

Preliminary teaching programme for academic year 2024-25

Code	Course unit name	Scope (cr)	Period	Languages	Mode of teaching / Method of completion	Open university studies	Open to exchange students	Open to other degree programmes
MAST32004	Advanced Bayesian Inference	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31005	Algebra II	10 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30161	Analysis of correlated data	5 cr	to be confirmed	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30128	Asymptotic statistical inference	5 cr	3. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST31402	Bayesian inversion	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30156	Bifurcation theory - Moodle exam	5 cr	all year	English	Moodle exam	Exam is only for degree students.	yes	yes
MAST30154	Career seminar in insurance mathematics	5 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30155	Case studies in insurance mathematics	5 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30157	Case Studies in Mathematics and Statistics	5 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30121	Causal Inference: foundations, assumptions and applications	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST 31207	Classification theory	10 cr	3.-4. period	English - Completely in English (or multilingual)	Contact teaching	Teaching is only for degree students.	yes	yes
MAST30145	Communicating with statistics	5 cr	intensive period in August	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST30137	Complex analysis II	10 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
Mast30146	Computational methods I	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST32001	Computational statistics	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31036	Convex analysis and optimization I	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31041	Convex analysis and optimization II	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30210	Design and analysis of experiments and surveys	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31910	Financial Economics	10 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31205	Finite model theory	10 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31205	Finite model theory - Examinarium	10 cr	all year	English	Examinarium exam	Exam is only for degree students.	yes	yes
MAST30170	Functional analysis I	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30171	Functional Analysis II	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31901	History of mathematics	5 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is offered through Open university.	yes	yes
MAST32015	History of statistics	5 cr	1.-4. period	English - Completely in English (or multilingual)	online teaching (not time-bound)	Teaching is offered through Open university.	yes	yes
MAST31023	Introduction to algebraic topology	10 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30143	Introduction to Complex Analysis	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30130	Introduction to mathematical physics A	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30132	Introduction to Real and Fourier Analysis	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31401	Inverse Problems 1: convolution and deconvolution	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31406	Inverse Problems 2: tomography and regularization	5 cr	2. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST31406	Inverse Problems 2: tomography and regularization	5 cr	2. period	English, Finnish - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST31405	Inverse Problems Project Work	5 cr	2. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST31911	Life insurance mathematics I	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31912	Life insurance mathematics II	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30011	Master's studies seminar I	2 cr	1. period	Finnish, English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	no	no
MAST30011	Master's studies seminar I	2 cr	3. period	Finnish, English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	no	no
MAST30012	Master's studies seminar II	3 cr	2. period	Finnish, English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	no	no
MAST30012	Master's studies seminar II	3 cr	4. period	Finnish, English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	no	no
MAST31201	Mathematical logic	10 cr	1.-2. period	English - Completely in English (or multilingual)	Contact teaching	Teaching is only for degree students.	yes	yes
MAST31201	Mathematical logic - general exam	10 cr	all year	English	usual exam	Exam is only for degree students.	yes	yes
MAST31203	Model theory	10 cr	1.-2. period	English - Completely in English (or multilingual)	Contact teaching	Teaching is only for degree students.	yes	yes
MAST30133	Multivariate analysis	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST32017	Nonparametric Inference	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30172	Partial differential equations I	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30173	Partial differential equations II	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31701	Probability theory I	5 cr	1. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST31702	Probability theory II	5 cr	2. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST31908	Quantitative finance	5 cr	3.-4. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST31026	Riemannian geometry	10 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST33004	Robust regression	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31503	Spatial models in ecology and evolution	10 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST32016	Statistical methods to handle missing data	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31706	Stochastic analysis I	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31710	Stochastic analysis II	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31420	Stochastic Methods of Energy Markets	5 cr	3.-4. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST30166	Stochastic population models I	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST30167	Stochastic population models II	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST32007	Time series analysis I	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST32008	Time series analysis II	5 cr	3. period	English - Completely in English (or multilingual)	including both contact and distance teaching	Teaching is only for degree students.	yes	yes
MAST30135	Topics in logic	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31704	Topics in probability I	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes
MAST31003	Topology II	10 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Teaching is only for degree students.	yes	yes