GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Technological Platforms, PG_00047670
Field of study	Informatics

Date of commencement of studies	October 2021	Academic year of realisation of subject	2022/2023
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 Computer Architecture -> Faculty of Electronics, Telecommunications and Informatics

Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Marcin Narloch
	Teachers	dr inż. Łukasz Gołuński
		dr inż. Piotr Kurgan
		dr inż. Marcin Narloch
		dr inż. Jarosław Magiera
		dr inż. Piotr Rajchowski
		dr inż. Jarosław Kuchta

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_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
	[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_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

Subject contents	1. Introduction adn pass criteria 2. Java Collections and introduction to generics 3. Java Beans and overview of standard Java classes 4. Enum types 5. Graphical User Interfaces in Java Swing 6. Using Beans Binding library to facilitate creating of GUI 7. Multithreading programming in Java 8. Networking and mobile in Java 9. Parsing XML in Java 10. Persistence (database access in JavaSE) 11. .NET platform components 12. Collections in .NET platform Data asccess layer ADO.NET Transaction and stored procedures in MS SQL Server Buffering data in web applications XML parsing in .NET, mobile .NET

Prerequisites and co-requisites	Knowledge of object oriented programming. Knowledge of mobile platforms.

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:

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable