

Industrial Engineering and Management

Study Year 1, Academic Year 2016/17 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	16/17	16/17	16/17	16/17
								sp1	sp2	sp3	sp4
EMAA05	15	G1	-	S	Calculus in One Variable		KS KE U W T	1	2		
MIOA01	9	G1	-	S	Managerial Economics, Basic Course		KS KE U W T	1	2		
EMA420	6	G1	-	S	Linear Algebra		KS KE U W T		2		
EMA430	6	G1	-	S	Calculus in Several Variables		KS KE U W T			3	
FMEA10	9	G1	-	S	Engineering Mechanics, Basic Course		KS KE U W T			3	
FAFA75	9	G1	-	S	Energy and Environmental Physics	X	KS KE U W T				4
MIO022	6	G2	-	S	Management Organization		KS KE U W T				4

[FAFA75](#) Energy and Environmental Physics: *Anmälan till laborationsgrupp vid introduktionsföreläsningen är obligatorisk*

Study Year 2, Academic Year 2017/18 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	17/18	17/18	17/18	17/18
								sp1	sp2	sp3	sp4
EXTA40	6	G1	-	S	Introduction to Microeconomic Theory		KS KE U W T	1			
MTTF01	5	G2	-	S	Logistics		KS KE U W T	1			
EMSF45	9	G2	-	S	Mathematical Statistics, Basic Course		KS KE U W T	1	2		
MIOF01	9	G2	-	S	Marketing and Globalization		KS KE U W T		2	3	
EDAA55	9	G1	-	S	Programming, First Course		KS KE U W T		2	3	
EMAF01	7	G2	-	E1	Mathematics - Analytic Functions		KS KE U W T			3	
MIOF25	6	G2	-	S	Managerial Economics, Advanced Course		KS KE U W T				4

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links					
							17/18 sp1	17/18 sp2	17/18 sp3	17/18 sp4		
EMAF05	7	G2	-	E1	Mathematics - Systems and Transforms		KS	KE	U	W	T	4
MIOF05	2	G2	-	S	Project in Managerial Economics, Advanced Course		KS	KE	U	W	T	4

Study Year 3, Academic Year 2018/19 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	18/19	18/19	18/19	18/19
								sp1	sp2	sp3	sp4
MIOE30	6	G2	-	S	Operations Research - Basic Course		KS KE U W T	1			
MMTA05	6	G1	-	S	Production Systems		KS KE U W T	1			
EMIF01	6	G2	-	S	Environmental System Studies: Management for Sustainable Development		KS KE U W T	1	2		
EXTF45	6	G2	-	S	Financial Management		KS KE U W T		2		
ERTF05	7.5	G2	-	S	Automatic Control, Basic Course	X	KS KE U W T			3	

[ERTF05](#) Automatic Control, Basic Course: *B3 who will study the elective block Product Innovation, should take [ERT010](#) in study period 2, autumn 17.*

Study Year 3, Academic Year 2018/19 (Elective Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links				
							18/19 sp1	18/19 sp2	18/19 sp3	18/19 sp4	
EITF45	7.5	G2	-	S	Computer Communication	X	KS KE U W T		2		
MVKN35	6	A	-	S	Energy Markets	X	KS KE U W T		2		
EMAN60	6	A	X	E1	Optimization	X	KS KE U W T		2		
FKMA01	7.5	G1	X	E1	Materials Engineering, Basic Course	X	KS KE U W T			3	
EDAA01	7.5	G1	-	S	Programming - Second Course	X	KS KE U W T			3	
EMIN20	7.5	A	-	S	Energy Systems Analysis: Renewable Sources of Energy	X	KS KE U W T			3	4
EMIN05	7.5	A	X	E1	Environmental System Studies: Climate, Science and Politics	X	KS KE U W T			3	4

