



Subject card

Subject name and code	, PG_00071328						
Field of study	Architecture						
Date of commencement of studies	October 2023		Academic year of realisation of subject		2025/2026		
Education level	first-cycle studies		Subject group				
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Statistics and Econometrics -> Faculty of Management and Economics -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Dagmara Nikulin				
	Teachers		dr hab. Dagmara Nikulin				
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	0.0	0.0	0.0	30
	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	30		0.0		0.0	30
Subject objectives	The aim of the course is to familiarize students with fundamental methods of collecting and analyzing quantitative and qualitative data used in scientific research. The course seeks to develop practical skills in designing research tools (e.g., surveys, interviews), conducting the research (including the use of Google Forms), and performing a preliminary analysis of the collected data.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W02] knows and understands the rules of gathering information and their interpretation as a part of project concept preparation; issues related to architecture and urban planning in the field of simple design problems solving		The student knows and understands the basic methods of collecting, organizing, analyzing, and interpreting quantitative and qualitative data, as well as the principles of designing and using simple research tools.		[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects		
	[K6_U01] is able to use the experience gained during studies to critically analyze the conditions and formulate conclusions for design in an interdisciplinary context		The student is able to critically analyze and interpret collected quantitative and qualitative data and, based on them, formulate conclusions useful for solving design problems.		[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools		

Subject contents	Course content – lecture 1. Designing research tools (surveys and interviews) Survey questionnaire (Google Forms): Learning to construct technically sound questions (closed-ended, open-ended, demographic data). Emphasis on avoiding leading questions, using correct scaling (e.g., Likert scale), and ensuring logical question sequencing. Interview guide: Developing an interview questionnaire, formulating open-ended questions, and encouraging in-depth responses. Tool testing (Pilot study): Preliminary study with a small group to assess question clarity and completion time. 2. Sampling and process planning Sampling techniques: Discussing the differences between random and non-random sampling (e.g., purposive, quota, snowball) and convenience sampling. Process planning: Defining the research objective, identifying the target population, selecting the method of reaching respondents (online, face-to-face), and establishing a timeline. 3. Ethical aspects and documentation Research ethics: Principles of anonymity and confidentiality, obtaining informed consent, and ethical conduct when interacting with respondents. Documenting results: Guidelines for preparing reliable reports, correctly quoting responses (in qualitative research), and presenting results via charts and graphs. Course content – exercises 1. Data Collection Conducting surveys: Practical work with Google Forms – collecting responses, monitoring data inflow, cleaning the database. Conducting interviews: Interview simulations (conducting the conversation, recording, taking notes). 2. Data Analysis (quantitative and qualitative) Quantitative analysis (Excel/Google Sheets): Descriptive statistics: Mean, median, mode, standard deviation. Visualization: Bar charts, pie charts, histograms. Qualitative analysis: Transcription: Converting interview recordings into text. Coding: Assigning codes (categories) to text segments to organize the data.
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	Category identification: Thematic data analysis, identifying patterns and relationships.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	evaluation of the conducted research	60.0%	50.0%
	analysis of the collected material	60.0%	50.0%
Recommended reading	Basic literature	- Babbie E., <i>Badania społeczne w praktyce</i>, Wydawnictwo Naukowe PWN, Warszawa 2024. - Creswell J.W., <i>Projektowanie badań naukowych. Metody jakościowe, ilościowe i mieszane</i>, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2013.	
	Supplementary literature	Szreder M., <i>Metody i techniki sondażowych badań opinii</i> , Polskie Wydawnictwo Ekonomiczne, Warszawa 2004.	
	eResources addresses		
Example issues/ example questions/ tasks being completed	Development of a research tool – preparing a survey questionnaire or interview guide addressing the selected research problem. Conducting a pilot study – testing the prepared tool on a small group of respondents and identifying necessary changes and revisions. Conducting a brief study – collecting data via an online survey (e.g., using Google Forms) or conducting a few interviews. Quantitative data analysis – preparing basic descriptive statistics and charts based on the collected data. Qualitative data analysis – transcribing selected interview excerpts, coding them, and identifying key categories and themes.		
Practical activities within the subject	Not applicable		

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