University of Gdańsk

Subject card

Subject name and code	.Net technology, PG_00179127						
Field of study	Informatics						
Date of commencement of studies	October 2023		Academic year of realisation of subject		2025/2026		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study Optional subject group		
Mode of study	part-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		8.0		
Learning profile	academic		Assessment form		exam		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Tomasz Borzyszkowski				
	Teachers						

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	30.0	0.0	0.0	60

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	60	0.0	0.0	60

Subject objectives

The subject is intended to:
- introduce students to the object-oriented features of the C# language
- introduction to practical use of Visual Studio for software development and
- the basics of the ASP MVC library.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[INFL3_W05] has general knowledge of various programming paradigms and programming languages; has detailed knowledge of object-oriented design and programming methods and patterns	The student knows the basic constructs of the C# language and ASP MVC technology as well as basic programming paradigms	[SW2] presentation/project/paper/ report
[INFL3_U06] is able to design, create, run and test programs using dedicated tools and adequate templates	The student is able to construct computer programs and Internet portals in .Net technology using the Visual Studio tool.	[SU2] presentation/project/paper/ report

Subject contents

1. Introduction to Visual Studio and the C# language.
2. Object-oriented programming principles in C#: defining classes and objects, hiding information in C# language classes, access modifiers, partial classes, comparing properties of structures and classes, object constructors and destructors, initialising structures, inheritance and overriding methods.
3. Programming constructs: definition of properties and indexers, static components, overloading operators.
4. Advanced techniques: attributes and reflection mechanism, delegation and event handling, serialisation.
5. Introduction to web development in ASP technology.
6. ASP MVC technology.

<table>
<tr><td>Prerequisites and co-requisites</td><td colspan="3">Basic knowledge of object-oriented programming and relational databases</td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>project presentation, observation of student work</td><td>51.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td colspan="2">S. C. Perry. C# i .NET. Helion, 2006.

S. Walther. ASP .NET 2.0. Księga eksperta. Helion, 2008.</td></tr>
<tr><td>Supplementary literature</td><td colspan="2">Materiały dostępne na platformie https://learn.microsoft.com/pl-pl/dotnet/</td></tr>
<tr><td>eResources addresses</td><td colspan="2"></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="3"></td></tr>
<tr><td>Work placement</td><td colspan="3">Not applicable</td></tr>
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