University of Gdańsk

Subject card

Subject name and code	Business Outcomes of Big Data Analysis, PG_00188975		
Field of study	Finance and Accounting, Informatics and Econometrics, Management		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2025/2026
Education level	Bachelor's studies	Subject group	Optional subject group
Mode of study	part-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	English
Semester of study	2	ECTS credits	2.0
Learning profile	academic	Assessment form	credit
Conducting unit			
Name and surname of lecturer (lecturers)	Subject supervisor	dr Jacek Maślankowski	
	Teachers	dr Jacek Maślankowski	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	8.0	0.0	0.0	0.0	0.0	8

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	8	1.0	41.0	50

Subject objectives

proposes a data processing model tailored to defined requirements,
critically evaluates existing data sources,
characterizes relationships within data sets.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[ZARZL3_W01] The student has advanced knowledge and understanding of the nature and evolution of management, quality sciences, economics, and finance theories, along with their place in the social sciences system — particularly their relevance to business decision-making.	Possesses knowledge of data processing models and knows how to align them with defined requirements. Has knowledge of the evaluation criteria for data sources and understands the relationships occurring within data sets.	[SW2] presentation/project/paper/ report
[IiEL3_W01] The student knows and understands to an advanced degree the nature and evolution of theories in management, quality sciences, economics, and finance, along with their place in the social sciences system —especially in applying informatics or statistics tools.	Possesses knowledge of data processing models and knows how to align them with defined requirements. Has knowledge of the evaluation criteria for data sources and understands the relationships occurring within data sets.	[SW2] presentation/project/paper/ report
[FiRL3_W01] The student has advanced knowledge and understanding of the nature and evolution of management, quality, economics, and finance theories and their place in the social sciences system, particularly from the perspectives of finance and accounting.	Possesses knowledge of data processing models and knows how to align them with defined requirements. Has knowledge of the evaluation criteria for data sources and understands the relationships occurring within data sets.	[SW2] presentation/project/paper/ report

Subject contents	1. Overview of Big Data Analytics (goals, methods, types of analysis, classifications) 2. Types of data in Big Data Analytics (machine generated data, human generated data, business mediated data) 3. Internet Marketing finding value in data and the quality of Big Data (hyperdimensions and attributes) 4. Data Mining, Text Mining, Web Mining and Machine Learning Tools 5. Big Data ecosystem (tools and software for analysis) 6. Practical aspects of Big Data implementation - MapReduce algorithms, regular expressions 7. Case studies
Prerequisites and co-requisites	Knowledge of databases

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project of a system that use BIg Data sources	51.0%	80.0%
Students activity during classes	51.0%	20.0%

Recommended reading

Basic literature	Hawker, M. (2025) The Data Hero Playbook: Developing Your Data Leadership Superpowers, Wiley Mayer-Schonberger, V., Cukier, K. (2013) Big Data: A Revolution That Will Transform How We Live, Work, and Think, Eamon Dolan/Houghton Mifflin Harcourt
Supplementary literature	Woods, G. (2024) The AI-Driven Leader: Harnessing AI to Make Faster, Smarter Decisions., AI Thought Leadership Publisher Glass, R., Callahan, S., (2015) The Big Data-Driven Business: How to Use Big Data to Win Customers, Beat Competitors, and Boost Profits, John Wiley & Sons
eResources addresses	

Example issues/ example questions/ tasks being completed	A Big Data system project presenting real estate prices collected from the internet A Big Data system project with sentiment analysis based on online comments A Big Data system project identifying business types based on website content
Work placement	Not applicable

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