

## SDAŃSK UNIVERSITY 的 OF TECHNOLOGY

## Subject card

Subject name and code	Strategies for Information	ation Systems,	PG_00047776	3				
Field of study	Informatics							
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	Part-time studies		Mode of delivery		at the university			
Year of study	2		Language of instruction		Polish			
Semester of study	3		ECTS crea	ECTS credits		4.0		
Learning profile	general academic profile		Assessme	nt form		exam		
Conducting unit	Department of Software Engineering -> Faculty of Electronics, Telecommunications and Informatics							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Agnieszka Landowska					
	Teachers		dr hab. inż. Agnieszka Landowska					
		mgr inż. Małgorzata Pykała						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM
	Number of study hours	12.0	0.0	0.0	15.0		0.0	27
	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	27		10.0		63.0		100
Subject objectives	Purpose of the subject is to change student's perspective on IT projects and to show, how projects are managed and done from the perspective of its customers. Software aquisition and its relation to strategic planning is described as well as financial and time perspective is explored.							

Learning outcomes	Course outcome	Subject outcome	Method of verification				
	[K7_U42] can solve engineering and research problems including design, assessment and maintenance of information systems and applications, using experimental methods and management techniques	Student defines strategy of software systems procurement.	[SU1] Assessment of task fulfilment				
	[K7_U43] can apply information technologies in market economy and information society conditions as well as algorithmize and computerize cognitive and decision-making processes in other areas of knowledge	Student defines IT strategy for organization.	[SU1] Assessment of task fulfilment				
	[K7_W09] Knows and understands, to an increased extent, the economic, legal and other conditions of various types of activities related to the given qualification, including the principles of protection of industrial property and copyright.	Student analyzes IT investments financial aspect.	[SW3] Assessment of knowledge contained in written work and projects				
	[K7_W43] Knows and understands, to an increased extent, the nformal, technical and social aspects of the operation of complex information systems in the information society and in the global information n infrastructure.	Student describes and analyses organization processes and their influence on IT.	[SW3] Assessment of knowledge contained in written work and projects				
	[K7_U08] while identifying and formulating engineering tasks specifications and solving these tasks, can:n- apply analytical, simulation and experimental methods,n- notice their systemic and non-technical aspects,n- make a preliminary economic assessment of suggested solutions and engineering workn	Student demonstates use of Critical Success Factor method.	[SU1] Assessment of task fulfilment				
Subject contents	<ol> <li>Definition of information strategy, features of IT investments, problems in IT investments 2. Enterprise business strategy analysis - mission statement, goal hierarchy, market shares 3. Enterprise business strategy analysis - strategy type model, organization structure model 4. Strategic planning of IT (information technology) and IS (information systems) 5. Information strategy - case study 6. Classification of information systems 7. Enterprise information systems - MRP, ERP, SCM. CRM systems. 8. Financial analysis of IT investments 9. Making decisions about information systems. CSF method. 10. Software aquisition process - problems overview 11. Software aquisition rules-of-thumb 12. Requirements management 13. Software copyright problem 14. Configuration management in software acquisition 15. Schedule and risk management 16. Software maintanance problems</li> </ol>						
Prerequisites and co-requisites	No requirements						
Assessment methods	Subject passing criteria	Passing threshold	Percentage of the final grade				
and criteria	Project	50.0%	50.0%				
	Written exam	50.0%	50.0%				
Recommended reading	Basic literature	<ol> <li>Carr Nicholas, IT doesn't matter, Harvard Business Review, May 2003.</li> <li>Gray Paul, Manager's Guide to Making Decisions about Information Systems, Wiley&amp;Sons, 2006</li> </ol>					
	<ol> <li>Kaplan, R. and Norton, D., "Using the balanced scorecard as a strategic management system", Harvard Business Review, January-February 1996a, pp. 75-85</li> <li>M.J. Earl, Management Strategies for Information Technology, Prentice Hall, 1989</li> <li>Parker, M., Strategic transformation and information technology, Prentice Hall, 1996 4 Wiseman, Information Economic: a practical approach to valuing information systems, Journal of Information Technology, 1992, 7</li> </ol>						
	eResources addresses	Adresy na platformie eNauczanie: Strategie Informatyzacji - MSU - 2023/2024 - Moodle ID: 25781 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25781					
Example issues/ example questions/ tasks being completed	IT strategy planning	1					

Work placement	Not applicable