</a>	7.5	A	V		4 - 16/17	4	X	E1	Ultrasound Physics and Technology	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				3	
<a href="#">EEMN01</a>	7.5	A	V		4 - 16/17	4	X	E1	Micro Sensors	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">ETIF10</a>	7.5	G2	V		4 - 16/17	4	X	E1	Signal Processing - Design and Implementation		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">EXTP80</a>	7.5	A	V		4 - 16/17	4	X	E1	Artificial Neural Networks	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	Course on hold				
<a href="#">EMSN35</a>	7.5	A	V		4 - 16/17	4	X	E	Stationary and Non-stationary Spectral Analysis	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	Course on hold				

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

[EEM031](#) Transducer Technology: *Re-examination set by agreement.*

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

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

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

[EXTP80](#) Artificial Neural Networks: *The course is offered every other academic year and will next be offered in 2017/18.*



[EMSN35](#) Stationary and Non-stationary Spectral Analysis: *The course is offered every other academic year and will next be offered in 2017/18.*

## **Elective Courses - E**

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
<a href="#">EXTA10</a>	3	G1	2 - 14/15	2	-	S	Introduction to Chinese Society, Culture and Language	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">T</a>	1	2		
<a href="#">EXTA35</a>	15	G1	2 - 14/15	2	-	S	Introductory Course in Chinese for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">T</a>			3	4
<a href="#">EXTF60</a>	15	G2	3 - 15/16	3	-	E	Introductory Course in Chinese for Engineers, Part 2	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">GEMA65</a>	7.5	G1	3 - 15/16	1	-	S	Chinese for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">T</a>			3	4
<a href="#">MIO022</a>	6	G2	3 - 15/16	3	-	S	Management Organization		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EITN50</a>	7.5	A	4 - 16/17	4	X	E	Advanced Computer Security	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MMKF15</a>	7.5	G2	4 - 16/17	4	X	E1	Applied Robotics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
<a href="#">EDAA25</a>	3	G1	4 - 16/17	4	X	S	C Programming		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">EDAN65</a>	7.5	A	4 - 16/17	4	X	E1	Compilers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">ETEN05</a>	7.5	A	4 - 16/17	4	X	E	Electromagnetic Wave Propagation		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">FMSE15</a>	7.5	G2	4 - 16/17	4	X	E1	Markov Processes		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">EITN10</a>	7.5	A	4 - 16/17	4	X	E	Multiple Antenna Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">EDA230</a>	7.5	A	4 - 16/17	4	X	S	Optimising Compilers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">EMFE15</a>	7.5	G2	4 - 16/17	4	-	E1	Quantum Mechanics and Mathematical Methods		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4			
										1	2	3	4
<a href="#">AEB010</a>	7.5	G2	4 - 16/17	4	X	E	Solar Heating Technology, Basic Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">EMIF20</a>	7.5	G2	4 - 16/17	4	X	E	Environmental Issues		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">MIE041</a>	9	G2	4 - 16/17	4	X	E1	Measurement Systems for Control	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">MVKN05</a>	7.5	A	4 - 16/17	2	-	S	Project - Formula Student		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2	3	4
<a href="#">TEK210</a>	4.5	G1	4 - 16/17	4	-	S	Cognition		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EITF20</a>	7.5	G2	4 - 16/17	4	X	E1	Computer Architecture		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EMAA25</a>	7.5	G1	4 - 16/17	4	X	E1	Discrete Mathematics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
<a href="#">EKFN05</a>	7.5	A	4 - 16/17	4	X	E1	Experimental Tools for Subatomic Physics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EMAN45</a>	7.5	A	4 - 16/17	4	X	E	Machine Learning		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EMA051</a>	6	A	4 - 16/17	4	X	E1	Optimization	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">FAFA10</a>	9	G1	4 - 16/17	4	-	S	Physics - Quantum Phenomena and Nanotechnology		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EMAN40</a>	3	A	4 - 16/17	4	X	E1	Project in Applied Mathematics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EDAN70</a>	7.5	A	4 - 16/17	4	X	E1	Project in Computer Science		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EMAN35</a>	3	A	4 - 16/17	4	X	E1	Project in Mathematics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
<a href="#">MMKN30</a>	7.5	A	4 - 16/17	4	X	E1	Service Robotics	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">FFF042</a>	7.5	A	4 - 16/17	4	X	E	The Physics of Low-dimensional Structures and Quantum Devices	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EDA132</a>	7.5	G2	4 - 16/17	4	X	E	Applied Artificial Intelligence		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">EIT060</a>	7.5	G1	4 - 16/17	4	X	S	Computer Security		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">MVKN20</a>	7.5	A	4 - 16/17	4	-	S	Energy Utilization		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">FHL055</a>	7.5	G1	4 - 16/17	4	-	E	Engineering Mechanics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">EMA240</a>	6	G2	4 - 16/17	4	X	E1	Linear and Combinatorial Optimization		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
									sp1	sp2	sp3	sp4
<a href="#">ETIA10</a>	7.5	G1	4 - 16/17	4	X	E	Patent and Intellectual Property Rights	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">TEK070</a>	7.5	G2	4 - 16/17	4	-	S	Safety, Health and Environmental Law	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">EMF061</a>	4.5	G2	4 - 16/17	4	-	S	Theory of Relativity	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">MAMF15</a>	6	G2	4 - 16/17	4	-	S	Work Organization and Management	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	
<a href="#">FMA021</a>	7.5	A	4 - 16/17	4	-	S	Applied Mathematics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">EXTG15</a>	7.5	G2	4 - 16/17	4	X	E1	Biology, Introductory Course	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">EMAN25</a>	7.5	A	4 - 16/17	4	X	E1	Calculus of Variations	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4

