

Type and level of studies: Doctoral studies				
Title of the study program: Statistics				
Subject title: Advanced Informatics Methods				
Subject code: DSMI				
Number of ECTS: 9				
Subject status (Compulsory / Elective): elective				
Teacher/s (Name, last name): Jasna Soldić-Aleksić, Rade Stankić				
Number of active teaching lessons:				Other lessons 0
Lectures: 3	Practice classes: 0	Other forms of teaching: 0	Study research work: 3	
Prerequisite: no prerequisite				
Subject objective: The objective of this subject is to make students capable to use different applicative software tools, such as: data base management systems, operating systems, project management systems, programing languages, web programing languages, data mining techniques, intelligent systems for business decision making.				
Subject outcome (gained knowledge): At the end of the course students can: analyze, make programs, projects and proposals for the usage of information-communication technologies in various business domains and research activities; also, they can participate in professional teams for education in the sphere of new information technology usage.				
Subject content/structure: The structure of the subject is as follows: basic techniques of algorithm design and analysis; Data structures; Graphs and network algorithms; Algebra algorithms; parallel algorithms; Genetic algorithms; Architecture of computers and computer networks; Internet, intranet and Extranet; data base and data models; Query optimization; Transaction process; Distributed and parallel data base systems; Multimedia data base; data protection; Intelligent Systems; Neural networks; Organization and topology of computer networks; data mining and data knowledge discovery systems; software engineering; object oriented programming languages; web programming; software design and testing; software verification and validation; Making projects of business information systems; Electronic commerce.				
Teaching methods: Lecturing; study and research work; case studies; project presentation; active Internet usage.				
Grading (maximum number of points 100)				
Pre-examination obligations	Points	Final exam: oral exam		Points
Activities during lectures	40	Written exam		60
Practice lessons		Oral exam		
Colloquium/a			
Semester papers				
Literature:				
No.	Author	Title	Publisher	Year
1.	Turban E., King, D. Viehland D., Lee. J	Electronic Commerce	Prentice Hall, New Jersey,	2008
2.	Brookshear J. G.	Computer Science	Addison-Wesley	2008
3.	Turban, E. Volonino L.	Information	John Wiley \$ Sons,	2012

		Technology for management		