GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Technological Platforms, PG_00047670		
Field of study	Informatics		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2023/2024
Education level	first-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	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	4	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Radiocommunication Systems and Networks -> Faculty of Electronics, Telecommunications and Informatics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Krzysztof Cwalina	
	Teachers	dr inż. Krzysztof Cwalina dr inż. Wojciech Siwicki dr inż. Jarosław Magiera dr inż. Marcin Narloch dr inż. Piotr Kurgan mgr inż. Alicja Olejniczak dr inż. Łukasz Gołuński	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	0.0	0.0	45
	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	45	15.0	15.0	75

Subject objectives	Presentation of technological platforms: .NET and Java

Learning outcomes

Course outcome	Subject outcome	Method of verification
[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 and understands programming methods in C # and Java.	[SW1] Assessment of factual knowledge
[K6_W07] Knows and understands, to an advanced extent, the general principles of setting up and development of business entities, forms of individual entrepreneurship and running ventures in the field specific to the field of study	Knows and understands how to create applications in C # and Java.	[SW1] Assessment of factual knowledge
[K6_U01] can apply mathematical knowledge to formulate and solve complex and non-typical problems related to the field of study and perform tasks, in an innovative way, in not entirely predictable conditions, by:n- appropriate selection of sources and information obtained from them, assessment, critical analysis and synthesis of this information,n- selection and application of appropriate methods and toolsn	Can implement algorithms in C # and Java	[SU1] Assessment of task fulfilment

Subject contents

Java: Java Platform, conventions and startup, Project building - Maven, Collections and comparison of objects, Thread support, I/O support, Network sockets, Java Persistence API, Software testing, Parallelization of operations;

NET: Introduction to .NET., language comparison, WPF, Entity Framework, LINQ, Asynchronous applications

Prerequisites and co-requisites

Knowledge of object oriented programming.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Midterm colloquium	50.0%	50.0%
Practical exercise	50.0%	50.0%

Recommended reading

Basic literature	C. Nagel, B. Evjen, J. Glynn, M. Skinnerand, K. Watson Professional C# 2005 with .NET 3.0, Wrox Press 2007 The Java Tutorial, Oracle, 2010 Bruce Eckel: Thinking in Java 4th Edition Code Conventions for the Java Programming Language
Supplementary literature	E. Jendrock, I. Evans, D. Gollapudi, K. Haase, C. Srivathsa: "The Java EE 6 Tutorial", Oracle, 2010
eResources addresses	Adresy na platformie eNauczanie: Platformy technologiczne - 2023/2024 - Moodle ID: 35801 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=35801

Example issues/ example questions/ tasks being completed

Work placement

Not applicable