GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Internet Programming, PG_00058934		
Field of study	Informatics		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2027/2028
Education level	first-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
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	5.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Metrology and Optoelectronics -> Faculty of Electronics Telecommunications and Informatics -> Wydziały Politechniki Gdańskiej		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Katarzyna Karpienko	
	Teachers	dr inż. Katarzyna Karpienko mgr inż. Maciej Kraszewski	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	15.0	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	7.0	73.0	125

Subject objectives	To provide students with knowledge and skills in web application development by discussing the main techniques, languages and tools used on the server and client side.

<table>
<tr><td>Learning outcomes</td><td>
<table>
<tr><th>Course outcome</th><th>Subject outcome</th><th>Method of verification</th></tr>
<tr><td>[K6_U04] can apply knowledge of programming methods and techniques as well as select and apply appropriate programming methods and tools in computer software development or programming devices or controllers using microprocessors or programmable elements or systems specific to the field of study</td><td>The student knows how to use HTML, CSS, JavaScript, and tools such as the Node.js runtime environment and the React.js library to create a web application.</td><td>[SU5] Assessment of ability to present the results of task
[SU4] Assessment of ability to use methods and tools
[SU3] Assessment of ability to use knowledge gained from the subject</td></tr>
<tr><td>[K6_U03] can design, according to required specifications, and make a simple device, facility, system or carry out a process, specific to the field of study, using suitable methods, techniques, tools and materials, following engineering standards and norms, applying technologies specific to the field of study and experience gained in the professional engineering environment</td><td>The student can design and implement a web application, both on the client and server-side. knows how to prepare software documentation.</td><td>[SU1] Assessment of task fulfilment</td></tr>
<tr><td>[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</td><td>The student has the knowledge necessary to start working on creating a web application. Knows the network model and its layers. He knows the protocols necessary to transfer data across layers. Uses web browsers technologies - HTML, CSS, JavaScript, SVG, and those used on the server-side.</td><td>[SW1] Assessment of factual knowledge</td></tr>
</table>
</td></tr>
<tr><td>Subject contents</td><td>Scope of the material covered:the main protocols of the Internet,XHTML,Javascript,DOM + DHTML,SVG,Silverlight,web servers,PHP,Symfony,AJAX,security of applications and protocols,sources of standards and their documentation.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>Knowledge of basic concepts and models related to distributed computing (client-server model, P2P).</td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>kolokwium zaliczające</td><td>50.0%</td><td>50.0%</td></tr>
<tr><td>projekt</td><td>50.0%</td><td>50.0%</td></tr>
</table>
</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>Shklar L., Rosen R.: "Web Application Architecture - Principles, Protocols and Practice". Wyd. John Wiley & Sons, Ltd.</td></tr>
<tr><td>Supplementary literature</td><td>Dokumenty RFC.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
</table>
</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.