Table 5.2. Course specification

Study program : Advanced Data Analytics in Business
Course title: Big Data Fundamentals
Teachers: Boris Radovanov, Aleksandar Kupusinac, Dragan Stojić
Status of the course: Obligatory
Number of ECTS: 7
Condition: No
Goal of the course
To provide the students with basic knowledge of big data: big data characteristics, storing, cleansing and analysing big data, with the emphasis on predictive and prescriptive analytics.
Learning outcome
Students will be able to apply the methods of data collection and data analytics to solve business related problems in support of business decision making. Students will develop competencies necessary to use related softwaretools to perform data collection, cleansing and analytics.
Content of the course
Theoretical part
1-2. Introduction to Course
3. Relational databases
4. Structural and non-structural data
5-6. Data cleansing
7-8. Data visualisation
9. Descriptive statistics and
10. Correlation
11-12. Association analysis and
13. Cluster analysis
14-15. Principles of classification
Practical part
Work on case studies based on real-world data using computer laboratory.
Literature
1. Provost, F., Fawcett, T.(2013). Data Science for Business, ISBN 978-1449361327 2. Erl, T., Khattak, W., Buhler, P.(2015). Big Data Fundamentals: Concepts, Drivers & Techniques.

Number of hours of active teaching	Theoretical teaching: 2	Practical teaching: 3

Teaching methods
Teaching will be done in classrooms, computer labs using appropriate teaching resources (multimedia presentations, software packages, etc.). Teaching takes place through lectures, exercises and independent work. Proof of knowledge is done through written and oral exams.
Assessment (maximum number of points 100)

Pre-exam obligations	Points	Final exam	Points
Activities during semester	**5**	Written exam	**15**
Practical part	**5**	Oral exam	**15**
Colloquium	**40**	....	
Seminar paper	**20**		