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links						
							18/19 sp1	18/19 sp2	18/19 sp3	18/19 sp4			
MMKF35	7.5	G2	X	E	Industrial Design	X	KS	KE	U	W	T	3	4
MMKF05	7.5	G2	X	E	Product Development and Design Methodology	X	KS	KE	U	W	T	3	4
EITF12	9	G2	-	S	Digital Systems, Project Laboratory	X	KS	KE	U	W	T		4
FHLE10	7.5	G2	-	E1	Finite Element Method and Introduction to Strength of Materials	X	KS	KE	U	W	T		4
FBRF01	7.5	G2	X	E	Fundamental Combustion	X	KS	KE	U	W	T		4
FMSN40	9	A	X	E	Linear and Logistic Regression with Data Gathering	X	KS	KE	U	W	T		4
FMNF10	6	G2	X	E1	Numerical Analysis	X	KS	KE	U	W	T		4

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links								
							18/19 sp1	18/19 sp2	18/19 sp3	18/19 sp4					
ETSA02	6	G1	-	S	Software Engineering - Methodology	X	KS	KE	U	W	T				4

[EITF45](#) Computer Communication: *Compulsory course in the elective blocks 'Systems and Software Development'. The course is also an optional programme course.*

[MVKN35](#) Energy Markets: *Compulsory course in the elective block 'Energy and Environmental Engineering' for students admitted autumn 2015. The course is also an optional programme course.*

[FMAN60](#) Optimization: *Compulsory course in the elective block 'Mathematical Modelling' for students admitted autumn 2015. The course is also an optional programme course. Written examination before Christmas so that exchange students may participate.*

[FKMA01](#) Materials Engineering, Basic Course: *Compulsory course in the elective block 'Product Innovation' for students admitted autumn 2015. The course is also an optional programme course.*

[EDAA01](#) Programming - Second Course: *Compulsory course in the elective blocks 'Mathematical Modelling' and 'Systems and Software Development' for students admitted autumn 2015. The course is also an optional programme course.*

[EMIN20](#) Energy Systems Analysis: Renewable Sources of Energy: *Compulsory course in the elective block 'Energy and Environmental Engineering' for students admitted autumn 2015. The course is also an optional programme course.*

[EMIN05](#) Environmental System Studies: Climate, Science and Politics: *Compulsory course in the elective block 'Energy and Environmental Engineering' for students admitted autumn 2015. The course is also an optional programme course.*

[MMKE35](#) Industrial Design: *Compulsory course in the elective block 'Product Innovation' for students admitted autumn 2015. The course is also an optional programme course.*

[MMKE05](#) Product Development and Design Methodology: *Compulsory course in the elective block 'Product innovation' for students admitted autumn 2015. The course is also an optional programme course.*

[EITF12](#) Digital Systems, Project Laboratory: *Compulsory course in the elective blocks 'Systems and Software Development'. The course is also an optional programme course.*

[FHLF10](#) Finite Element Method and Introduction to Strength of Materials: *Compulsory course in the elective block 'Product Innovation' for students admitted autumn 2015. The course is also an optional programme course.*

[FBRF01](#) Fundamental Combustion: *Compulsory course in the elective block 'Energy and Environmental Engineering' for students admitted autumn 2015. The course is also an optional programme course.*

[FMSN40](#) Linear and Logistic Regression with Data Gathering: *Compulsory course in the elective block 'Mathematical Modelling' for students admitted autumn 2016. The course is also an optional programme course. Only one of the courses [FMSN30](#) and [FMSN40](#) may be included in a degree.*

[FMNF10](#) Numerical Analysis: *Compulsory course in the elective block 'Mathematical Modelling' for students admitted autumn 2015. The course is also an optional programme course.*

[ETSA02](#) Software Engineering - Methodology: *Compulsory course in the elective blocks 'Systems and Software Development' for students admitted autumn 2015. The course is also an optional programme course.*

