Master's Programme in Mathematics and Statistics - Preliminary teaching programme for academic year 2025-26

Code	Course unit name	Scope (cr)	Period	Languages	Form of teaching	Open university studies	Open to exchange students	Open to other programmes
MAST31505	Adaptive Dynamics	10 cr	34. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST32004	Advanced Bayesian Inference	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31806	Advanced risk theory	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31005	Algebra II	10 cr	12. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST30128	Asymptotic statistical inference	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31202	Axiomatic set theory	10 cr	34. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
	DIF 11 11	-		multilingual)		students.		
MAST30156	Bifurcation theory	5 cr	entire year	English - Completely in English (or	online teaching (not time-bound)	Course unit is only for degree	yes	yes
		-		multilingual)		students.		
MAST30154	Career seminar in insurance mathematics	5 cr	34. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
144CT204FF	Const. discission and the continu	F	4.2	multilingual)		students.		
MAST30155	Case studies in insurance mathematics	5 cr	12. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
MAST30157	Case Studies in Mathematics and Statistics	5 cr	12. period	multilingual) English - Completely in English (or	contact teaching	students. Course unit is only for degree	luos .	was
IVIA3130137	Case studies in Mathematics and Statistics	3 (1	12. periou	multilingual)	contact teaching	students.	yes	yes
to be announced	Clustering, classification and nonlinear	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
to be affilounced	regression	3 0	3. periou	multilingual)	contact teaching	students.	yes	yes
to be announced	Complex dynamics (preliminary name)	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
to be announced	complex dynamics (premimary name)	3 61	4. period	multilingual)	contact teaching	students.	Yes	Yes
MAST31214	Computability theory	10 cr	34. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
1417/3131214	computability theory	10 0	3. 4. period	multilingual)	contact teaching	students.	Yes	Yes
MAST30146	Computational methods I	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	ves
				multilingual)	J	students.	,	,
MAST32001	Computational statistics	5 cr	1. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
			ļ '	multilingual)	_	students.	ľ	ľ
MAST31036	Convex analysis and optimization I	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31041	Convex analysis and optimization II	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31206	Dependence logic	10 cr	12. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST30210	Design and analysis of experiments and	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
	surveys			multilingual)		students.		
MAST30170	Functional analysis I	5 cr	1. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST30171	Functional Analysis II	5 cr	2. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST32006	High-dimensional statistics	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
		-		multilingual)		students.		
MAST31901	History of mathematics	5 cr	34. period	English - Completely in English (or	contact teaching	Course unit is both for degree	yes	yes
				multilingual)		students and open university		
144CT2204F		F	1 1	Facilish Completely in Facilish (an	anline teaching (not time bound)	studies.		
MAST32015	History of statistics	5 cr	14. period	English - Completely in English (or multilingual)	onine teaching (not time-bound)	Course unit is both for degree	yes	yes
				muitilinguai)		students and open university studies.		
MAST31023	Introduction to algebraic topology	10 cr	34. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
IVIN-3131023	introduction to algebraic topology	10 (1	34. periou	multilingual)	contact teaching	students.	yes	yes
MAST30143	Introduction to Complex Analysis	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
	Suddion to complex Analysis	30	S. period	multilingual)		students.		,
MAST31017	Introduction to differential geometry	10 cr	34. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
	Saastion to universitial geometry	10 0	S. F. Periou	multilingual)		students.	765	,

