

☑ MSc Program: Probability, actuarial sciences and Statistics

Length of Study: 4 semesters

Form of Study: part-time

Minimum ECTS credits: 120

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The aim of the program is a thorough study of probabilistic and statistical methods and their contemporary applications, combined with the use of modern computer technology and a wide range of statistical software. Potential personnel for scientific and academic career in probability and statistics and their applications at Master degree level with prospects for doctoral studies in the same specialty is educated in the program.

The training of the program is characterized by a high degree of mathematical tools to a level comparable to that of conventional university programs in the field of Stochastic. Students can specialize according to their interests on both – the highlighted theoretical specialization or the practically oriented one. Program graduates will be able to analyze, model, optimize and explore specific phenomena and processes, taking into account their random nature, and to create and deliver fully operational and market-based solutions.

Students acquire skills to apply modern statistical software to simulate, explore and optimize specific phenomena and processes of random nature in the applications oriented specialization. The scope and flexibility of the treated material are provided so that the program is relevant for biologists, sociologists, demographers, economists, philosophers, philologists and other professionals whose statistical skills and culture are an inevitable part of their future career. The combination of acquired knowledge and skills allow graduates to take jobs in prestigious industrial and academic organizations. Main priorities of the curriculum are the courses focused on

the training and qualification of future actuaries and financial analysts. Graduates of this direction can find its professional development in: banks and business organizations; insurance companies; public administration; organizations and companies offering consulting services in the field of financial management and investment.

The possible professional qualifications are associated with the creation of a new generation of specialists in probability and statistics, able to model, explore and optimize specific events and processes with elements of random nature and create fully functional and market-oriented solutions.

The qualification “Statistician” provides knowledge and skills necessary for an interesting and challenging career. There is a growing demand for qualified statisticians, data analysts, whose education includes statistics, mathematics and informatics. Some examples of areas for professional development are: forecasting economic and market trends; market research on consumer behavior and preferences; actuarial and financial analyses; collecting and analyzing data in support of government policy decisions and public administration; teaching in schools and universities; planning and analysis of clinical studies, screening of new drugs, study of causes, distribution and effects of disease; process control, reliability of products and production experiment; consulting in the field of agriculture, environment, forestry and industry.

Candidates must have at least Bachelor Degree or equivalent in Mathematics, Informatics, Computer Science, Software Engineering, Economics, Business Administration, Management, Marketing or similar from an accredited university. The average grade from studies must be at least good 4 (in a 6 grades system from 2-fail to 6-excellent). Admission to the program is from the winter semester.