

Table 5.2. Course specification

Study program : Advanced Data Analytics in Business			
Course title: Financial Analytics			
Teachers: Boris Radovanov, Laslo Šereš			
Status of the course: Elective			
Number of ECTS: 7			
Condition: No			
Goal of the course The goal of the course is to provide students a different view on the financial data and an in-depth financial knowledge approach in order to improve overall financial business performances.			
Learning outcome Students are able to implement a large set of financial models. Through examples, they learn how to obtain raw data, perform the analysis and generate an output properly. Therefore, students learn how to answer specific business questions and forecast possible future scenarios using real-world data available online.			
Content of the course <i>Theoretical part</i> 1-2. Stock market introduction 3-4. Analytical thinking 5-6. Financial statistics 7-8. Risk measurement 9-10. Time series analysis 11. Forecasting techniques 12-13. Simulation of trading strategies 14-15. Measuring portfolio performances <i>Practical part</i> Work on case studies based on real-world data using computer laboratory.			
Literature 1. Bennet, M. & Hugen, D. (2016). Financial Analytics with R: Building a Laptop Laboratory for Data Science. Cambridge University Press. 2. Mitra, G. & Mitra, L. (2012). A Handbook of News Analytics in Finance. John Wiley & Sons Ltd, Chichester, UK. 3. Williams, E. & Dobelman, J. (2017). Quantitative Financial Analytics: The Path to Investment Profits. World Scientific, Singapore. 4. Ang, C. (2015). Analysing Financial Data and Implementing Financial Models Using R. Springer International Publishing, Switzerland.			
Number of hours of active teaching	Theoretical teaching: 2	Practical teaching: 2	
Teaching methods Work on case studies based on real-world data using computer laboratory.			
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		