Specialisation ai - Business and Innovation

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1	sp2	sp3	sp4
INTN01	7.5	A	V	4 - 19/20	4	X	E	Innovation Engineering		KS KE U W T	1			
MION25	7.5	A	V	4 - 19/20	4	-	S	Technology Strategy		KS KE U W T	1			
MION05	7.5	A	V	4 - 19/20	4	-	S	Business Marketing		KS KE U W T		2		
MTTN75	7.5	A	V	4 - 19/20	4	X	E	Industrial Purchasing		KS KE U W T		2		
MION20	7.5	A	V	4 - 19/20	4	-	S	Applied Business Analysis		KS KE U W T			3	
INNN15	7.5	A	V	4 - 19/20	4	X	E	Innovation Management		KS KE U W T			3	
INNN10	7.5	A	V	4 - 19/20	4	X	E	Globalization and Innovation		KS KE U T				4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
										sp1	sp2	sp3	sp4		
MAMN30	7.5	A	V	4 - 19/20	3	-	S	Management, Work Organisation and Project Management		KS	KE	U	W	T	4

Specialisation fir - Financial Engineering and Risk Management

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
												sp1	sp2	sp3	sp4	
EXTQ25	7.5	A	V		4 - 19/20	4	X	E	Financial Economics, Advanced Course	X	KS KE U W T	1				
EMSE10	7.5	G2	V		4 - 19/20	3	X	E	Stationary Stochastic Processes		KS KE U W T	1				
EXTQ30	7.5	A	V		4 - 19/20	4	X	E	Economics, Empirical Finance	X	KS KE U W T		2			
FMSN45	7.5	A	V		4 - 19/20	4	X	E	Mathematical Statistics, Time Series Analysis		KS KE U W T		2			
EXTQ35	7.5	A	V		4 - 19/20	4	X	E	Financial Valuation and Risk Management	X	KS KE U W T			3		
FMSN50	7.5	A	V		4 - 19/20	4	X	E	Monte Carlo and Empirical Methods for Stochastic Inference		KS KE U W T			3		
FRTN30	7.5	A	V		4 - 19/20	4	X	E	Network Dynamics		KS KE U W T				4	

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
										sp1	sp2	sp3	sp4		
EMSN55	7.5	A	V	4 - 19/20	4	X	E	Statistical Modelling of Extreme Values		KS	KE	U	W	T	4

[EXTQ25](#) Financial Economics, Advanced Course: *The course is to be studied together with NEKN81, which is given by the Department of Economics. Does not follow the study period structure.*

[EXTQ30](#) Economics, Empirical Finance: *The course is to be studied together with NEKN82, which is given by the Department of Economics. Does not follow the study period structure.*

[EXTQ35](#) Financial Valuation and Risk Management: *The course is to be studied together with NEKN83, which is given by the Department of Economics. Does not follow the study period structure.*

Specialisation If - Supply Chain Management

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
MTTN40	7.5	A	V	4 - 19/20	4	X	E	Packaging Technology and Development		KS KE U W T	1			
MTTN25	7.5	A	V	4 - 19/20	4	X	E	Warehousing and Materials Handling		KS KE U W T	1			
MTTN75	7.5	A	V	4 - 19/20	4	X	E	Industrial Purchasing		KS KE U W T		2		
MIOF10	7.5	G2	V	4 - 19/20	4	X	E	Production and Inventory Control		KS KE U W T		2		
MTTN70	7.5	A	V	4 - 19/20	4	X	E	International Physical Distribution		KS KE U W T			3	
MION01	7.5	A	V	4 - 19/20	4	X	E	Management of Production and Inventory Systems		KS KE U W T			3	
MTTN60	7.5	A	V	4 - 19/20	4	X	E	Business Process Management		KS KE U W T				4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
										sp1	sp2	sp3	sp4		
MION45	7.5	A	V	4 - 19/20	4	X	E	Operations Strategy		KS	KE	U	W	T	4
MTTN80	7.5	A	V	4 - 19/20	4	X	E	Supply Chain Management		KS	KE	U	W	T	4

