

# Engineering Mathematics

## Study Year 1 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	21/22 sp1					21/22 sp2					21/22 sp3					21/22 sp4				
								F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
<a href="#">FMAB65</a>	7.5	G1	-	S	Calculus in One Variable B1		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	50	30	0	0	120															
<a href="#">FMAB20</a>	6	G1	-	S	Linear Algebra		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	40	16	0	0	106															
<a href="#">FMAB55</a>	5	G1	-	S	Mathematical Communication		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	10	8	0	1	17	10	2	0	1	18	4	6	0	4	45					
<a href="#">FMAB70</a>	7.5	G1	-	S	Calculus in One Variable B2		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						50	30	0	0	120										
<a href="#">EDAA55</a>	9	G1	-	S	Programming, First Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						30	0	22	0	98	22	0	10	0	62					
<a href="#">FMEA35</a>	6	G1	-	S	Engineering Mechanics I		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											36	28	0	0	96					
<a href="#">FMAB35</a>	7.5	G1	-	S	Calculus in Several Variables		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											38	14	2	0	79	14	8	0	0	45
<a href="#">FMAB40</a>	4	G1	-	S	Mathematical Modelling	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>																6	0	0	3	98
<a href="#">FAFF40</a>	7.5	G2	-	S	Waves and Optics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">T</a>																40	28	16	0	120

[FMAB40](#) Mathematical Modelling: *All the projects must be approved during the current academic year. Thus one may not save results on single projects till a later year.*

## Study Year 2 (Mandatory Courses)

Course Code	Credits	Cycle	Language		Course Name	Footnote	Links	21/22																			
			S.Ex. stud.					sp1	sp2	sp3	sp4																
								F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
<a href="#">EMAF01</a>	7	G2	-	E1	Mathematics - Analytic Functions		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	42	24	0	1	128															
<a href="#">EMSF80</a>	9	G2	-	S	Mathematical Statistics, Basic Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	18	14	4	0	85	18	14	2	2	85										
<a href="#">EDAA01</a>	7.5	G1	-	S	Programming - Second Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	14	0	6	0	72	14	0	8	0	86										
<a href="#">EMAF05</a>	7	G2	-	E1	Mathematics - Systems and Transforms		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						40	16	0	1	130										
<a href="#">FRTF05</a>	7.5	G2	-	S	Automatic Control, Basic Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											30	30	12	0	128					
<a href="#">MIOA12</a>	6	G1	-	S	Managerial Economics, Basic Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											50	12	5	0	93					
<a href="#">FMAN55</a>	7.5	A	-	S	Applied Mathematics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											24	12	2	0	62	22	14	2	0	62
<a href="#">EMAF25</a>	3	G2	-	S	Mathematical Modelling with Statistical Applications, Project		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>																18	0	0	3	59
<a href="#">EITG10</a>	6	G2	-	E1	Systems, Signals and Discrete Transforms		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>																28	28	8	0	96

### Study Year 3 (Mandatory Courses)

Course Code	Credits	Cycle	Language		Course Name	Footnote	Links	21/22																			
			S.Ex. stud.					sp1	sp2	sp3	sp4																
								F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
<a href="#">ETEF01</a>	7	G2	-	S	Electromagnetic Field Theory		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	34	32	0	0	110															
<a href="#">EMSF10</a>	7.5	G2	X	E	Stationary Stochastic Processes	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	22	16	6	0	145															
<a href="#">EMAN70</a>	6	A	X	E1	Matrix Theory		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	18	10	0	1	56	12	4	0	1	58										
<a href="#">FMNN10</a>	8	A	X	E1	Numerical Methods for Differential Equations		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						48	0	0	3	160										
<a href="#">EMIF10</a>	6	G2	-	S	Environmental Systems Studies and Sustainable Development		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">T</a>						32	6	0	0	68	2	3	0	2	46					
<a href="#">FRTN45</a>	4.5	A	-	S	Mathematical Modelling, Advanced Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											4	0	0	6	100					
<a href="#">FMAN65</a>	6	A	-	S	Mathematical Structures		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											28	14	0	0	118					
<a href="#">EDAF05</a>	5	G2	X	S	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>																20	0	12	0	100
<a href="#">FHLEF10</a>	7.5	G2	-	E1	Finite Element Method and Introduction to Strength of Materials		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>																32	28	2	0	140

[EMSF10](#) Stationary Stochastic Processes: *The course is to be studied together with MASC04*

## Study Year 3 (Elective Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language				Footnote	Links		21/22 sp1		21/22 sp2		21/22 sp3		21/22 sp4									
				Year	From year	S.Ex. stud.						F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
<a href="#">EXTG11</a>	4	G2	X	E1						<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>			6	8	0	0	30	14	16	0	0	30
<a href="#">EXTG15</a>	7.5	G2	X	E1							<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		16	8	0	0	65	27	20	0	0	65

