

1.	Course title	Data Science
2.	Course code	ИТ-И-18
3.	Semester	9
4.	Unit offering the course	Faculty of Computer Science and Engineering
5.	ECTS	6
6.	Goals of the study programme	
	During the course, students will gain knowledge of the five essential parts of data analysis: data wrangling, data cleaning, and data sampling to obtain the appropriate data set; data management for fast and promising access to big data; prediction based on statistical methods (such as regression and classification), data visualization and results interpretation.	
7.	Contents of the study programme	
	Data-driven science as a new scientific paradigm. Data concepts. Data related problems and solutions. Tools for Working in Data-Based Science. Locating data sets and using them. Cleaning and restructuring of data. Data modeling and linking. Data engineering and big data work. Research data analysis - generating hypotheses. Application of machine learning. Communication of results - summary of results, control panels, and data flows. Development of intelligent applications.	