Specialisation pr - Production Engineering

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
											sp1	sp2	sp3	sp4
MMTN30	7.5	A	V	4 - 19/20	4	X	E	Flexible Manufacturing Systems		KS KE U W T	1			
MMTN25	7.5	A	V	4 - 19/20	4	X	E	Production Technology		KS KE U W T	1			
MTTN25	7.5	A	V	4 - 19/20	4	X	E	Warehousing and Materials Handling		KS KE U W T	1			
MIOF10	7.5	G2	V	4 - 19/20	4	X	E	Production and Inventory Control		KS KE U W T		2		
EIEF45	7.5	G2	V	4 - 19/20	3	X	E1	Automation		KS KE U W T			3	
MION01	7.5	A	V	4 - 19/20	4	X	E	Management of Production and Inventory Systems		KS KE U W T			3	
MMTF25	7.5	G2	V	4 - 19/20	4	X	E1	Computer Aided Design/Computer Aided Manufacturing		KS KE U W T				4

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
										sp1	sp2	sp3	sp4		
MMTN05	7.5	A	V	4 - 19/20	4	X	E	Flexible Manufacturing Systems, Advanced Course		KS	KE	U	W	T	4

Specialisation pvs - Software Intensive Systems

Course Code	Credits	Cycle	Mand./ Elect.		Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links			
											sp1	sp2	sp3	sp4
ERTN10	7.5	A	V		4 - 19/20	4	X	E1	Multivariable Control	KS KE U W T	1			
EDAF60	4.5	G2	V		4 - 19/20	4	-	S	Object-oriented Modelling and Design	KS KE U W T	1			
ETSN05	7.5	A	V		4 - 19/20	4	-	S	Software Development for Large Systems	KS KE U W T	1			
EDAN10	7.5	A	V		4 - 19/20	4	X	E	Configuration Management	KS KE U W T		2		
ETSN20	7.5	A	V		4 - 19/20	4	X	E	Software Testing	KS KE U W T		2		
ETSN10	7.5	A	V		4 - 19/20	4	X	E	Network Architecture and Performance	KS KE U W T			3	
ETSN15	7.5	A	V		4 - 19/20	4	-	S	Requirements Engineering	KS KE U W T			3	

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links								
										sp1	sp2	sp3	sp4					
EDAF75	7.5	G2	V	4 - 19/20	4	X	S	Database Technology		KS	KE	U	W	T			3	4
ERTN01	10	A	V	4 - 19/20	4	X	E	Real-Time Systems		KS	KE	U	W	T			3	4

Elective Courses - I

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
EXTP50	7.5	A	4 - 19/20	4	-	E	Advanced Microeconomic Analysis		KS KE U W T	1			
ERTF20	7.5	G2	4 - 19/20	4	X	E	Applied Robotics		KS KE U W T	1			
MVKP01	7.5	A	4 - 19/20	4	-	S	District Heating and Cooling		KS KE U W T	1			
IYT000	15	G2	4 - 19/20	3	-	S	Engineering Training Course		KS KE U W	1			
FMSE15	7.5	G2	4 - 19/20	4	X	E	Markov Processes		KS KE U W T	1			
ERTN50	7.5	A	4 - 19/20	3	X	E	Optimization for Learning		KS KE U W T	1			
EXTF40	7.5	G2	4 - 19/20	4	-	S	Option Theory	X	KS KE U W T	1			

