WEB APPLICATIONS DEVELOPMENT IN .NET TECHNOLOGY

Faculty of Computer Science				
Study programme:	**Computer Science**		Degree level:	**Engineer's degree full-time programme**
Specialization	**---**		Diploma path:	**2026/2027W - 2026/2027S**
Module name:	**Web Applications Development in .NET technology** (Programowanie aplikacji WWW w technologii .NET)			
Module type:	**obligatory**	**Semester: 2**	ECTS:**5**	Module ID:**FCS-00003**
No. of hrs in semester:	Lecture (L) - **26** Classes(C) - **0** Specialization workshop (SW) - **30** Project (P) - **0** Laboratory classes (LC) - **0** Seminar (S) - **0**			
Prerequisites	-			

Aims and objectives:	The goal of the subject is to learn students how to use .NET technology for creating web applications.		
Forms of teching activities::	lecture, specialization workshop,	Assessment:	Evaluation must be relevant to the intended learning outcomes:
			Lecture - two writing tests Practical exercises - project implementation
Module content:	ASP .NET architecture. HTML controls. Life-cycle of web page. Session management. Data validation. Mechanisms and controls supporting web applications design. Databases access methods.		
Teaching methods:	programming, lecture problem,		

Learning outcomes

Symbol	Specify min. 4, max. 8 learning outcomes in the following order: knowledge – skills – competence. Each learning outcome must be verifiable	Reference to the programme learning outcomes of education
LO1	understands choosen parts of ASP.NET architecture	
LO2	describes usage of choosed web server controls	
LO3	implements web applications using .NET technology	
LO4	knows how to use realtional database in ASPX .NET applications	

No. of learning outcome	Methods of assessing the learning outcome	Type of teaching activities (if more than one) during which the outcome is assessed
LO1	written test	L
LO2	written test	L
LO3	implemented projects	Sw
LO4	implemented projects	Sw

Student's workload (in hours)	**1** - Presence during lectures	None	26
	2 - Presence during practical exercises	None	30
	3 - Preparation to practical exercises	None	49
	5 - Preparation to writing test	None	20
		TOTAL:	**125**

Quantitative indicators	Student's workload - activities that require direct teacher participation: (2)+(1)	56	**ECTS**
			2.2
	Student's workload connected with practical classes (2)+(3)	79	3.2

Basic references:	1. A. Freeman, Pro ASP.NET Core MVC 2, Apress, 2017 2. A. Freeman, Pro ASP.NET MVC 5, Apress, 2013
Further reading	1. 1. V. Pecanac, Ultimate ASP.NET Core 3 Web API, 2020 2. M. J. Price, C# 8.0 and .NET Core 3.0 – Modern Cross-Platform Development - Fourth Edition, Packt, 2019 3. D. Esposito, Microsoft ASP.NET and AJAX : architecting Web applications, Microsoft Press, 2009.

Unit:	Department of Information Systems and Computer Networks	Lecturer/ instructor	
Date of issuing the programme:	31st March 2026	Author of the programme:	dr hab. inż. Ireneusz Mrozek

L - lecture, C - classes, LC - laboratory classes, P-project, SW - specialization workshop, S - seminar