GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	BUSINESS PROCESSES ANALYSIS, PG_00066339		
Field of study	Economic Analytics		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
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	2	Language of instruction	Polish
Semester of study	3	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Management -> Faculty of Management and Economics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Marzena Grzesiak	
	Teachers	dr inż. Marzena Grzesiak	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	30.0	0.0	0.0	45

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	45	4.0	51.0	100

Subject objectives

Identifies and models business processes based on reliable data, selecting their degree of complexity in accordance with the purpose of the study

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W04] Describes and explains complex analytical problems using in-depth knowledge of analytical methods and reliable data, providing answers to fundamental dilemmas of the modern economy.	analyzes complex processes in an in-depth way, creating the structure of a simulation model and conducting an experiment confirming the logic of the solution	[SW1] Assessment of factual knowledge
[K7_K02] Makes competent and ethical decisions, safeguarding the public interest and maintaining economic, social, and environmental values	makes competent decisions on the selection of the scenario using organizational and economic criteria	[SK5] Assessment of ability to solve problems that arise in practice

Subject contents

LECTURE
Strategies for implementing changes towards the dynamics of processes in the organization
Competing based on analytics in internal and external processes
Building analytical competencies
Managing the growth of process maturity
Process approach implementation methodology
Process architecture - APQC PCF
SIPOC model. BPMN notation - advanced modeling
Handling unusual situations - advanced aspects of events
Construction of process maps
Building process architecture
Advanced tag properties
Artifacts. Collaboration diagram - case study
Choreography diagram - case study
Conversation diagram - case study.
LABORATORY
Creative observation of reality in order to identify processes in which the student is a stakeholder, contractor or owner
Independent construction of a simulation model using iGrafx and BPMN notation, based on acquired skills
Conducting simulations, tests and analyzes to optimize the process
Making a description of the process. Defending the completed task

<table>
<tr><td>Prerequisites and co-requisites</td><td colspan="3"></td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Test</td><td>56.0%</td><td>50.0%</td></tr>
<tr><td>Project</td><td>56.0%</td><td>50.0%</td></tr>
</table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td colspan="2">Auksztol J., Chomuszko M. (red.): Modelowanie organizacji procesowej, PWN, Warszawa 2012
Davenport T.H., Harris J.G.: Inteligencja analityczna w biznesie, MT Biznes, Warszawa 2013
Gawin B., Marcinkowski B.: Symulacja procesów biznesowych. Standardy BPMS i BPMN w praktyce, Helion 2013
Piotrowski M.: Procesy biznesowe w praktyce. Projektowanie, testowanie i optymalizacja, Helion 2013</td></tr>
<tr><td>Supplementary literature</td><td colspan="2">Bitkowska A.: Zarządzanie procesowe we współczesnych organizacjach, DIFIN, Warszawa 2013
Drejewicz Sz.: Zrozumieć BPMN. Modelowanie procesów biznesowych, Helion 2012
Piotrowski M.: Notacja modelowania procesów biznesowych. Podstawy, Wydawnictwo BTC 2014</td></tr>
<tr><td>eResources addresses</td><td colspan="2">Adresy na platformie eNauczanie:</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="3">Discuss the differences between a process map and a process model
Discuss win-win strategies for managing process maturity growth
List typical internal processes where analytics is used. How can organizations build their competitive position based on analytics in these processes?
Discuss the SIPOC model used in the implementation of the process approach in the organization</td></tr>
<tr><td>Work placement</td><td colspan="3">Not applicable</td></tr>
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