



Subject-specific competencies of students who complete undergraduate program of Information Systems and Technology

- Design, operation and administration of databases;
- Efficient use of different methodological approaches and tools in the development of information systems;
- Development of advanced multi-layered, distributed, scalable and reliable information systems in the environment of modern information technologies;
- Design and implementation of modern software architectures
- Selection, creation, application, integration and administration of information technologies;
- Design, operation and administration of computer networks;
- Analysis, design and implementation of network security systems;
- Design, fabrication, and evaluation of existing user interface;
- Introduction to electronic business micro/macro environment and key environmental factors.
- Design and implementation of modern e-commerce applications;
- Identification of most important processes in electronic business management.
- Choosing the right approach for electronic business strategy selection.
- Providing knowledge and enabling students to learn the basic skills needed to manage electronic business/commerce organizations.
- Design and development of modern mobile applications;
- Design and development of multimedia applications.
- Understanding the basic concepts of decision support and expert systems
- Design and implementation of modern AI applications;
- Application of business intelligence tools for supporting the decision-making process in business and organizational systems.
- Application of data mining algorithms for supporting the decision-making process in business and organizational systems.
- Implementation of machine learning methods for supporting the decision-making process in business and organizational systems.
- Ability to create and evaluate the organizational solutions for problems, using specialized methods and techniques of support for strategic and operational management of technology in the company; team work experience by fulfilling assignments of problem analysis and critical thinking based on innovative companies' examples; software applications used in solving concrete problems and tasks in their assignments.
- The ability to solve problems of design, implementation, measurement, and improvement of business and work processes, by using specific industrial and management engineering methods and techniques in organizational systems.
- Selecting adequate institutional model and archetypal organizational structure model.
- Calculating and analyzing productivity in organizational systems.
- Identifying cost categories and solving basic cost management problems.
- Projecting process capacities and solving basic stock management problems.
- Solving legal problems of information systems and phenomena related to computer networks using debates, case studies and problem solving methods.
- Mathematical modeling of the decision-making process in business and organizational systems using multiattribute decision-making methods.
- Quantitative modeling, systems analysis and control

- Modeling and development of systems based on fuzzy logic, neural networks and other computational intelligence techniques
- Financial modeling and development of systems for forecasting and automated trading
- Collection, preparation, and analysis of various quantitative data, and making appropriate conclusions and decision making through methods of multivariate statistics and statistical inference.
- Modelling of business and organizational systems and solving practical optimization problems using quantitative methods
- Applying quantitative techniques for multi stage processes, project planning, inventory management and queuing theory
- Mathematical modelling for efficiency evaluation and comparative analysis of decision-making units using data envelopment analysis
- Strategic and analytical thinking and application of concepts of game theory in modeling and solving real-world problems
- Reliability analysis and risk management in business and organizational systems using quantitative methods
- Solving the practical management problems throughout applying of financial management and accounting concepts and methods.
- Developing the ability to use different financial systems models and instruments for real quantitative finance problems solution..
- The ability to apply project management processes through project management knowledge areas, combining technical, contextual and behavioral competencies in project management.
- Elucidation and mastering basic economic categories and economic laws; linking economic concepts as abstract categories with practical economic life; proper orientation in identifying important economic events in one country, but also on a global level;
- efficient use of various data structures, as well the development of algorithms in different programming languages in the development of information systems
- Application of current psychological principles (in the domain of organizational adjustment, group dynamics, work motivation, communication, leadership and occupational stress), in order to understand and overcome the psychological obstacles in work context.
- The ability to communicate with members of different ethnic, cultural, religious, social and class groups.
- Knowing and understanding of cultural diversity.
- Knowing and understanding of the value framework of different societies.
- Understanding the social and political environment.
- Understanding the social-structural context of the social environment.
- Understanding the relationship between scientific and technological development and social change.
- Understanding the interaction between ecology and society.
- Thorough comprehension and understanding of different HRM activities, policies and practices
- The ability to solve HR-related issues using specific methods and procedures taught within the course
- Combining knowledge acquired in different fields during the course of studies and the practical application of said knowledge
- Applying up to date information and the latest IT solutions in implementing various HRM practices
- Understanding the e-learning process and its application in business and education.
- Teaching class planning and organization, teaching class implementation, teamwork.
- Developing subject-related written and spoken language production in English, taking part in discussions and oral presentations and producing grammatically correct and coherent writing, particularly related to job application process.
- Further development of subject-specific written and spoken language production in English, taking part in

more professionally-oriented discussions and oral presentations and producing grammatically correct and coherent writing

- Employing a variety of pre-reading and pre-writing techniques, demonstrating clear and structured composition skills, editing, proofreading and critically evaluating different academic genres and developing academic presentation skills.
- Developing subject-related written and spoken language production in French, taking part in discussion and oral presentation and producing grammatically correct and coherent writing, particularly related to job application process.
- Further development of subject-specific written and spoken language production in French, taking part in more professionally-oriented discussion and oral presentation, and producing grammatically correct and coherent writing, particularly related to job application process.
- Developing the essential language skills necessary for integration into French communities of higher education, and familiarizing the students with the structure of the French university system as well as the lives of students studying in France.
- Understanding the principles of planning, organization and implementation of learning units as a part of teaching process.

