



Subject card

Subject name and code	Application Servers in Medicine, PG_00049303						
Field of study	Biomedical Engineering						
Date of commencement of studies	October 2022		Academic year of realisation of subject		2025/2026		
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_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		
	[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 tematic service using given tools		[SU4] Assessment of ability to use methods and tools		
	[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		

Subject contents	Definition of a server		
	Requirements for dervers, Methods of improving server's accesibility		
	Server-room - requirements		
	TCP/IP basics		
	Programming of the server and client side		
	Operating sytem an a network service		
	Electronic mail - principles of operation		
	FTP protocol		
	www - principles of operation, programming of the www- CGI, servlets, applets		
	Servlet contaINERS - EXAMPLES		
	Principles of cloud computing		
	Medical information services		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	final writting class	50.0%	50.0%
	laboratory achievements	50.0%	50.0%
Recommended reading	Basic literature	Multiple authors, Vademecum teleinformatyka, Tom 1, IDG 1999	
		Multiple authors, Vademecum teleinformatyka, Tom 2, IDG 1999	
		Multiple authors, Vademecum teleinformatyka, Tom 3, IDG 1999	
		Barnett, Apache, Zabezpieczenia aplikacji i serwerów www, Helion , 2007	
Supplementary literature	Ford, Apache 2. Pocket reference. O'relly		
	www.ltsp.org		
eResources addresses	www.apache.org		
	Adresy na platformie eNauczanie:		
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		