GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Data Processing with Mobile Platforms, PG_00047973						
Field of study	Informatics						
Date of commencement of studies	October 2025		Academic year of realisation of subject	2028/2029			
Education level	first-cycle studies		Subject group	Optional subject group 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	4		Language of instruction	Polish			
Semester of study	7		ECTS credits	2.0			
Learning profile	general academic profile		Assessment form	assessment			
Conducting unit	Department Of Geoinformatics -> Faculty Of Electronics Telecommunications And Informatics -> Wydziały Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Przemysław Falkowski-Gilski				
	Teachers		dr inż. Przemysław Falkowski-Gilski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	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		2.0	18.0		50
Subject objectives	The objective of this course is to tech students basic mobile data processing in mobile devices using various data processing models such as client-server.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_U08] while identifying and formulating specifications of engineering tasks related to the field of study and solving these tasks, can:n- apply analytical, simulation and experimental methods,n- notice their systemic and non-technical aspects,n- make a preliminary economic assessment of suggested solutions and engineering work n	Student is able to properly design the test scenario of the investigated scientific problem.	[SU3] Assessment of ability to use knowledge gained from the subject
[K6_W04] knows and understands, to an advanced extent, the principles, methods and techniques of programming and the principles of computer software development or programming devices or controllers using microprocessors or programmable elements or systems specific to the field of study, and organisation of systems using computers or such devices	Student is able to develop a mobile application utilizing data processing techniques.	[SW2] Assessment of knowledge contained in presentation
[K6_U03] can design, according to required specifications, and make a simple device, facility, system or carry out a process, specific to the field of study, using suitable methods, techniques, tools and materials, following engineering standards and norms, applying technologies specific to the field of study and experience gained in the professional engineering environment	Student is able to design a mobile application utilizing data processing techniques.	[SU4] Assessment of ability to use methods and tools

Subject contents

Application architecture for Android Studio
Communication models for mobile technologies
Wireless technologies (WiFi, Bluetooth, GSM)
Security of data in the context of mobile devices

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Laboratory	60.0%	60.0%
Lecture	51.0%	40.0%

Recommended reading

Basic literature	Mobile Computing and Wireless Communications: Applications, Networks, Platforms, Architectures, and Security Amjad Umar, 2004
Supplementary literature	• Zimmerman, James B. "Mobile Computing: Characteristics, Business Benefits, and Mobile Framework" April 2, 1999. http://ac-support.europe.umuc.edu/~meinkej/inss690/zimmerman/INSS%20690%20CC%20-%20Mobile%20Computing.htm • Koudounas, Vasilis. Iqbal, Omar. "Mobile Computing: Past, Present, and Future" http://www.doc.ic.ac.uk/~nd/surprise_96/journal/vol4/vk5/report.html
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed

Work placement

Not applicable

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