

Mathematical Statistics

Course Code	Credits	Cycle	Programme	Language		Course Name	Footnote	Links	12/13 sp1				12/13 sp2				12/13 sp3				12/13 sp4									
				S.Ex. stud.					F	O	L	H	S	F	O	L	H	S	F	O	L	H	S	F	O	L	H	S		
FMSF15	7.5	G2	C, D, E, E, I, Pi	X	E1	Markov Processes		KS KE U W T	28	28	6	0	120																	
FMS086	7.5	G2	B, K, N	-	S	Mathematical Statistics		KS KE U W T	28	22	18	1	120																	
FMS140	7.5	G2	W	-	S	Mathematical Statistics, Basic Course		KS KE U W T	14	28	28	1	120																	
FMSN20	7.5	A	C, D, E, E, Pi	X	E1	Spatial Statistics with Image Analysis		KS KE U W T	28	0	21	4	120																	
FMSF10	7.5	G2	C, D, E, E, I, L, M, MWIR	X	E1	Stationary Stochastic Processes	X	KS KE U W T	28	28	6	0	120																	
FMS065	7.5	G2	C, Pi, RH	-	E2	Statistical Methods for Safety Analysis		KS KE U W T	28	14	12	0	120																	
FMSN25	7.5	A	E, I, Pi	X	E1	Valuation of Derivative Assets		KS KE U W T	28	28	6	1	120																	
FMS012	9	G2	I	-	S	Mathematical Statistics, Basic Course		KS KE U W T	18	14	6	0	85	18	14	6	0	85												
FMS012			C, D						18	14	4	0	85	18	14	6	0	85												
FMS012			E											18	14	4	0	85	18	14	6	0	85							
FMS012			Pi											18	14	4	0	72	18	14	6	0	98							
FMS012			F																18	14	4	0	85	18	14	6	0	85		
FMS110	7.5	A	D, E, Pi	X	E1	Non-Linear Time Series Analysis		KS KE U W T	16	4	8	0	60	16	4	8	3	60												
FMS161	7.5	A	E, I, Pi	X	E1	Financial Statistics		KS KE U W T						28	14	14	5	120												
FMSF01	3	G2	V	-	S	Mathematical Statistics	X	KS KE U W T						0	0	12	1	50												
FMS032	7.5	G2	L, V	-	S	Mathematical Statistics, Basic Course		KS KE U W T						28	28	12	0	120												
FMS051	7.5	A	C, D, E, E, I, Pi	X	E2	Mathematical Statistics, Time Series Analysis		KS KE U W T						26	12	12	5	120												
FMSN15	7.5	A	E, Pi	X	E1	Statistical Modelling of Multivariate Extreme Values		KS KE U W T						28	14	9	1	120												
FMSN10	7.5	A	E, Pi	X	E1	Survival Analysis		KS KE U W T						28	14	8	1	100												
FMSN30	7.5	A	D, E, L, M, Pi	X	E1	Linear and Logistic Regression		KS KE U W T											28	14	14	2	120							
FMS091	7.5	A	D, E, I, Pi	X	E2	Monte Carlo and Empirical Methods for Stochastic Inference		KS KE U W T											26	0	14	5	120							
FMSF05	7.5	G2	E, I, Pi	X	E2	Probability Theory		KS KE U W T											22	14	0	0	160							
FMSN35	7.5	A	C, D, E, E, I, Pi	X	E2	Stationary and Non-stationary Spectral Analysis		KS KE U W T											18	6	6	5	120							

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				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
FMS072	7.5	G2	D, E, E, MLIV, MWIR, N, Pi, W	X	E2	Design of Experiments		KS KE U W T																14	14	0	14	150
FMSN05	3	A	Pi	X	E	International Project Course-Mathematical Modelling	X	KS KE U W T																0	0	0	10	40
FMS035	7.5	G2	M	-	S	Mathematical Statistics, Basic Course		KS KE U W T																28	28	10	0	120
FMS045	6	G2	C, D, E, I	-	S	Stationary Stochastic Processes	X	KS KE U W T																28	28	4	0	80
FMS045			Pi				X		Course on hold																			
FMS047	3	A	D, I	-	S	Stationary Stochastic Processes, Project Work	X	KS KE U W T																0	0	4	6	70
FMS155	7.5	A	D, E, I, Pi	X	E2	Statistical Modelling of Extreme Values		KS KE U W T																28	14	6	2	100

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

[FMSF01](#) (V) Mathematical Statistics: *This course can only be included in TVOLY.*

[FMSN05](#) (Pi) International Project Course-Mathematical Modelling: *Limited number of participants. Specific application procedure. The course is given in August.*

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

[FMS045](#) (I) Stationary Stochastic Processes: *Compulsory course in the elective block 'Mathematical Modelling' for students admitted autumn 2010. The course is also an optional programme course. Only one of the courses [FMS045](#) and [FMSF10](#) may be included in a degree.*

[FMS045](#) (Pi) Stationary Stochastic Processes: *The course is transferred from year 2 to year 3.*

