

Study Programme: Information Systems Engineering			
Course Unit Title: Data mining methods			
Course Unit Code: IZOI62			
Name of Lecturer(s): Sladojević Srđan, Čulibrk Dubravko, Arsenović Marko			
Type and Level of Studies: bachelor			
Course Status (compulsory/elective): elective			
Semester (winter/ summer): summer			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 6			
Prerequisites: none			
Course Aims: To impart basic knowledge of machine learning algorithms and methods used in the domain of data mining.			
Learning Outcomes: Upon successful completion of the course the students will have acquired knowledge and skills that will enable them to efficiently apply basic techniques of artificial intelligence and machine learning to mine data. They will be introduced to various aspects of computers as data mining tools, structural pattern discovery, presentation and use of knowledge discovered.			
Syllabus. The course will cover the following areas: an overview of the basic concepts of data mining, data sources and preprocessing, decision trees, neural networks, support vector machines, clustering, time series analysis. Theoretical instruction will be accompanied by practical training in the use of open source data mining solutions.			
Required Reading: Relevant literature in English, tbd			
Weekly Contact Hours:2	Lectures: 3	Practical work: 0	
Teaching Methods: Lectures and labs, tests and an exam assignment. The labs will focus on enabling the students to use the Java programming language to implement computer programs. The students' knowledge of the theory will be evaluated using tests. The individual assignment will consist of the practical implementation of programs of suitable complexity.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Attendance			
Computer exercises			
Tests (4x)			

