

## SDAŃSK UNIVERSITY 的 OF TECHNOLOGY

## Subject card

Subject name and code	Programming of Local Applications, PG_00048014							
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 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							
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Project Ser		Seminar	SUM
of instruction	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 i classes incluc		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 mulitasking implementation.							

No.   No. <th colspan="2">Learning outcomes Course outcome</th> <th>Subject outcome</th> <th colspan="2">Method of verification</th>	Learning outcomes Course outcome		Subject outcome	Method of verification			
System resources.   knowledge     when, architecture, design principles and methods of cost and distributed information systems, including computing systems, including computing systems, including computing systems, and bases, computer applications, as well as the principles of human cooperation principles of human cooperation programming methods and techniques as well as select and apply apportaines programming methods and tosis in computer subare devices for the field of subare devices in a divanced advant, methods of sugoring processes and functions, specific to the field of subar subare devices, server to the field of subar subare devices, server to the field of subar subare devices, server and approcesses and bemnork   Kows how to implement local it solutions   (SU1) Assessment of factual knowledge     Subject contents   Kc_U41 (an advanced advant, methods of sugoring processes and bemnork   Is belot to implement local it solutions   (SU1) Assessment of factual knowledge     Subject contents   Architecture of . Net platform   Is below to implement busines metaphors.   (SU1) Assessment of factual knowledge     Subject contents   Architecture of . Net platform   Is below to implement busines metaphors.   (SU1) Assessment of factual knowledge     Subject contents   Architecture of . Net platform   Is below to implement busin the platform.   SU1) Subject cont		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		[SW1] Assessment of factual			
Implementation of modern GUI   Implementation of modern GUI   fulfilment     apply appropriate programming devices or controllers using microprocessors or programmable elements or systems specific to the field of study   Knows how to implement local it solutions   [SW1] Assessment of factual knowledge     [K6_W05] Knows and understands, to an advanced extert, 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_W05] Knows and understands, to an advanced extert, methods of supporting processes and functions, specific to the field of study   Is able to implement business togic with usage of modern metaphors.   [SU1] Assessment of task fulfiment     Subject contents   Architecture of .Net platform GUI technologies - WPF, WF Ussage of system resources Multitaking vs asynchronous Memory management   GUI technologies - WPF, WF   Ussage of system resources     Nutitaking vs asynchronous system Services   Memory management   Configuration and diagnostics of applications     System Services   Subject passing criteria   Passing threshold   Percentage of the final grade and criteria		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-					
understands, to an advanced extent, methods of supporting processes and functions, specific to the field of study   solutions   knowledge     [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 fulfiment     Subject contents   Architecture of .Net platform   [SU1] Assessment of task fulfiment   [SU1] Assessment of task fulfiment     Subject contents   Architecture of .Net platform   [SU1] Assessment resources   [SU1] Assessment fulficient generation and diagnostics of applications     Memory management   Configuration and diagnostics of applications   [System Services     Prerequisites and co-requisites   Subject passing criteria   Passing threshold   Percentage of the final grade so 0.0%		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					
ievaluate software using modern programming platforms, tools, anguages and paradigms of different levels, as well as using software packages supporting scientific and research processes as well as buliess decision- making processes and teamwork imultiment   Subject contents Architecture of .Net platform imultimess decision- making processes and teamwork   GUI technologies - WPF, WF Ussage of system resources imultimession   Multitasking vs asynchronous Memory management   Configuration and diagnostics of applications System Services   Prerequisites and co-requisites and co-requisites Subject passing criteria Passing threshold Percentage of the final grade and criteria		understands, to an advanced extent, methods of supporting processes and functions, specific					
GUI technologies - WPF, WF   Ussage of system resources   Multitasking vs asynchronous   Memory management   Configuration and diagnostics of applications   System Services   Prerequisites and co-requisites   Assessment methods and criteria   Subject passing criteria   Passing threshold   Percentage of the final grade		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-	logic with usage of modern multitasking and asynchronous				
Ussage of system resources   Multitasking vs asynchronous   Memory management   Configuration and diagnostics of applications   System Services   Prerequisites and co-requisites   Assessment methods and criteria Subject passing criteria   Passing threshold Percentage of the final grade   50.0% 60.0%	Subject contents	Architecture of .Net platform	•				
Multitasking vs asynchronous   Memory management   Configuration and diagnostics of applications   System Services   Prerequisites and co-requisites   Assessment methods and criteria   Subject passing criteria   Passing threshold   Percentage of the final grade   50.0%		GUI technologies - WPF, WF					
Memory management   Configuration and diagnostics of applications   System Services   Prerequisites and co-requisites   Assessment methods and criteria   Subject passing criteria Passing threshold   Percentage of the final grade   50.0% 60.0%		Ussage of system resources					
Configuration and diagnostics of applications   System Services   Prerequisites and co-requisites   Assessment methods and criteria   Subject passing criteria Passing threshold   Percentage of the final grade   50.0% 60.0%		Multitasking vs asynchronous					
System Services   Prerequisites and co-requisites   Assessment methods and criteria Subject passing criteria Passing threshold Percentage of the final grade   60.0%		Memory management					
Prerequisites and co-requisites Subject passing criteria Passing threshold Percentage of the final grade   Assessment methods and criteria Subject passing criteria Passing threshold Percentage of the final grade		Configuration and diagnostics of applications					
and co-requisites   Assessment methods and criteria Subject passing criteria Passing threshold Percentage of the final grade   50.0% 60.0%		System Services					
Assessment methods Subject passing criteria Passing threshold Percentage of the final grade 50.0% 60.0%							
and criteria 50.0% 60.0%	•	Subject passing criteria	Passing threshold	Percentage of the final grade			
50.0%	and criteria						
			50.0%	40.0%			

Recommended reading	Basic literature	<i>C# 5.0 IN A NUTSHEL</i> L, J. Albahari, B. Albahari <i>CLR via C#</i> , J Ritchter <i>WPF 4 Unleashed</i> , Nathan A.
	Supplementary literature	MSDN
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	