



Subject card

Subject name and code	Programming of Internet Applications, PG_00044103						
Field of study	Automation, Robotics and Control Systems						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	Subject group					
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Control Engineering -> Faculty of Electrical and Control Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Andrzej Kopczyński				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	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		35.0	75
Subject objectives	HTML5. Designing the visual layer of web applications - CSS styles (Bootstrap framework, dynamic language of LESS and SASS stylesheets). Practical use of JavaScript - jQuery library. Object document model DOM (Document Object Model). Programming of information systems working in the environment of the Internet network using the PHP language in the object version. Relational databases. Laravel - framework PHP.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	K7_U04		The student uses general principles of project implementation - from the analysis phase, through design, to the programming phase. Uses HTML, CSS, PHP and database languages at work. The student uses general principles of project implementation - from the analysis phase through the design phase to the programming phase. Student uses HTML, CSS, PHP and database languages at work. Student designs and creates internet applications using databases. It appropriately combines technologies available on the client side (XHTML, DOM, Java Script) with programming on the server side (PHP, SQL).			[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information	
	K7_U03		The student can prepare a presentation and present the effects of his or her work. The student can justify the solutions used during the task.			[SU5] Assessment of ability to present the results of task [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment	
Subject contents	Hypertext markup language - HTML. Designing the visual layer of web applications based on the Bootstrap framework. Css preprocessors. Programming of information systems working in the Internet environment using the PHP language. Relational databases and programming using the SQL language. Git - version control system.						
Prerequisites and co-requisites	Basic programming skills in the following languages: HTML, CSS, PHP.						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Practical project	50.0%	60.0%
	Theoretical test	50.0%	40.0%
Recommended reading	Basic literature	<ol style="list-style-type: none"> 1. M. Lis, PHP7. Praktyczny kurs, Helion 2017 2. W. Gajda, Git -rozproszony system kontroli wersji, Helion 2013 3. T. Matula, Laravel. Tworzenie aplikacji. Receptury, Helion 2015 4. R. Saunier, Laravel 4. Podstawy tworzenia aplikacji w PHP, Helion 2015 5. L.Welling , L.Thomson, PHP and MySQL Web Development 6. K. Tatroe, Programming PHP: Creating Dynamic Web Pages 	
	Supplementary literature	<ol style="list-style-type: none"> 1. J. Duckett, JavaScript i jQuery. Interaktywne strony WWW dla każdego, Helion 2015 2. J.Lockhart, Modern PHP: New Features and Good Practices, O'Reilly Media; 1st edition (March 31, 2015) 	
	eResources addresses	Adresy na platformie eNauczenie:	
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> 1. The definition of a rule in CSS. 2. Assumptions of MVC architecture. 3. Cascading in CSS. 4. The access specifiers in PHP. 5. The advantages of the Git system. 		
Work placement	Not applicable		