

Subject card

Subject name and code	Computer Systems Administration, PG_00053911							
Field of study	Informatics							
Date of commencement of	October 2020		Academic year of			2022/2023		
studies	35,000, 2020		Academic year of realisation of subject		2022/2023			
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	3		Language of instruction			Polish	Polish	
Semester of study	5		ECTS credits			5.0		
Learning profile	general academic profile		Assessment form			exam		
Conducting unit	Department of Computer Architectur		re -> Faculty of Electronics, Telecommunications and Informatics					
Name and surname	Subject supervisor dr inż. Tomasz Boiński							
of lecturer (lecturers)	Teachers		dr inż. Piotr Rajchowski					
			dr inż. Tomas	sz Boiński				
			mgr inż. Szymon Olewniczak					
		i		i			i	
Lesson types and methods of instruction	Lesson type Number of study	Lecture 30.0	Tutorial 0.0	Laboratory 15.0	Project 15.0	t	Seminar 0.0	SUM 60
or matruction	hours	30.0	0.0	15.0	15.0		0.0	100
	E-learning hours inclu	ıded: 0.0						
Learning activity and number of study hours	Learning activity	Participation in classes include plan		Participation in consultation hours		Self-study S		SUM
	Number of study hours 60			6.0		59.0		125
Subject objectives	The aim of the subject is to familiarize students with topics connected with administering Linux and Windows based servers and provide means of interoperability between them							
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 system scripts Student administers complex information systems		[SW1] Assessment of factual knowledge			
[K6_W03] Knows and understands, to an advance extent, the construction and operating principles of components and systems re to the field of study, includin theories, methods and comprelationships between them selected specific issues - appropriate for the curriculu		dvanced fon and of tems related ncluding and complex on them and ues -	Student knows and describes system components in regard to computer system administration Student knows and describes complex system components in regard to computer system deployment and administration Student understands and describes cooperation of information systems in regard to computer system administration			[SW1] Assessment of factual knowledge		

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2. Administrative tools in Windows 3. Configuration and management of network in Windows 4. Internet Information Services - IIS 5. Hardware configuration in Windows systems 6. Windows Server Management 7. SQL Server Administration 8. User management in Linux systems 9. Advanced network administration in Linux systems 10. NIS and LDAP Directory Services 11. Filesystem management in Linux System 12. Construction of Linux Kernel 13. Mail servers in Linux systems 14. WWW and proxy servers in Linux systems 15. Printing and office software in Linux 16. XWindow configuration 17. Hardware support in Linux 18. Security in Linux Systems 19. Security in Linux Systems 19. Security in Linux Systems Security in Linux Systems 19. Security in Windows Systems Prerequisites and co-requisites Subject passing criteria Passing threshold Percentage of the final grade Project Project Su 0.0% 25.0%	Subject contents	1. Menagmenet of Windows systems					
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Project 30.0% 25.0% Practical exercise 30.0% 25.0%	·	Subject passing criteria	Passing threshold	Percentage of the final grade			
Practical exercise 30.0% 25.0%			-				
		Written exam	30.0%	50.0%			

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D	Design literature	1 to the distribution we also distribute a consequence	
Recommended reading	Basic literature	- Linux distribution"s dedicated web pages	
		- mailing lists	
		- Linux distribution"s Wikis	
		- Microsoft TechNet, http://technet.microsoft.com	
		- Apache Web Server documentation, http://httpd.apache.org/docs/ - Linux Administrator's Security Guide, Kurt Seifried, 2001, http://www.linuxtopia.org/online_books/linux_administrators_security_guide/index.html	
	Supplementary literature	No requirements	
	eResources addresses	Adresy na platformie eNauczanie:	
		2022/2023 - Administrowanie Systemami Komputerowymi - Moodle ID: 21960 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=21960	
Example issues/ example questions/ tasks being completed	Iptables are: a. simple firewall used in some Linux distributions b. A powerful packet filter c. The program that provides QoS d. a very complex, stateless firewall BasicAuthentication mode in Apache: a. sends the username and password in plain text each time a request is made b. is sensitive to eavesdrop only at the time of entering users login and password c. sends password as hashes d. uses an encrypted connection by default Exim mail server uses SSL authentication with MySQL		
	1.install Exim server and mysql database 2.configure the mail server so that the user authentication is based on entries in MySQL database 3.server allows receiving email only from selected domains 4.user reads mail using POP or IMAP-SSL-SSL (optional) 5.create at least 2 users who will use the e-mail system		
Work placement	Not applicable		

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