

PHD PROGRAMME IN MATHEMATICS

	FIELD OF SCIENCE	FIELD OF SCIENCE ID NUMBER
Faculty of Mathematics and Informatics	Natural sciences (Mathematics)	N 001

Field of science	Course title	Credits (ECTS)	Institute(s), implementing the course
	Compulsory courses *		
Natural sciences (Mathematics)	Algebra	10	Institute of Mathematics
Natural sciences (Mathematics)	Functional Analysis	10	Institute of Applied Mathematics
Natural sciences (Mathematics)	Mathematical Analysis	10	Institute of Applied Mathematics
Natural sciences (Mathematics)	Probability Theory and Mathematical Statistics	10	Institute of Mathematics, Institute of Applied Mathematics
	Elective courses		
Natural sciences (Mathematics)	Algebraic Combinatorics	5	Institute of Mathematics
Natural sciences (Mathematics)	Algebraic Number Theory	5	Institute of Mathematics
Natural sciences (Mathematics)	Algebraic Numbers, Polynomials and Diophantine Analysis	5	Institute of Mathematics
Natural sciences (Mathematics)	Analytic Number Theory	5	Institute of Mathematics
Natural sciences (Mathematics)	Analytic and Probabilistic Combinatorics	5	Institute of Mathematics
Natural sciences (Mathematics)	Approximation Methods	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Asymptotic Statistics	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Stochastic Processes	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Finite Population Statistics	5	Institute of Applied Mathematics, Institute of Data Science and Digital Technologies
Natural sciences (Mathematics)	Bayesian Statistics	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Multivariate Statistics	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Differential Problems with Nonlocal Boundary Conditions	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Numerical Methods for Differential Equations	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Insurance Mathematics	5	Institute of Mathematics, Institute of Applied Mathematics
Natural sciences (Mathematics)	Zeta Functions	5	Institute of Mathematics

Natural sciences (Mathematics)	Econometrics	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Spatial Statistics	5	Institute of Data Science and Digital Technologies, Institute of Applied Mathematics
Natural sciences (Mathematics)	Complex Analysis	5	Institute of Mathematics
Natural sciences (Mathematics)	Time Series Analysis	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Markov Chains	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Equations of Mathematical Physics	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Modular Forms and Elliptic Curves	5	Institute of Mathematics
Natural sciences (Mathematics)	Theory of Navier-Stokes Equations	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Dependence Measures and Copulas	5	Institute of Mathematics, Institute of Applied Mathematics
Natural sciences (Mathematics)	Statistics	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Statistical Data Analysis	5	Institute of Applied Mathematics
Natural sciences (Mathematics)	Stochastic Analysis	5	Institute of Mathematics
Natural sciences (Mathematics)	Stochastic Differential Equations	5	Institute of Data Science and Digital Technologies
Natural sciences (Mathematics)	Probabilistic Number Theory	5	Institute of Mathematics
Natural sciences (Mathematics)	Limit Theorems in Probability Theory	5	Institute of Mathematics, Institute of Applied Mathematics

* PhD students in Mathematics must take at least two compulsory courses

Approved by the Doctoral Committee of Mathematics and confirmed by the Board of Faculty of Mathematics and Informatics 10/12/2021. Resolution No. (1.5 E) 110000-TPN-42.
Board Chairman – assoc. prof. dr. Kristina Lapin