



Subject card

Subject name and code	Application Servers in Medicine, PG_00049303						
Field of study	Biomedical Engineering						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2026/2027		
Education level	first-cycle studies	Subject group			Optional subject group 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	4	Language of instruction			Polish		
Semester of study	7	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			exam		
Conducting unit	Department of Biomedical Engineering -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Adam Bujnowski					
	Teachers	dr inż. Adam Bujnowski					
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	3.0		42.0		75
Subject objectives	The goal of the subject is to familiarize students with the typical techniques of serving in information services. There will be mentioned both, hardware issues to produce reliable datacenter and typical information services with their realisation.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	[K6_U07] can apply methods of process and function support, specific to the field of study		Student creates selected elements of bigger system on the base of given information			[SU2] Assessment of ability to analyse information	
	[K6_U02] can perform tasks related to the field of study in an innovative way as well as solve complex and nontypical problems, applying knowledge of physics, in changing and not fully predictable conditions		Student creates thematic service using given tools			[SU4] Assessment of ability to use methods and tools	
	[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		Student creates service for automated data collection.			[SU1] Assessment of task fulfilment	

Subject contents	<p>Definition of a server</p> <p>Requirements for servers, Methods of improving server's accessibility</p> <p>Server-room - requirements</p> <p>TCP/IP basics</p> <p>Programming of the server and client side</p> <p>Operating system and a network service</p> <p>Electronic mail - principles of operation</p> <p>FTP protocol</p> <p>www - principles of operation, programming of the www- CGI, servlets, applets</p> <p>Servlet containers - EXAMPLES</p> <p>Principles of cloud computing</p> <p>Medical information services</p>											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="456 1111 794 1137">Subject passing criteria</th> <th data-bbox="799 1111 1137 1137">Passing threshold</th> <th data-bbox="1142 1111 1481 1137">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="456 1137 794 1164">laboratory achievements</td> <td data-bbox="799 1137 1137 1164">50.0%</td> <td data-bbox="1142 1137 1481 1164">50.0%</td> </tr> <tr> <td data-bbox="456 1164 794 1191">final writing class</td> <td data-bbox="799 1164 1137 1191">50.0%</td> <td data-bbox="1142 1164 1481 1191">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	laboratory achievements	50.0%	50.0%	final writing class	50.0%	50.0%
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final writing class	50.0%	50.0%										
Recommended reading	Basic literature	<p>Multiple authors, Vademecum teleinformatyka, Tom 1, IDG 1999</p> <p>Multiple authors, Vademecum teleinformatyka, Tom 2, IDG 1999</p> <p>Multiple authors, Vademecum teleinformatyka, Tom 3, IDG 1999</p> <p>Barnett, Apache, Zabezpieczenia aplikacji i serwerów www, Helion , 2007</p>										
	Supplementary literature	<p>Ford, Apache 2. Pocket reference. O'relly</p> <p>www.ltsp.org</p> <p>www.apache.org</p>										
	eResources addresses	Adresy na platformie eNauczanie:										
Example issues/ example questions/ tasks being completed												
Work placement	Not applicable											