



Subject card

Subject name and code	Data Processing with Mobile Platforms, PG_00047973						
Field of study	Informatics						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2026/2027		
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						
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 teach 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_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
	[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_W03] Knows and understands, to an advanced extent, the construction and operating principles of components and systems related to the field of study, including theories, methods and complex relationships between them and selected specific issues - appropriate for the curriculum	Student is able to properly utilize tools and methods in order to solve tasks.	[SW1] Assessment of factual knowledge
	[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
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	<ul style="list-style-type: none"> 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 eNauzanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		