GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Systems Modelling and Business Analysis, PG_00048281
Field of study	Informatics, Biomedical Engineering, Biomedical Engineering, Biomedical Engineering

Date of commencement of studies	February 2023	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	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment

Conducting unit	Department of Software Engineering -> Faculty of Electronics, Telecommunications and Informatics

Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Aleksander Jarzębowicz
	Teachers	dr inż. Aleksander Jarzębowicz

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	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 goal of this course is to teach fundamentals of model-driven engineering as well as to prepare for performing tasks of business analyst.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W42] Knows and understands, to an increased extent, the principles and trends in the analysis and design of local and distributed IT systems and the basics of computer modeling and computerization of complex cognitive and decision-making processes.	Student knows modern guides to business analysis.	[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation
	[K7_U07] can apply advanced methods of process and function support, specific to the field of study	Student makes plans of business analysis for non-trivial systems.	[SU1] Assessment of task fulfilment
	[K7_W41] Knows and understands, to an increased extent, the standards, production methods, life cycle and development trends of software as well as information systems and applications.	Student understands specyfics of standard visual modeling languages as well as domain-specific languages.	[SW1] Assessment of factual knowledge
	[K7_U41] can select methods of modelling and analysis of information systems and applications using selected elements of theoretical computer science and modern programming tools	Student can select relevant modeling methods depending on project specifics.	[SU3] Assessment of ability to use knowledge gained from the subject
	[K7_K02] is ready to provide critical evaluation of received content and to acknowledge the importance of knowledge in solving cognitive and practical problems	Student understands research results related to model-driven engineering.	[SK5] Assessment of ability to solve problems that arise in practice

Subject contents	Model-driven engineering: • Models and meta-models, quality of models, quality of UML tools • Domain-specific modeling, • Business models, BPM/BPA/BPMS tools • application of analysis patterns • 'model-driven approaches'(MDA, MDE, MDD, MDSD), • configuration of modeling in software project - OMG SPEM, Business analysis: • business analysis, • tasks, techniques and tools of business analyst • profil i kompetencje analityka biznesowego		
Prerequisites and co-requisites	Basics of software engineering and modeling in UML.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test of knowledge	50.0%	50.0%
	task in the project	50.0%	50.0%
Recommended reading	Basic literature	International Institute of Business Analysis - A Guide to Business Analysis Body of Knowledge (BABOK Guide), version 3.0, 2015. International Institute of Business Analysis – Global Business Analysis Core Standard (A companion to BABOK Guide v. 3.0), 2017. OMG Software and Systems Process Engineering Meta-model	
	Supplementary literature	IBM Rational Unified Process Specification, version 7.0.1, 2006, www.ibm.com. Project Management Institute - Business Analysis for Practitioners, a Practice Guide, 2015. OMG MDA Guide Version 1.0.1, Joaquin Miller and Jishnu Mukerji (ed.), 2003	
	eResources addresses	Adresy na platformie eNauczanie: Modelowanie i analiza biznesowa 2023/2024 - Moodle ID: 527 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=527	
Example issues/ example questions/ tasks being completed	N/A		
Work placement	Not applicable		