[FMS047](#) (I) Stationary Stochastic Processes, Project Work: *Compulsory course in the elective block 'Mathematical Modelling' for students admitted autumn 2010. The course is also an optional programme course.*

Mathematics

Course Code	Credits	Cycle	Programme	Language		Course Name	Footnote	Links	12/13																			
				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
FMA430	6	G1	B, BI, BME, K, L, N, Y	-	S	Calculus in Several Variables		KS KE U W T	50	28	4	0	90															
FMA430			C, D											50	28	4	0	90										
FMA430			E, I																50	28	4	0	90					
FMA430			E, M, MD, W																					50	28	4	0	90
FMA170	6	A	C, D, E, E, L, Pi	X	E1	Image Analysis		KS KE U W T	28	14	8	1	120															
FMA661	7.5	G2	IDA	-	S	Probability Theory and Discrete Mathematics		KS KE U W T	36	36	0	0	128															
FMAA05	15	G1	BI, E, E, I, L, Pi, V, W	-	S	Calculus in One Variable		KS KE U W T	56	48	0	0	122	56	42	0	0	122										
FMA260	7.5	A	E, Pi	X	E2	Functional Analysis and Harmonic Analysis		KS KE U W T	14	14	0	0	72	14	14	0	0	72										
FMA140	6	A	D, E, Pi	X	E2	Non-Linear Dynamical Systems		KS KE U W T	14	7	0	0	59	14	7	0	0	59										
FMA645	13.5	G1	IBYA, IBYL, IBYV, IDA, IEA	-	S	Calculus		KS KE U W T	14	28	0	0	38	36	36	0	0	88	28	28	0	0	64					
FMAA01	15	G1	BME, C, D, M, MD	-	S	Calculus in One Variable		KS KE U W T	34	36	0	0	81	42	28	0	0	81	42	28	0	0	81					
FMAA01			B, K, N						34	36	0	0	81	0	0	0	0	0	42	28	0	0	81	42	28	0	0	81
FMA085	4.5	G1	Pi	-	S	Mathematical Communication		KS KE U W T	10	10	0	1	10	6	4	0	1	6	0	0	0	0	0	8	8	0	4	58
FMA420	6	G1	C, E, Pi, W	-	S	Linear Algebra		KS KE U W T	42	28	0	0	90															
FMA420			B, I, K, M, MD, N											42	28	0	0	90										
FMA420			BI, E, L, V																42	28	0	0	90					
FMA420			BME, D																					42	28	0	0	90
FMAF01	7	G2	E, N, Pi	-	S	Mathematics - Analytic Functions		KS KE U W T	42	28	4	0	130															
FMAF01			C, D, E, I				X												42	28	4	0	130					
FMA120	6	A	Pi	X	E2	Matrix Theory		KS KE U W T	14	14	0	1	52	14	14	0	1	52										
FMA120			C, D, E, F																20	20	0	1	64	8	8	0	1	40
FMA175	3	A	C, D, E, E, L, Pi	X	E1	Image Analysis, Project		KS KE U W T						0	0	0	10	70										
FMAA10	3	G1	Pi	-	S	Mathematical Modelling	X	KS KE U W T						18	0	0	2	60										
FMA145	3	A	D, E, Pi	X	E1	Non-linear Dynamical Systems, Project		KS KE U W T						0	0	0	10	70										
FMA051	6	A	D, E, E, I, Pi	X	E1	Optimization	X	KS KE U W T						36	14	4	1	100										

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				S.Ex. stud.					sp1	sp2	sp3	sp4													
									F	O	L	H	S	F	O	L	H	S	F	O	L	H	S		
FMA135	6	G1	C, D, E, F, Pi	X	E2	Geometry		KS KE U W T		14	0	2	0	64	14	0	2	1	64						
FMA250	7.5	A	F, Pi	X	E2	Partial Differential Equations with Distribution Theory		KS KE U W T		14	14	0	0	72	14	14	0	0	72						
FMAF05	7	G2	F, N, Pi	-	S	Mathematics - Systems and Transforms		KS KE U W T		42	28	4	0	90											
FMAF05			C, D, E, I				X														42	28	4	0	90
FMA125	3	A	Pi	-	E1	Matrix Theory, Project		KS KE U T		0	0	0	10	70											
FMA125			D, E, F																		0	0	0	10	70
FMAN10	7.5	A	C, D, E, Pi	X	E1	Algebraic Structures	X	KS KE U W T							28	14	0	0	158						
FMAF10	5	G2	B, C, D, K, L, M, W	-	S	Applied Mathematics - Linear systems	X	KS KE U W T							28	14	4	0	75						
FMA270	6	A	C, D, E, F, Pi	X	E1	Computer Vision		KS KE U W T							28	14	8	1	120						
FMA240	6	G2	D, E, F, Pi	X	E2	Linear and Combinatorial Optimization		KS KE U W T							28	0	4	1	132						
FMA111	6	A	D, E, Pi	-	S	Mathematical Structures		KS KE U W T							28	14	0	0	118						
FMA021	7.5	A	D, E, F, M, Pi	-	S	Applied Mathematics		KS KE U W T							24	12	2	0	60	24	14	6	0	60	
FMAN01	7.5	A	E, F, Pi, W	X	E2	Biomathematics	X	KS KE U T	Course on hold																
FMA435	7.5	G1	Pi	-	S	Calculus in Several Variables		KS KE U W T							50	28	4	0	90	10	10	0	0	20	
FMA200	6	A	D, E, F, Pi	X	E2	Calculus of Variations		KS KE U T							14	0	0	0	66	14	0	0	0	66	
FMA023	3	A	F, Pi	-	E1	Applied Mathematics, Project		KS KE U W T												0	0	0	10	70	
FMA272	3	A	C, D, E, F, Pi	X	E1	Computer Vision, Project		KS KE U T												0	0	0	10	70	
FMA091	6	G1	C, D, E, F, Pi	-	S	Discrete Mathematics		KS KE U W T												36	28	0	0	104	
FMA656	4.5	G1	IBYA, IBYL, IBYV, IDA, IEA	-	S	Mathematics, Linear Algebra		KS KE U W T												28	28	0	0	64	
FMAN05	6	A	D, E, N, Pi	X	E1	Quantum Computing	X	KS KE U W T	Course on hold																