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Code	nme in Mathematics and Statistics - Prelin Course unit name	Scope (cr)		Languages	Form of teaching	Open university studies	Open to exchange students	Open to other programmes
MAST30130	Introduction to mathematical physics A	5 cr	3. period	English - Completely in English (or		Course unit is only for degree	yes	yes
			'	multilingual)		students.		ľ
MAST30131	Introduction to mathematical physics B	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31218	Introduction to quantum computation	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST30132	Introduction to Real and Fourier Analysis	5 cr	2. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31401	Inverse Problems 1: convolution and	5 cr	1. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
	deconvolution			multilingual)		students.		
MAST31406	Inverse Problems 2: tomography and	5 cr	2. period		blended teaching (both contact and	Course unit is only for degree	yes	yes
	regularization			multilingual)	distance teaching)	students.		
MAST31405	Inverse problems Project work	5 cr	3-4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
		-		multilingual)		students.		
MAST30011	Master's studies seminar I	2 cr	3. period	Finnish, English - Completely in	contact teaching	Course unit is only for degree	no	no
		-		English (or multilingual)		students.		
MAST30011	Master's studies seminar I	2 cr	1. period	Finnish, English - Completely in	contact teaching	Course unit is only for degree	no	no
NAACT20042	Markada da di dia anata di	2	4	English (or multilingual)		students.		
MAST30012	Master's studies seminar II	3 cr	4. period	Finnish, English - Completely in	contact teaching	Course unit is only for degree	no	no
NAACT20012	Mantagla at relian anno 11	2	2	English (or multilingual)	agenta et tageline	students.		
MAST30012	Master's studies seminar II	3 cr	2. period	Finnish, English - Completely in	contact teaching	Course unit is only for degree	no	no
MAST31201	Mathematical logic	10 cr	1 2 period	English (or multilingual)	contact teaching	students.	lvos	was
IVIA3131201	Wathematical logic	10 (1	12. period	English - Completely in English (or multilingual)	Contact teaching	Course unit is only for degree students.	yes	yes
MAST30163	Mathematical modelling I	5 cr	1. period	English - Completely in English (or	contact teaching	Course unit is only for degree	vos	ves
WAS130103	Watternatical modelling i	3 (1	1. period	multilingual)	contact teaching	students.	yes	yes
MAST30164	Mathematical modelling II	5 cr	2. period	English - Completely in English (or	contact teaching	Course unit is only for degree	ves	ves
WAS130104	Wathernatical modelling ii	3 61	z. periou	multilingual)	contact teaching	students.	yes	yes
MAST30133	Multivariate analysis	5 cr	2. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
	maintanace analysis	5 6.	2. period	multilingual)		students.	, co	,,,,
MAST32017	Nonparametric Inference	5 cr	2. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
			"	multilingual)		students.	\(\frac{1}{2}\)	,
MAST30172	Partial differential equations I	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
	·		'	multilingual)		students.		
MAST30173	Partial differential equations II	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31701	Probability theory I	5 cr	1. period	English - Completely in English (or	blended teaching (both contact and	Course unit is only for degree	yes	yes
				multilingual)	distance teaching)	students.		
MAST31702	Probability theory II	5 cr	2. period	English - Completely in English (or	blended teaching (both contact and	Course unit is only for degree	yes	yes
				multilingual)	distance teaching)	students.		
MAST31908	Quantitative finance	5 cr	34. period		blended teaching (both contact and	Course unit is only for degree	yes	yes
				multilingual)	distance teaching)	students.		
MAST31026	Riemannian geometry	10 cr	12. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31908	Risk theory	10 cr	12. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST33004	Robust regression	5 cr	1. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
NAACT24040	Control the	10	2.4	multilingual)		students.		
MAST31018	Spectral theory	10 cr	34. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
1. 6	Control of other states and the	F	14	multilingual)		students.	1	
to be announced	Statistical and mathematical causality theory	5 cr	May intensive	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
NAACT201CE	Castistical decision theory.	F	4	multilingual)	contact tooghing	students.		
MAST30165	Statistical decision theory	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
NAACT2170C	Stachastic analysis I	For	1 paried	multilingual)	contact toaching	students.	lune	lung
MAST31706	Stochastic analysis I	5 cr	1. period	English - Completely in English (or	contact teacning	Course unit is only for degree	yes	yes
				multilingual)		students.		

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Code	Course unit name	Scope (cr)	Period	Languages	Form of teaching	Open university studies	Open to exchange students	Open to other programmes
MAST31710	Stochastic analysis II	5 cr	2. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31038	Stochastic partial differential equations I	5 cr	3. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST32012	Survival and event history analysis I	5 cr	2. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST32013	Survival and event history analysis II	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31804	Tariff theory	5 cr	4. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		
MAST31003	Topology II	10 cr	12. period	English - Completely in English (or	contact teaching	Course unit is only for degree	yes	yes
				multilingual)		students.		