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4			
										sp1	sp2	sp3	sp4
EXTE35	7.5	G2	4 - 19/20	4	-	E	Portfolio Selection	X	KS KE U W T	1			
MMKN35	7.5	A	4 - 19/20	4	X	E1	Product Innovation		KS KE U W T	1			
MMVA01	5	G1	4 - 19/20	4	-	S	Thermodynamics and Fluid Mechanics, Basic Course		KS KE U W T	1			
EMIN25	7.5	A	4 - 19/20	4	-	S	Energy Systems Analysis: Energy, Environment and Natural Resources		KS KE U W T	1	2		
EMAN70	6	A	4 - 19/20	4	X	E1	Matrix Theory		KS KE U W T	1	2		
MVKP05	7.5	A	4 - 19/20	4	X	E1	Project - Formula Student		KS KE U W T	1	2	3	4
EDAP05	7.5	A	4 - 19/20	4	X	E	Concepts of Programming Languages	X	KS KE U W T		2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
EXTG65	7.5	G2	4 - 19/20	3	-	S	Econometrics	X	KS KE U W T		2		
EXTN05	7.5	A	4 - 19/20	3	X	E	Econometrics, Advanced Course	X	KS KE U W T		2		
IYT000	15	G2	4 - 19/20	3	-	S	Engineering Training Course		KS KE U W		2		
EXTF30	7.5	G2	4 - 19/20	3	-	S	Fixed Income Securities	X	KS KE U W T		2		
MTTN45	7.5	A	4 - 19/20	4	X	E	Humanitarian Logistics - disaster relief and logistics in developing countries		KS KE U W T		2		
EXTQ40	7.5	A	4 - 19/20	4	-	E1	Introduction to Artificial Neural Networks and Deep Learning		KS KE U W T		2		
FMNN10	8	A	4 - 19/20	4	X	E1	Numerical Methods for Differential Equations		KS KE U W T		2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links					
									sp1	sp2	sp3	sp4		
EMFE35	7.5	G2	4 - 19/20	3	X	E	Complex Economy	X	KS	KE	U	W	T	3
EITF70	6	G2	4 - 19/20	3	-	S	Computer Organization		KS	KE	U	W	T	3
EITA25	7.5	G1	4 - 19/20	4	X	S	Computer Security		KS	KE	U	W	T	3
EXTG60	7.5	G2	4 - 19/20	3	X	E	Economics, Industrial Organization	X	KS	KE	U	W	T	3
MVKN20	7.5	A	4 - 19/20	4	-	S	Energy Utilization		KS	KE	U	W	T	3
IYT000	15	G2	4 - 19/20	3	-	S	Engineering Training Course		KS	KE	U	W	T	3
FRTN45	4.5	A	4 - 19/20	3	-	S	Mathematical Modelling, Advanced Course		KS	KE	U	W	T	3

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links						
									sp1	sp2	sp3	sp4			
ETIA10	7.5	G1	4 - 19/20	3	X	E	Patent and Intellectual Property Rights		KS	KE	U	W	T	3	
EMSF05	7.5	G2	4 - 19/20	4	X	E	Probability Theory		KS	KE	U	W	T	3	
MMTN45	7.5	A	4 - 19/20	4	X	E	Production Technology 2		KS	KE	U	W	T	3	
ETSN15	7.5	A	4 - 19/20	4	-	S	Requirements Engineering		KS	KE	U	W	T	3	
FMSN35	7.5	A	4 - 19/20	4	X	E	Stationary and Non-stationary Spectral Analysis	X	KS	KE	U	W	T	3	
EDAF90	7.5	G2	4 - 19/20	4	X	S	Web Programming		KS	KE	U	T		3	
MMKN11	7.5	A	4 - 19/20	4	X	E	Design for X		KS	KE	U	W	T	3	4

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links						
									sp1	sp2	sp3	sp4			
EITA05	4.5	G1	4 - 19/20	4	-	S	History of Technology		KS	KE	U	W	T	3	4
BMEA01	6	G1	4 - 19/20	4	-	S	Medicine for Engineers	X	KS	KE	U	W	T	3	4
MAMF21	7.5	G2	4 - 19/20	4	-	S	Working Environment, Occupational Health and Safety		KS	KE	U	W	T	3	4
EIEN35	7.5	A	4 - 19/20	4	X	E1	Automation for Complex Systems		KS	KE	U	W	T		4
EXTG65	7.5	G2	4 - 19/20	3	-	S	Econometrics	X	KS	KE	U	W	T		4
MVKN15	7.5	A	4 - 19/20	4	-	S	Energy Supply Systems		KS	KE	U	W	T		4
IYT000	15	G2	4 - 19/20	3	-	S	Engineering Training Course		KS	KE	U	W			4

