



Subject card

Subject name and code	Portable devices technologies, PG_00047764						
Field of study	Informatics						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2025/2026		
Education level	second-cycle studies	Subject group			Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Part-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			4.0		
Learning profile	general academic profile	Assessment form			exam		
Conducting unit	Department of Geoinformatics -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	mgr inż. Tomasz Idzi					
	Teachers	mgr inż. Tomasz Idzi dr inż. Marek Kulawiak mgr inż. Łukasz Markiewicz					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	12.0	0.0	15.0	0.0	0.0	27
	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	27		10.0		63.0	100
Subject objectives	The goal of the subject is to educate the students on technologies applicable to mobile devices.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U09] can carry out a critical analysis of the functioning of existing technical solutions and assess these solutions, as well as apply experience related to the maintenance of advanced technical systems, devices and facilities typical for the field of studies, gained in the professional engineering environment	Student knows the characteristics of libraries available in the iOS system and is able to choose the right tools to solve a specific problem.	[SU1] Assessment of task fulfilment
	[K7_W03] knows and understands, to an increased 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 knows the architecture of mobile systems and is able to present the relationship between their layers.	[SW1] Assessment of factual knowledge
	[K7_U08] while identifying and formulating engineering tasks specifications and solving these tasks, can: - apply analytical, simulation and experimental methods, - notice their systemic and non-technical aspects, - make a preliminary economic assessment of suggested solutions and engineering work	Student is able to design modern mobile applications and apply appropriate design patterns.	[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment
	[K7_U06] can analyse the operation of components, circuits and systems related to the field of study; measure their parameters; examine technical specifications; interpret obtained results and draw conclusions	Student is able to analyze and debug mobile applications and can use appropriate tools.	[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information
[K7_U05] can plan and conduct experiments related to the field of study, including computer simulations and measurements; interpret obtained results and draw conclusions	Student is able to design modern mobile applications and to analyze the selection of a design pattern appropriate to the problem.	[SU2] Assessment of ability to analyse information	
Subject contents	<p>Mobile devices market.</p> <p>Mobile operating systems.</p> <p>Selling mobile applications.</p> <p>Hardware in mobile devices.</p> <p>GPS system.</p> <p>Mobile sensors.</p> <p>Objective-C programming language.</p> <p>Cocoa Touch framework</p>		
Prerequisites and co-requisites	Programming experience.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Laboratory	50.0%	50.0%
	Exam	50.0%	50.0%
Recommended reading	Basic literature	Scott Stevenson: Cocoa and Objective-C: Up and Running, O'Reilly 2010	
	Supplementary literature	N/A	

	eResources addresses	Adresy na platformie eNauzanie:
Example issues/ example questions/ tasks being completed	N/A	
Work placement	Not applicable	