

。 GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00065234								
Field of study	Transport								
Date of commencement of studies	February 2024		Academic year of realisation of subject			2024/2025			
Education level	second-cycle studies		Subject group						
Mode of study	Full-time studies		Mode of delivery			at the university			
Year of study	1		Language of instruction			Polish			
Semester of study	2		ECTS credits			3.0			
Learning profile	general academic profile		Assessment form			assessment			
Conducting unit	Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering								
Name and surname	Subject supervisor		dr hab. Daniel	Kaszubowski					
of lecturer (lecturers)	Teachers								
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM	
	Number of study hours	15.0	0.0	15.0	15.0		0.0	45	
	E-learning hours included: 0.0								
Learning activity and number of study hours	Learning activity	Participation in classes includ plan	n didactic ed in study	Participation in consultation hours		Self-study		SUM	
	Number of study hours	45		0.0		0.0		45	
Subject objectives	Providing knowledge about techniques and applications of modeling and simulation of logistics processes and using the acquired knowledge in practice using a dedicated simulation application.								
Learning outcomes	Course outcome		Subject outcome			Method of verification			
	[K7_K02] makes competent and ethical decisions, caring for the public interest and maintaining economic, social and environmental values		Ability to identify the possibilities of using simulation in various practical applications			[SK5] Assessment of ability to solve problems that arise in practice			
	[K7_U02] presents logical and solid arguments regarding the obtained results, through analysis, synthesis of information in various technical contexts, critically approaching their interpretation		Ability to interpret simulation results and identify their causes.			[SU2] Assessment of ability to analyse information			
	[K7_W01] identifies in an in-depth way phenomena related to the field of study as well as theories describing them and possible methods of analyzing processes occurring in the life cycle of technical systems		Ability to identify problematic issues in the project task being carried out			[SW3] Assessment of knowledge contained in written work and projects			
	[K7_U05] cooperates with other people in the implementation of team work, both as a leader and a team member, effectively achieving set goals		The ability to jointly develop assumptions for solving a design problem.			[SU1] Assessment of task fulfilment			
	[K7_K01] recognizes the importance of knowledge related to the field of study in solving cognitive and practical problems		Ability to independently formulate research problems			[SK5] Assessment of ability to solve problems that arise in practice			
Subject contents	 Definition of simulation and modeling Characteristics of operating systems Principles of execution, examples and advantages of simulation Simulation users Simulation procedure Simulation of queuing systems Discrete event simulation 								
Prerequisites and co-requisites	Basic knowledge of the functioning of logistics systems								

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade		
	Lecture - test	60.0%	50.0%		
	Practical work	60.0%	50.0%		
Recommended reading	Basic literature	 A. M. Law, Simulation Modeling Education, 2015 K. A. Jurczyk, Flexsim. Podrećz A. G. GreenWood, Simulation F A. G. GreenWood, Simulation S 	ling and Analysis. McGrawHill rećznik użytkownika. Intermarium, 2024 on Primer, FlexSim, 2019 on Software Primer, FlexSim, 2020		
	Supplementary literature	Actual industry-related literature			
	eResources addresses	Adresy na platformie eNauczanie:			
Example issues/ example questions/ tasks being completed	 Basics of 3D mode Creating element flow lo gic Defining parameters of objects in the model Model of a quality control station Model of the conveyor system 				
Work placement	Not applicable				

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