

FACULTY OF MATHEMATICS AND INFORMATICS

COURSE	PROFESSOR	SEMESTER	LANGUAGE LEVEL	ECTS CREDITS	STUDY LEVEL	COURSE DESCRIPTION
*Game Theory	Snezhana Hristova	3	B1	6	Bachelor	Basic algorithms for decision making by the methods of game theory
*Probability	Snezhana Hristova	2	B1	6	Bachelor	Probability methods and basic distributions
*Statistics	Snezhana Hristova	3	B1	6	Bachelor	Descriptive statistics and inferential statistics
*Calculus	Snezhana Hristova	1	B1	6	Bachelor	Main methods for differentiation and integrations
*Differential equations with applications	Snezhana Hristova	2	B1	6	Bachelor	Several methods for solving and applications of differential equations
*Mathematical modeling	Snezhana Hristova	2	B1	6	Bachelor	Basic mathematical modes by application o calculus and differential equations
*Object-Oriented Programming	Elena Somova	3	B1	7	Bachelor	The course presents main topics in object oriented programming - class, inheritance, encapsulation, polymorphism, etc. Students will acquire practical programming skills in C#.
*Algorithms and Data Structures	Elena Somova	1	B1	6	Bachelor	The course presents base algorithms for searching and sorting of arrays, recursion, main algorithms on dynamical data structure, etc. The special attention of the course is pointed to the data structures: list, queue, stack, tree and graph. Students will acquire practical programming skills in C#.
*Modeling and Management of Business Processes	Elena Somova	3	B1	6	Bachelor	The course presents main standards and specification for modeling business processes. The notation BPMN is studied in details. Students will acquire practical skills in modeling different kind of BPMN diagrams using some software like Bizagi, etc.

*Information Technologies in Education	Elena Somova	2	B1	5	Master	The course presents the main concepts in the domain of e-learning. The course gives practical knowledge how to design one e-learning course and its elements. Students will acquire skills in development of e-learning courses and different kind of e-learning materials and activities in the e-learning environment Moodle.
*Web programming	Elena Somova	1	B1	5	Bachelor	The course presents HTML, CSS and JS. Students will acquire practical skills how to develop web pages and sites.