## Specialisation bam - Image Analysis and Machine Intelligence

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language		Footnote	Links		sp1		sp2		sp3		sp4											
												F	O	L	H	S	F	O	L	H	S	F	O	L	H	S			
<a href="#">EDAF80</a>	7.5	G2	V	4	4	X	E				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	26	0	10	0	160									
<a href="#">EMAN20</a>	7.5	A	V	4	4	X	E1				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	32	0	0	2	166									
<a href="#">EDAN20</a>	7.5	A	V	4	4	X	E				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	20	0	14	0	160									
<a href="#">EMNN01</a>	7.5	A	V	4	4	X	E				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	36	0	0	6	160									
<a href="#">EXTQ40</a>	7.5	A	V	4	4	-	E1				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		34	10	30	0	126								
<a href="#">FMSN45</a>	7.5	A	V	4	4	X	E		X		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		24	12	12	5	120								
<a href="#">EMAN30</a>	7.5	A	V	4	4	X	E1				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		32	0	0	3	165								
<a href="#">EMAN61</a>	7.5	A	V	4	4	X	E1				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		32	14	4	2	148								
<a href="#">FMSN20</a>	7.5	A	V	4	4	X	E		X		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		26	0	18	5	150								
<a href="#">EDAP01</a>	7.5	A	V	4	4	X	E				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>						28	0	0	0	170				
<a href="#">EMAN95</a>	7.5	A	V	4	4	X	E1				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>						32	0	0	2	166				
<a href="#">FMSN50</a>	7.5	A	V	4	4	X	E		X		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>						28	0	12	5	140				
<a href="#">FMSN30</a>	7.5	A	V	4	4	X	E				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>										24	0	26	2	120
<a href="#">EMAN45</a>	7.5	A	V	4	4	-	E1				<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>										28	0	0	2	170

[FMSN45](#) Mathematical Statistics, Time Series Analysis: *The course is to be studied together with MASM17.*

[FMSN20](#) Spatial Statistics with Image Analysis: *The course is to be studied together with MASM25*

[FMSN50](#) Monte Carlo and Empirical Methods for Stochastic Inference: *The course is to be studied together with MASM11.*

## Specialisation bem - Computational Mechanics

Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1				sp2				sp3				sp4							
											F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
<a href="#">FHLN05</a>	7.5	A	V	4	4	X	E	Computational Inelasticity		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	38	28	4	0	130															
<a href="#">FMEN21</a>	7.5	A	V	4	4	X	E	Continuum Mechanics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	42	14	0	2	142															
<a href="#">FHLN20</a>	7.5	A	V	4	4	X	E	Finite Element Method for Non-linear Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						28	0	28	0	144										
<a href="#">MMVN10</a>	7.5	A	V	4	4	-	S	Fluid Mechanics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						26	46	4	8	116										
<a href="#">FMEN11</a>	7.5	A	V	4	4	X	E	Mechanical Vibrations		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						42	14	0	0	144										
<a href="#">EMAN61</a>	7.5	A	V	4	4	X	E1	Optimization		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						32	14	4	2	148										
<a href="#">MVKN90</a>	7.5	A	V	4	4	X	E	Turbulence - Theory and Modelling		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						28	26	8	4	134										
<a href="#">FMEN02</a>	7.5	A	V	4	4	X	E	Multibody Dynamics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											36	14	0	4	146					
<a href="#">VSMN10</a>	7.5	A	V	4	4	X	E1	Structural Dynamic Computing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											20	0	8	2	170					
<a href="#">FHLN01</a>	7.5	A	V	4	4	X	E	Structural Optimization		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											28	26	2	0	100					
<a href="#">EMAN25</a>	7.5	A	V	4	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>											18	0	0	0	82	16	0	0	0	84
<a href="#">MMVN05</a>	7.5	A	V	4	4	X	E	Numerical Fluid Dynamics and Heat Transfer		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>															28	24	10	4	134	
<a href="#">MVKN70</a>	7.5	A	V	5	4	X	E	Advanced Methods within Numerical Fluid Mechanics and Heat Transfer		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	28	24	10	4	134															

## Specialisation biek - Biological, Ecological and Medical Modelling



Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1				sp2				sp3				sp4						
											F	O	L	S	F	O	L	S	F	O	L	S	F	O	L	S			
<a href="#">FMNN25</a>	7.5	A	V	4	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>	28	0	0	3	169														
<a href="#">FMNN01</a>	7.5	A	V	4	4	X	E	Numerical Linear Algebra		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	36	0	0	6	160														
<a href="#">FMAN80</a>	7.5	A	V	4	4	X	E1	Functional Analysis and Harmonic Analysis		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	20	10	0	0	108	8	4	0	0	50									
<a href="#">FMAN15</a>	7.5	A	V	4	4	X	E	Nonlinear Dynamical Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	16	6	0	0	78	14	8	0	0	78									
<a href="#">FHLN20</a>	7.5	A	V	4	4	X	E	Finite Element Method for Non-linear Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						28	0	28	0	144									
<a href="#">EMAN61</a>	7.5	A	V	4	4	X	E1	Optimization		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>						32	14	4	2	148									
<a href="#">EMAE35</a>	6	G2	V	4	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>										26	0	4	1	130					
<a href="#">FMSN50</a>	7.5	A	V	4	4	X	E	Monte Carlo and Empirical Methods for Stochastic Inference	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>										28	0	12	5	140					
<a href="#">EITN90</a>	7.5	A	V	4	4	X	E	Radar and Remote Sensing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>										28	8	12	5	147					
<a href="#">FMNN05</a>	7.5	A	V	4	4	X	E1	Simulation Tools		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>										28	0	0	3	169					
<a href="#">EMAN25</a>	7.5	A	V	4	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>										18	0	0	0	82	16	0	0	0	84
<a href="#">VSMN20</a>	7.5	A	V	4	4	X	E1	Software Development for Technical Applications		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>														16	32	0	0	152	

