GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Computer Systems Administration, PG_00053911		
Field of study	Informatics		
Date of commencement of studies	October 2024	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	3	Language of instruction	Polish
Semester of study	5	ECTS credits	5.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Computer Architecture -> Faculty of Electronics Telecommunications and Informatics -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Tomasz Boiński	
	Teachers	dr inż. Tomasz Boiński	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	15.0	15.0	0.0	60

E-learning hours included: 0.0

eNauczanie source addresses:

Moodle ID: 6898 2026/2027 - Administrowanie systemami komputerowymi
https://enauczanie.pg.edu.pl/2025/course/view.php?id=6898

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	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_W03] knows and understands, to an advanced extent, the construction and operating principles of components and systems related to the field of study, including theories, methods and complex relationships between them and selected specific issues - appropriate for the curriculum	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
[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

Subject contents	Course content – lecture 1. Menagmenet of Windows systems 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 Windows Systems
Prerequisites and co-requisites	Basic knowledge of Windows and Linux Systems
Assessment methods and criteria	

Subject passing criteria	Passing threshold	Percentage of the final grade
Written exam	30.0%	50.0%
Practical exercise	30.0%	25.0%
Project	30.0%	25.0%

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	
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	
Practical activites within the subject	Not applicable	

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