GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Technological Platforms, PG_00047724		
Field of study	Informatics		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2023/2024
Education level	second-cycle studies	Subject group	Obligatory subject group in the field of study 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	1	Language of instruction	Polish
Semester of study	2	ECTS credits	5.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Computer Architecture -> Faculty of Electronics, Telecommunications and Informatics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Jarosław Kuchta	
	Teachers	dr inż. Jarosław Kuchta	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	12.0	0.0	18.0	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	10.0	85.0	125

Subject objectives	The aim of the course is to present advanced techniques of using selected technological platforms (e.g. .NET & Java) in the development of modern applications.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[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.	The student knows and understands the ways of functioning of the technology platforms at the level of multi-layered applications	[SW1] Assessment of factual knowledge
[K7_K03] is ready to meet social obligations, inspire and organise activities for the social environment, initiate actions for the public interest, think and act in an entrepreneurial way	The student is able to create modern applications for solving social and business problems.	[SK5] Assessment of ability to solve problems that arise in practice
[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	The student is able to design the user interface and the structure of the database using tools related to selected technological platforms.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
[K7_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	The student knows and understands advanced application development mechanisms using modern technology platforms.	[SW1] Assessment of factual knowledge
[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	The student is able to use advanced tools of programming environments on selected technology platforms.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools

Subject contents

1. Introduction: comparison of selected technological platforms (.NET, Java)
2. Component approach to application development
3. Graphical user interface platforms
4. Modeling and implementing data access in applications
5. Web-based applications
6. Asynchronous and multithreading in applications

Prerequisites and co-requisites

Object oriented programming in C # or Java languages

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
laboratory	50.0%	50.0%
lecture	50.0%	50.0%

Recommended reading

Basic literature	1. Andrew Troelsen, Philip Japikse: Pro C# 7: With .NET and .NET Core, APRESS. 2017 2. https://docs.microsoft.com/en-gb/ 3. Antonio Goncalves: Beginning Java EE 7, APRESS, 2013 4. https://docs.oracle.com/javase/8/docs/api/
Supplementary literature	brak
eResources addresses	Adresy na platformie eNauczanie: Platformy Technologiczne - MSU - 2023/24 - Moodle ID: 37356 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=37356

Example issues/ example questions/ tasks being completed

Work placement	Not applicable