

GRADUATE PROFILE

Mathematics – studies of first degree

The graduate receives a thorough education in the field of mathematics and computer science enabling him or her to use acquired knowledge in various disciplines depending on the chosen specialty. The graduate is able to use mathematical models essential in applications of mathematics, is able to use information technology tools to solve theoretical and practical mathematical problems. Studies of first degree prepare its graduates for studies of second degree.

Specialisation: mathematical computer science

The graduate has mathematical and computer science skills which allow him or her to work as an independent computer scientist and enable an interdisciplinary cooperation with those who use mathematics and computer science in their professional activities. The graduate in this area of specialization acquires knowledge essential for constructing and implementation of software, for designing, maintaining and administration of databases, and statistical data processing. Employment prospects: graduates of this specialisation can find employment in computer companies and IT centers.

Specialisation: mathematics and computer science in economics

The graduate receives a thorough education in the field of mathematics and computer science, and acquires basic knowledge of economics allowing him or her to take part in solving practical and theoretical problems in economics. The graduate in this area of specialisation is prepared to process and analyze data, to prepare forecasts and analyses of business activities, to construct and implement software which facilitates economic activity. The graduate has skills in mathematical modeling of economic phenomena, in solving control problems and in optimization of economic activity. Employment prospects: graduates of this specialisation can find employment in economics, planning and management departments of manufacturing and trading companies, in departments of state budget entities, and in consulting companies

Specialisation: mathematics and computer science in finance and insurance

The graduate receives a thorough education in the field of mathematics and computer science enabling him or her to prepare - in cooperation with economists, investment and insurance consultants – capital strategies. The graduate in this area of specialisation demonstrates skills and knowledge of actuarial calculus, financial evaluation of investment projects and statistical elaboration of data. He or she is able to apply mathematical methods both to capital and insurance markets, and can use adequate computer packages to solve the above-mentioned issues. Employment prospects: graduates of this specialisation can find employment in companies where capital decisions are of special importance, i.e. banks or insurance companies.

Specialisation: mathematical modelling

The graduate is ready to begin interdisciplinary cooperation with economists, engineers and social scientists. The graduate acquires knowledge necessary for the development of mathematical models which effectively solve problems whose sources can be traced to natural, technical, financial, and social processes. He or she is able to apply information technology tools which are used to solve problems in the above-mentioned disciplines. Employment prospects: graduates of this specialisation can find employment in industrial plants, financial and insurance institutions, and in consulting companies.

Specialisation: teaching mathematics

The graduate receives a thorough education in the field of mathematics and computer science, as well as essential knowledge of psychology, pedagogy, and teaching mathematics. The graduate of this specialization is prepared to take on school's educational and teaching tasks and is able to use information technologies in a teaching process. Employment prospects: graduates of this specialisation are prepared to teach mathematics in primary schools (grades IV – VI).