



Subject card

Subject name and code	ESSENTIALS OF STATISTICS, PG_00061318						
Field of study	Engineering Management						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2024/2025		
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 Kocharński					
	Teachers						
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_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		
	[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		

Subject contents	<p>Statistical data and statistical studies</p> <p>Measurement levels</p> <p>Visualization of the distribution of a quantitative feature</p> <p>Measures of central tendency and quantiles</p> <p>Dispersion measures</p> <p>Measures of the shape of the distribution</p> <p>Correlation, measures of interdependence between variables</p> <p>Linear regression</p> <p>Dynamics analysis, indexes</p>														
Prerequisites and co-requisites															
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="451 864 794 898">Subject passing criteria</th> <th data-bbox="794 864 1137 898">Passing threshold</th> <th data-bbox="1137 864 1487 898">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="451 898 794 931">tutorial exam II</td> <td data-bbox="794 898 1137 931">60.0%</td> <td data-bbox="1137 898 1487 931">25.0%</td> </tr> <tr> <td data-bbox="451 931 794 965">tutorial exam I</td> <td data-bbox="794 931 1137 965">60.0%</td> <td data-bbox="1137 931 1487 965">25.0%</td> </tr> <tr> <td data-bbox="451 965 794 999">written exam</td> <td data-bbox="794 965 1137 999">60.0%</td> <td data-bbox="1137 965 1487 999">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	tutorial exam II	60.0%	25.0%	tutorial exam I	60.0%	25.0%	written exam	60.0%	50.0%
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Example issues/ example questions/ tasks being completed	<p>Based on the data, compare two groups using descriptive statistics. Interpret the results.</p> <p>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.</p> <p>Based on the fixed-base index, determine the values of the chain index. Calculate the average rate of change (CAGR).</p>														
Work placement	Not applicable														