



Subject card

Subject name and code	Programming of Local Applications, PG_00048014						
Field of study	Informatics						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2023/2024		
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 Algorithms and Systems Modelling -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Krzysztof Manuszewski					
	Teachers	dr inż. Krzysztof Manuszewski mgr inż. Tomasz Goluch					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	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 main goal is preparation of students for development of GUI and system part of server. In particular subject focuses on efficient system resource management and effective multitasking implementation.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U41] can produce, test or evaluate software using modern programming platforms, tools, languages and paradigms of different levels, as well as use software packages supporting scientific and research processes as well as business decision-making processes and teamwork	Is able to implement business logic with usage of modern multitasking and asynchronous metaphors.	[SU1] Assessment of task fulfilment
	[K6_W05] Knows and understands, to an advanced extent, methods of supporting processes and functions, specific to the field of study	Knows how to implement local it solutions	[SW1] Assessment of factual knowledge
	[K6_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	Is able to efficient design and implementation of modern GUI	[SU1] Assessment of task fulfilment
	[K6_W42] Knows and understands, to an advanced extent, architecture, design principles and methods of hardware and software support for local and distributed information systems, including computing systems, databases, computer networks and information applications, as well as the principles of human cooperation with computers and computer-aided teamwork	Is able to monitor and manage system resources.	[SW1] Assessment of factual knowledge
	[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	Knows methods of implementation of modern GUI	[SW1] Assessment of factual knowledge
Subject contents	<p>Architecture of .Net platform</p> <p>GUI technologies - WPF, WF</p> <p>Usage of system resources</p> <p>Multitasking vs asynchronous</p> <p>Memory management</p> <p>Configuration and diagnostics of applications</p> <p>System Services</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		50.0%	40.0%
		50.0%	60.0%

Recommended reading	Basic literature	<p><i>C# 5.0 IN A NUTSHELL</i>, J. Albahari, B. Albahari</p> <p><i>CLR via C#</i>, J Ritchter</p> <p><i>WPF 4 Unleashed</i>, Nathan A.</p>
	Supplementary literature	MSDN
	eResources addresses	<p>Adresy na platformie eNauczenie:</p> <p>Programowanie Lokalnych Aplikacji .Net 23/24 - Moodle ID: 34095 https://enauczenie.pg.edu.pl/moodle/course/view.php?id=34095</p>
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	