[FMSN50](#) Monte Carlo and Empirical Methods for Stochastic Inference: *The course is to be studied together with MASM11.*

## Specialisation fm - Financial Modelling



Course Code	Credits	Cycle	Mand./ Elect.	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1				sp2				sp3				sp4							
											F	O	L	S	F	O	L	S	F	O	L	S	F	O	L	S				
<a href="#">FMAN10</a>	7.5	A	V	2	2	X	E1	Algebraic Structures		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>									28	10	0	0	162							
<a href="#">EDAP10</a>	7.5	A	V	4	4	-	S	Concurrent Programming		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	28	0	12	0	160															
<a href="#">EDAP20</a>	7.5	A	V	4	4	X	E	Intelligent Autonomous Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	24	0	30	0	144															
<a href="#">EDAN20</a>	7.5	A	V	4	4	X	E	Language Technology		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	20	0	14	0	160															
<a href="#">EDAN26</a>	7.5	A	V	4	4	-	S	Multicore Programming	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	24	0	12	0	150															
<a href="#">EDAN95</a>	7.5	A	V	4	4	-	E	Applied Machine Learning		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					28	0	14	0	156											
<a href="#">EDAN01</a>	7.5	A	V	4	4	X	E1	Constraint Programming		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					20	0	12	0	160											
<a href="#">EDIN01</a>	7.5	A	V	4	4	X	E1	Cryptography		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					36	14	0	2	148											
<a href="#">EDAG01</a>	7.5	G2	V	4	4	X	S	Efficient C	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					28	12	12	0	148											
<a href="#">FMAE35</a>	6	G2	V	4	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>									26	0	4	1	130							
<a href="#">FMNN05</a>	7.5	A	V	4	4	X	E1	Simulation Tools		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>									28	0	0	3	169							
<a href="#">EDAF75</a>	7.5	G2	V	4	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>									24	2	8	0	112	0	0	0	50			
<a href="#">FRTN01</a>	10	A	V	4	4	X	E	Real-Time Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>									34	22	12	0	132	0	0	0	12	54		
<a href="#">EDAN40</a>	7.5	A	V	4	4	X	E	Functional Programming		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>													28	6	0	0	166			
<a href="#">EDAP15</a>	7.5	A	V	4	4	X	E	Program 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																			

[EDAN26](#) Multicore Programming: *The course is offered every other academic year and will be given in 2021/22, 2023/24.*

[EDAG01](#) Efficient C: [EDAA25](#) and [EDAF15](#) can not be included in the degree at the same time as [EDAG01](#).

[EDAP15](#) Program Analysis: *The course is offered every other academic year and will next be given in 2022/23.*

## Specialisation sssr - Systems, Signals and Control











## Externally Elective Courses - Pi

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4																			
										F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S
<a href="#">GEMA20</a>	7.5	G1	4	1	-	E	English for Engineers		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	30	0	0	0	70	20	0	0	0	80										
<a href="#">GEMA25</a>	7.5	G1	4	1	-	S	German for Engineers		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	0	40	0	0	60	0	40	0	0	60										
<a href="#">GEMA65</a>	7.5	G1	4	1	-	S	Chinese for Engineers		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											0	20	0	0	80	0	20	0	0	80
<a href="#">GEMA20</a>	7.5	G1	4	1	-	E	English for Engineers		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											30	0	0	0	70	20	0	0	0	80
<a href="#">GEMA01</a>	7.5	G1	4	1	-	S	French for Engineers: Language, Culture and Society, First Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											0	26	0	0	74	0	26	0	0	74
<a href="#">GEMA70</a>	15	G1	4	1	-	S	Japanese for Engineers		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>											0	34	0	0	165	0	32	0	0	165

## Bachelor's Projects - Pi

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

### 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>
EXTL02	15	Bachelor Project in Ecology	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</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>
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>
FMEL01	15	Bachelor Project in Mechanics	<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> <a href="#">W</a>
PHYL01	15	Bachelor Project in Physics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
FHLL01	15	Bachelor Project in Solid Mechanics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>
VSML05	15	Bachelor Project in Structural Mechanics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>

## Degree Projects - Pi

The list contains the degree project courses that are included in the Pi 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>
EXTM20	30	Degree Project in Ecology	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</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>
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> <a href="#">W</a>
FMEM01	30	Degree Project in Mechanics for Engineers	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</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>
FHLM01	30	Degree Project in Solid Mechanics for Engineers	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a>
VSMM05	30	Degree Project in Structural Mechanics	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a>