Course Code	Credits	Cycle		From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
		Year							sp1	sp2	sp3	sp4
<a href="#">EITA05</a>	4.5	G1	4 - 16/17	1	-	S	History of Technology	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">EKF100</a>	7.5	A	4 - 16/17	4	X	E	Methods for Environmental Monitoring	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">MAMF21</a>	7.5	G2	4 - 16/17	4	-	S	Working Environment, Occupational Health and Safety	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">EDAF05</a>	5	G2	4 - 16/17	4	X	E1	Algorithms, Data Structures and Complexity	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">FMS072</a>	7.5	G2	4 - 16/17	4	X	E1	Design of Experiments	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EMAA25</a>	7.5	G1	4 - 16/17	4	X	E1	Discrete Mathematics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">FHL064</a>	7.5	G2	4 - 16/17	4	X	E	Finite Element Method	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4



Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
									sp1	sp2	sp3	sp4
<a href="#">KII010</a>	7.5	G2	4 - 16/17	4	X	E1	Industrial Environmental Management	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EMAN40</a>	3	A	4 - 16/17	4	X	E1	Project in Applied Mathematics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EDAN70</a>	7.5	A	4 - 16/17	4	X	E1	Project in Computer Science	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">MIOF05</a>	2	G2	4 - 16/17	4	-	S	Project in Managerial Economics, Advanced Course	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EMAN35</a>	3	A	4 - 16/17	4	X	E1	Project in Mathematics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">EITN35</a>	7.5	A	5 - 17/18	4	X	E1	Advanced Course in Electrical and Information Technology	X <a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">EITF05</a>	4	G2	5 - 17/18	4	-	S	Web Security	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links								
									sp1	sp2	sp3	sp4					
<a href="#">EITN35</a>	7.5	A	5 - 17/18	4	X	E1	Advanced Course in Electrical and Information Technology	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	2			
<a href="#">EITN41</a>	7.5	A	5 - 17/18	4	-	S	Advanced Web Security		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	2			
<a href="#">EMAN45</a>	7.5	A	5 - 17/18	4	-	E	Machine Learning		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	2			
<a href="#">EXTP85</a>	7.5	A	5 - 17/18	4	-	S	Quantitative Human Physiology		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	2			
<a href="#">EITN35</a>	7.5	A	5 - 17/18	4	X	E1	Advanced Course in Electrical and Information Technology	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>			3	
<a href="#">EITN35</a>								X									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.*

