



Subject card

Subject name and code	Network Operating Systems, PG_00048056						
Field of study	Informatics						
Date of commencement of studies	February 2027	Academic year of realisation of subject			2026/2027		
Education level	second-cycle studies	Subject group			Optional subject group Specialty 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	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Computer Communications -> Faculty of Electronics Telecommunications and Informatics -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Wojciech Gumiński					
	Teachers	dr inż. Wojciech Gumiński					
Lesson types	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		4.0		16.0	50
Subject objectives	The main objective of the course is to provide students with the operation, construction and configuration of network operating systems.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W101] is able to make an in-depth identification of key objects and phenomena related to the field of study, as well as theories that describe them and applicable analytical and design methods	Student lists and describes the key services of network operating systems.	[SW1] Assessment of factual knowledge
	[K7_U12] is able, to an increased extent, to analyze the operation of components and systems related to the field of study, as well as to measure their parameters and study their technical characteristics, and to plan and carry out experiments related to the field of study, including computer simulations, interpret the obtained results and draw conclusions	Student determines the configuration of network services.	[SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment
	[K7_U09] can carry out a critical analysis of the functioning of existing technical solutions and assess these solutions, as well as apply experience related to the maintenance of advanced technical systems, devices and facilities typical for the field of studies, gained in the professional engineering environment	Student get knowledge of administration of directory services.	[SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment
	[K7_W03] knows and understands, to an increased 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 classifies network services.	[SW1] Assessment of factual knowledge

Subject contents	<p>Course content – lecture</p> <ol style="list-style-type: none"> 1. Network operating systems classification 2. Network operating systems tasks 3. TCP/IP software in NOS structure 4. Internet protocol - IP 5. Transmission Control Protocol - TCP state diagram 6. Network communication using sockets 7. Network services 8. Network services configuration in Windows Server, Linux and Netware 9. Novell Directory Services - eDirectory 10. Windows domain 11. Active Directory 12. Remote access 13. Network shares and network printing 14. Security of network operating systems 15. Network operating systems administration tools 														
Prerequisites and co-requisites															
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="456 1379 794 1402">Subject passing criteria</th> <th data-bbox="799 1379 1137 1402">Passing threshold</th> <th data-bbox="1142 1379 1481 1402">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="456 1408 794 1435">Activity/presence</td> <td data-bbox="799 1408 1137 1435">0.0%</td> <td data-bbox="1142 1408 1481 1435">10.0%</td> </tr> <tr> <td data-bbox="456 1442 794 1469">Practical exercise</td> <td data-bbox="799 1442 1137 1469">50.0%</td> <td data-bbox="1142 1442 1481 1469">40.0%</td> </tr> <tr> <td data-bbox="456 1476 794 1503">Midterm colloquium</td> <td data-bbox="799 1476 1137 1503">50.0%</td> <td data-bbox="1142 1476 1481 1503">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Activity/presence	0.0%	10.0%	Practical exercise	50.0%	40.0%	Midterm colloquium	50.0%	50.0%
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Example issues/ example questions/ tasks being completed	<p>Configuration of servers for DHCP, DNS, HTTP, FTP services and ProxyHTTP as application server.</p> <p>Configuration of Group Policies Objects in Active Directory.</p>														
Practical activities within the subject	Not applicable														

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