GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	ESSENTIALS OF STATISTICS, PG_00061318		
Field of study	Engineering Management		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study Subject group related to scientific research in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	5.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Katedra Statystyki i Ekonometrii -> Faculty of Management and Economics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Błażej Kochański	
	Teachers	mgr Magdalena Licznerska dr Jakub Golik dr Błażej Kochański	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	30.0	0.0	0.0	60

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	60	10.0	55.0	125

Subject objectives

Applies suitable methodology for investigating patterns and associations in data sets, using statistical software to process data and interpret the outcomes.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W02] demonstrates advanced preparation in the methods and techniques of formulating and solving problems	formulates the problem appropriately, obtains the data, selects methods necessary for solving the given problem, and interprets the results correctly	[SW1] Assessment of factual knowledge
[K6_U07] applies information technology to improve critical analysis and evaluation of data and management processes	uses statistical software that facilitates the analysis of mass data and supports decision-making processes	[SU2] Assessment of ability to analyse information

Subject contents	Statistical data and statistical studies Measurement levels Visualization of the distribution of a quantitative feature Measures of central tendency and quantiles Dispersion measures Measures of the shape of the distribution Correlation, measures of interdependence between variables Linear regression Dynamics analysis, indexes
Prerequisites and co-requisites	

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
written exam	60.0%	50.0%
tutorial exam I	60.0%	25.0%
tutorial exam II	60.0%	25.0%

Recommended reading

Basic literature	Aczel, A. (2010). Complete Business Statistics, New Jersey: Wohl Publishing McClave J. T., Benson P. G., Sincich T. (2008), Statistics for Business and Economics, Pearson/Prentice Hall
Supplementary literature	Kot S., Jakubowski J., Sokołowski A. (2011), Statystyka, Difin Józefacka, N.M., Kołek, M.F., Arciszewska-Leszczuk, A., Iwankowski, P. (2023) Metodologia i statystyka Przewodnik naukowego turysty. Tom 1. Warszawa: Wydawnictwo Naukowe PWN
eResources addresses	Uzupełniające Adresy na platformie eNauczanie: Podstawy statystyki 2023/2024 - Moodle ID: 31452 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=31452

Example issues/ example questions/ tasks being completed	Based on the data, compare two groups using descriptive statistics. Interpret the results. In a certain population of men, their height and weight have the following characteristics: average height = 175 cm, standard deviation = 9 cm mean body weight = 80 kg, standard deviation = 20 kg Pearson correlation is 0.4 Estimate the man's body weight, knowing that his height is 193 cm. Based on the fixed-base index, determine the values of the chain index. Calculate the average rate of change (CAGR).
Work placement	Not applicable