



List of credits on the specialty “**Mathematics**”
Specialization “*Actuarial and Financial Mathematics*”

BACHELOR		
NAME OF SUBJECTS	SEMESTER	CREDITS
Mathematical Analysis: Functions of a single Variable 1	Autumn	8
Linear Algebra 1	Autumn	5,5
Algebra	Autumn	4
Informatics and Programming 1	Autumn	3
Analytic Geometry 1	Autumn	5
Mathematical Analysis: Functions of Several Variables 1	Autumn	8
Complex Analysis 1	Autumn	3.5
Differential Equations 1	Autumn	4
Probability Theory 1	Autumn	5
Probability Theory 1	Autumn	4.5
Functional Analysis	Autumn	4.5
Differential geometry and topology 1	Autumn	5.5
History of Mathematics	Autumn	3
Variations Calculus and Optimization Methods	Autumn	4
Numerical optimization Methods	Autumn	4
Probabilistic Number Theory and Elements of Cryptography	Autumn	6
Dynamic Systems	Autumn	5
Fundamentals of Financial Mathematics	Autumn	3
Nonlinear functional analysis	Autumn	4.5
Computer visualization of dynamic systems	Autumn	2
Applied questions of the theory of random processes	Spring	6
Nonlinear mathematical models	Spring	4
The theory of measure and integral	Spring	4
Symmetric analysis	Spring	5
Dynamics and analytical mechanics	Spring	3
Software for mathematical calculations	Spring	3
Mathematical Control Theory	Spring	4
Wavelet analysis	Spring	2.5
The theory of operators and integral equations	Spring	4
Computing Methods	Spring	4
Differential geometry and topology 2	Spring	4.5
Discrete Mathematics	Spring	4
Methods of mathematical physics	Spring	6
The theory of operators and integral equations	Spring	4
Mathematical Statistics	Spring	6

Analytic Geometry 2	Spring	3
Theoretical Physics	Spring	4
Mathematical Analysis: Functions of Several Variables 2	Spring	8
Elementary number theory and cryptography	Spring	6
Complex Analysis 2	Spring	4.5
Differential Equations 2	Spring	4
Mathematical Analysis: Functions of a single Variable 2	Spring	8
Linear Algebra 2	Spring	5,5
Informatics and Programming 2	Spring	3

MASTER		
NAME OF SUBJECTS	SEMESTER	CREDITS
Stochastic differential equations and their applications	Autumn	6.5
Financial Mathematics of the Stock Market	Autumn	4
Deterministic chaos	Autumn	4
Time series analysis	Autumn	7
Random walks in the tasks of financial mathematics	Autumn	6
Elements of the theory of mass service	Autumn	6
Methodology of teaching higher mathematics	Autumn	3
Levy processes in models of financial mathematics	Autumn	5
Methods and concepts of stochastic dependence	Autumn	5
Chains and Markov processes	Spring	4
Computer statistics	Spring	4
Applications of correctly variables in probability theory	Spring	5
Method Monte Carlo	Spring	4.5
Methods of mathematical economics	Spring	4