Course Unit Descriptor

Study Programme: Information Systems Engineering

Course Unit Title: Introduction to business intelligence systems

Course Unit Code: IZOO56

Name of Lecturer(s): Mirković Milan, Ćulibrk Dubravko, Mandić Vladimir

Type and Level of Studies: bachelor

Course Status (compulsory/elective): compulsory

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: 5

Prerequisites: none

Course Aims:.

The goal of the course is to introduce the students to the basic concepts of computer technologies and systems that are used to aid the process of strategic decision making, as well as the principles of data mining, which form the foundation of such systems.

Learning Outcomes:
Upon successful completion of the course, students will know the capabilities and limitations of the state-of-the-art business intelligence systems. They will be able to use such systems to aid strategic decision making, efficiently. They will grasp the technologies that form the basis of such systems, the data that is stored in BI systems and information that can be gained through its processing. In addition they will be able to assess the reliability of such information, as well as the forms which it takes.

Syllabus.
The course will cover the following areas: basic concepts of business intelligence, management information systems, data bases management systems and data warehouses. Knowledge representations used in data mining, types of data, data acquisition and filtering. Big data visualization, and basic techniques for regression, classification and clustering. Finally, the applications of business intelligence in different domains will be covered.
The theoretical instruction will be accompanied by the practical training focused on the use of open-source data mining solution Wakaito Environment for Knowledge Analysis - WEKA.

Required Reading:
Relevant literature in English, tbd

Weekly Contact Hours:2	**Lectures: 2**	**Practical work: 0**

Teaching Methods:
Lectures and laboratory exercises, test and exam project. The labs will focus on training the students to use the state-of-the-art tools for data mining.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			