Course Code	Credits	Cycle	Language			S.Ex. stud.	Course Name	Footnote	Links					
			Year	From year					sp1	sp2	sp3	sp4		
EXTF30	7.5	G2	4 - 19/20	3	-	S	Fixed Income Securities	X	KS	KE	U	W	T	4
KIIF01	7.5	G2	4 - 19/20	4	X	E1	Industrial Environmental Management		KS	KE	U	W	T	4
EMSN30	7.5	A	4 - 19/20	4	X	E	Linear and Logistic Regression	X	KS	KE	U	W	T	4
EMAN45	7.5	A	4 - 19/20	4	-	E	Machine Learning		KS	KE	U	W	T	4
EITN95	7.5	A	4 - 19/20	4	X	E1	Simulation		KS	KE	U	W	T	4

[EXTF40](#) Option Theory: *The course is to be studied together with NEKH82, which is given by the Department of Economics. Does not follow the study period structure.*

[EXTF35](#) Portfolio Selection: *The course is to be studied together with NEKH81, which is given by the Department of Economics. Does not follow the study period structure.*

[EDAP05](#) Concepts of Programming Languages: *The course is offered every other academic year and will be given in 2019/20, 2021/22.*

[EXTG65](#) Econometrics: *The course is to be studied together with NEKG31, which is given by the Department of Economics. Does not follow the study period structure.*

[EXTN05](#) Econometrics, Advanced Course: *The course is to be studied together with NEKN31, which is given by the Department of Economics. Does not follow the study period structure.*

[EXTF30](#) Fixed Income Securities: *The course is to be studied together with NEKG81, which is given by the Department of Economics. Does not follow the study period structure.*

[MFFE35](#) Complex Economy: *The course is offered every other academic year and will be given in 2019/20, 2021/22.*

[EXTG60](#) Economics, Industrial Organization: *The course is to be studied together with NEKH21, which is given by the Department of Economics. Does not follow the study period structure.*

[MMSN35](#) Stationary and Non-stationary Spectral Analysis: *The course is offered every other academic year and will be given in 2019/20, 2021/22.*

[BMEA01](#) Medicine for Engineers: *The course is offered every other academic year and will be given in 2019/20, 2021/22.*

[FMSN30](#) Linear and Logistic Regression: *Only one of the courses [FMSN30](#) and [FMSN40](#) may be included in a degree.*

Externally Elective Courses - I

Course Code	Credits	Cycle		From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
		Year								sp1	sp2	sp3	sp4
GEMA20	7.5	G1	4 - 19/20	1	-	E	English for Engineers	X	KS KE U W T	1	2		
GEMA25	7.5	G1	4 - 19/20	1	-	S	German for Engineers	X	KS KE U W T	1	2		
GEMA70	15	G1	4 - 19/20	1	-	S	Japanese for Engineers	X	KS KE U W T	1	2		
GEMA65	7.5	G1	4 - 19/20	1	-	S	Chinese for Engineers	X	KS KE U W T			3	4
GEMA20	7.5	G1	4 - 19/20	1	-	E	English for Engineers	X	KS KE U W T			3	4
GEMA01	7.5	G1	4 - 19/20	1	-	S	French for Engineers: Language, Culture and Society, First Course	X	KS KE U W T			3	4

[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.*

[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 - I

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

Links

Course Code	Credits	Course Name	Links
FMSL01	15	Bachelor Project in Mathematical Statistics	KS KE U W
MIOL01	15	Bachelor Project in Production Management	KS KE U