[FMAF01](#) (D) Mathematics - Analytic Functions: *Can together with [FMAF05](#) replace [FMAF10](#). Also given as an elective course in the 4th year.*

[FMAA10](#) (Pi) 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.*

[FMA051](#) (I) Optimization: *Compulsory course in the elective block 'Mathematical Modelling' for students admitted autumn 2010. The course is also an optional programme course.*

[FMAF05](#) (C) Mathematics - Systems and Transforms: *Only one of the courses [FMAF05](#) and [FMAF10](#) may be included in a degree.*

[FMAF05](#) (D) Mathematics - Systems and Transforms: *Can together with [FMAF01](#) replace [FMAF10](#). Only one of the courses [FMAF05](#) and [FMAF10](#) may be included in a degree.*

[FMAN10](#) (C, D, E, Pi) Algebraic Structures: *In Spring 2013 the written exam will take place on the Saturday after the first week in the second study period.*

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

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

[EMAN01](#) (E, F, Pi, W) Biomathematics: *The course is offered every other academic year and will next be offered in 2013/14.*

[EMAN05](#) (D, E, N, Pi) Quantum Computing: *The course is offered every other academic year and will next be offered in 2013/14.*

Numerical Analysis

Course Code	Credits	Cycle	Programme	Language		Course Name	Footnote	Links	12/13																			
				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
FMNN25	7.5	A	D, E, F, Pi	X	E1	Advanced Course in Numerical Algorithms with Python/SciPy		KS KE U W T	28	14	0	3	155															
FMNN01	7.5	A	Pi	X	E	Numerical Linear Algebra		KS KE U W T	42	0	0	6	153															
FMNN01			F						42	0	0	6	152															
FMN100	6	A	C, D, E, F	X	E1	Numerical Methods in CAGD		KS KE U W T	28	12	0	4	120															
FMNN20	7.5	A	E, Pi	X	E1	Numerical Analysis for Elliptic and Parabolic Differential Equations	X	KS KE U T	Course on hold																			
FMNN10	8	A	E, I, Pi	X	E1	Numerical Methods for Differential Equations		KS KE U W T						56	0	0	3	150										
FMNN05	7.5	A	D, E, Pi	X	E1	Simulation Tools		KS KE U W T						28	14	0	3	155										
FMN140	6	G2	V	-	S	Scientific Computing		KS KE U W T						28	0	28	1	50	2	0	10	1	41					
FMNN15	4	A	F, Pi	X	E1	Multigrid Methods for Differential Equations		KS KE U W T											20	0	0	2	105					
FMN011	6	G2	C, D, L	X	E1	Numerical Analysis		KS KE U W T																56	14	0	3	90
FMN050	6	G2	E, I	X	E1	Numerical Analysis	X	KS KE U W T																56	14	0	3	90

[FMNN20](#) (E, Pi) Numerical Analysis for Elliptic and Parabolic Differential Equations: *The course is offered every other academic year and will next be offered in 2013/14.*

[FMN050](#) (I) Numerical Analysis: *Compulsory course in the elective block 'Mathematical Modelling' for students admitted autumn 2010. The course is also an optional programme course.*

Bachelor's Projects of the Department

The list contains the bachelor's projects which are given by the department and which programme each bachelor's project is included in. The list is not necessarily complete before the academic year 2016/17.

Links

Course Code	Credits	Programme	Course Name
FMSL01	15	C , D , E , F , I , Pi	Bachelor Project in Mathematical Statistics KS KE U W

Degree Projects of the Department

The list contains the degree projects which are given by the department and which programme each degree project is included in.

Links

Course Code	Credits	Programme	Course Name	Links
FMS820	30	BME , C , D , E , F , I , Pi , RH	Degree Project in Mathematical Statistics for Engineers	KS KE U W
FMA820	30	BME , C , D , E , F , I , M , Pi	Degree Project in Mathematics for Engineers	KS KE U W
FMN820	30	D , E , F , I , M , Pi	Degree Project in Numerical Analysis	KS KE U W