[EXTF60](#) Introductory Course in Chinese for Engineers, Part 2: *Compulsory for students admitted to the China specialisation. The course is given in China.*

[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.*

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

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

[EDA230](#) Optimising Compilers: *The course is offered every other academic year and will be given in 2016/17, 2018/19.*

[MIE041](#) Measurement Systems for Control: *The course is offered every other academic year and will be given in 2014/15, 2016/17.*

[FMA051](#) Optimization: *Written examination before Christmas so that exchange students may participate.*

[MMKN30](#) Service Robotics: *The course is offered every other academic year and will be given in 2016/17, 2018/2019.*

[FFF042](#) The Physics of Low-dimensional Structures and Quantum Devices: *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.*

## **Externally Elective Courses - E**

Course Code	Credits	Cycle	Language			S.Ex. stud.	Course Name	Footnote	Links				
			Year	From year						sp1	sp2	sp3	sp4
<a href="#">GEMA20</a>	7.5	G1	4 - 16/17	1	-	E	English for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">GEMA25</a>	7.5	G1	4 - 16/17	1	-	S	German for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">GEMA60</a>	7.5	G1	4 - 16/17	1	-	S	Law for Engineers, Introductory Course in Business Law	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">GEMA70</a>	15	G1	4 - 16/17	1	-	S	Japanese for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2	3	
<a href="#">GEMA20</a>	7.5	G1	4 - 16/17	1	-	E	English for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">GEMA01</a>	7.5	G1	4 - 16/17	1	-	S	French for Engineers: Language, Culture and Society, First Course	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">GEMA60</a>	7.5	G1	4 - 16/17	1	-	S	Law for Engineers, Introductory Course in Business Law	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>			3	4
<a href="#">GEMA55</a>	6	G1	4 - 16/17	1	-	S	Medicine for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	Course on hold			

[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.*

[GEMA55](#) Medicine for Engineers: *The course is offered every other academic year and will be given in 2015/16, 2017/18 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. The list is not necessarily complete before the academic year 2016/17.

### Links

Course Code	Credits	Course Name	Links
FRTL01	15	Bachelor Project in Automatic Control	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
BMEL01	15	Bachelor Project in Biomedical Engineering	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
EDAL01	15	Bachelor Project in Computer Science	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
EITL01	15	Bachelor Project in Electrical and Information Technology	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
EEML01	15	Bachelor Project in Electrical Measurements	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
EIEL01	15	Bachelor Project in Industrial Electrical Engineering and Automation	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
FMSL01	15	Bachelor Project in Mathematical Statistics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
FMAL01	15	Bachelor Project in Mathematics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
FMNL01	15	Bachelor Project in Numerical Analysis	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
PHYL01	15	Bachelor Project in Physics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>

## 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	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
BMEM01	30	Degree Project in Biomedical Engineering	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
EDAM05	30	Degree Project in Computer Sciences for Engineers	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
EITM01	30	Degree Project in Electrical and Information Technology	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
BMEM05	30	Degree Project in Electrical Measurements	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
AEBM05	30	Degree Project in Energy and Building Design	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
VTAM01	30	Degree Project in Engineering Acoustics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
MAMM10	30	Degree Project in Ergonomics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
EIEM01	30	Degree Project in Industrial Electrical Engineering and Automation	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
FMSM01	30	Degree Project in Mathematical Statistics for Engineers	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
FMAM05	30	Degree Project in Mathematics for Engineers	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
FMNM01	30	Degree Project in Numerical Analysis	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
PHYM01	30	Degree Project in Physics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
MIOM05	30	Degree Project in Production Management	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
TNSM01	30	Degree Project in Rehabilitation Engineering	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>