GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	DIGITAL INFRASTRUCTURE MANAGEMENT, PG_00053188		
Field of study	Economic Analytics		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2023/2024
Education level	second-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	blended-learning
Year of study	2	Language of instruction	Polish Some elements of the course will be held in English due to references specific.
Semester of study	3	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Grażyna Musiatowicz-Podbiał	
	Teachers	dr Grażyna Musiatowicz-Podbiał	

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: 15.0						

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	6.0	39.0	75

Subject objectives	The aim of the course is to get students acquainted with the IT infrastructure of an enterprises, means of modeling this infrastructure, IT infrastructure management methods and tools supporting this management.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U03] can identify and analyse the causes and course of specific economic processes and phenomena as well as propose solutions based on them	Student can analyze company's IT infrastructure, model it and suggest new solutions in the maintenance management area	[SU4] Assessment of ability to use methods and tools
	[K7_K01] understands the need for continuous learning and, in particular, for advanced and modern tools for data analysis	Student understands a need of acquiring a knowledge on tools supporting IT infrastructure management in areas such as: helpdesk function, asset and configuration management, request management, incudent management, problem and known error management, change management	[SK5] Assessment of ability to solve problems that arise in practice
	[K7_W15] has an in-depth knowledge of the processes taking place in the company and the risks associated with it	Student has an in-depth knowledge on IT infrastructure management including ITIL best practices	[SW3] Assessment of knowledge contained in written work and projects
	[K7_K03] can assess the validity of criteria and tasks in the projects implemented	Student has the ability to use selected tools for modeling and managing IT infrastructure.	[SK3] Assessment of ability to organize work

Subject contents	• Identification of IT infrastructure elements, • IT infrastructure and architecture modelling, • Asset and configuration management, • Service desk function - role and responsibility, • Incident management, • Problem management and Knowledge database, • Change management.
Prerequisites and co-requisites	

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Labs assignments and project	50.0%	50.0%
	Knowledge test	50.0%	50.0%

Recommended reading	Basic literature	• Anand, A., Buffington, P., Buchanan, I., Fok, T.(2018) The future of ITSM is agile, A practical guide for working with ITIL® 4 and Atlassian. https://www.newverveconsulting.com/docs/ Atlassian_Axelos_ITIL4_Guide.pdf • Ciesielska, M., & Musiatowicz-Podbiał, G. (2021). *Zarys problematyki zarządzania zasobami informatycznymi w przedsiębiorstwie* (pp. 1-213). Politechnika Gdańska. • DuMoulin, T. (2019) ITIL 4 A Holistic View of Service Management, July, Pink Elephant. https://www.pinkelephant.com/ uploadedfiles/ Resources/PinkPapers/itil-4-a-holistic-view-ofservicemanagement.pdf • Mastalerz, M.W. (2011), Perspektywa usług informatycznych na tle zaleceń biblioteki ITIL, Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław • eCourse rerefences attached
	Supplementary literature	• ITIL® Foundation: ITIL 4 Edition, (2019), The ITIL management practices, http://www.axelos.com Orzechowski, R. (2011), • Cykl zarządzania wartością IT dla przedsiębiorstwa, KWARTALNIK NAUK O PRZEDSIĘBIORSTWIE nr, SGH, s-18-24.
	eResources addresses	Adresy na platformie eNauczanie: DIGITAL INFRA. MGMT STAC, 23/24 - Moodle ID: 31504 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=31504

Example issues/ example questions/ tasks being completed	• What are the key elements of IT infrastructure; examples of hardware, software and telecommunications networks? • To present known modeling method of IT infrastructure • What is the life cycle and key processes related to IT assets and configuration items? • What is the main function of Service Desk in the organization? • What are the Service Desk's configuration items for IT assets, users and processes? • What are the main elements of the incident and problem management processes? • What are similarities and differences in incident and problem management? • What are main components of change management process?
Work placement	Not applicable