



Subject card

Subject name and code	Android applications development, PG_00047768						
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		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	12.0	0.0	6.0	9.0	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 aim is to develop a computer engineer who has knowledge and skills in the use of tools designed to create a mobile application for Android. Is prepared to work effectively in development teams in IT companies and ICT as well as in education, where their knowledge and skills will be used maintaining legal and ethical principles and with the awareness of social problems of computerization.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U04] can apply knowledge of programming methods and techniques as well as select and apply appropriate programming methods and tools in computer software development or programming devices or controllers using microprocessors or programmable elements or systems specific to the field of study, making assessment and critical analysis of the prepared software as well as a synthesis and creative interpretation of information presented with it	Students are able to use appropriate tools and programming languages in order to solve selected cases.	[SU2] Assessment of ability to analyse information
	[K7_W42] Knows and understands, to an increased extent, the principles and trends in the analysis and design of local and distributed IT systems and the basics of computer modeling and computerization of complex cognitive and decision-making processes.	Students are able to chose appropriate methods, tools, as well as hardware and software layer, depending on the specific of the analyzed case.	[SW3] Assessment of knowledge contained in written work and projects
	[K7_U03] can design, according to required specifications, and make a complex 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	Students are able to properly design and implement the software layer of a mobile application.	[SU4] Assessment of ability to use methods and tools
	[K7_W41] Knows and understands, to an increased extent, the standards, production methods, life cycle and development trends of software as well as information systems and applications.	Students are able to point out major components of mobile devices, as well as available sensors.	[SW1] Assessment of factual knowledge
Subject contents	<p>The genesis of Android project</p> <p>The architecture of the system</p> <p>Programming basics and API</p> <p>available services</p> <p>Sensors data acces</p>		
Prerequisites and co-requisites	<p>Basic Java programming skill</p> <p>Object programming basics</p>		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Laboratory	50.0%	30.0%
	Project	50.0%	30.0%
	Lecture	50.0%	40.0%
Recommended reading	Basic literature	Android Programming Guide	
	Supplementary literature	Hello, Android. Ed Burnette	
	eResources addresses	Adresy na platformie eNauczanie:	

Example issues/ example questions/ tasks being completed	Creating an application that uses data from the built-in GPS receiver Create an application using JNI
Work placement	Not applicable