University of Gdańsk

Subject card

Subject name and code	IT Tools and Techniques in Business Process Management, PG_00177464						
Field of study	Informatics and Econometrics						
Date of commencement of studies	October 2026		Academic year of realisation of subject	2027/2028			
Education level	Master's studies		Subject group	Obligatory subject group in the field of study 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	2		Language of instruction	English			
Semester of study	3		ECTS credits	5.0			
Learning profile	academic		Assessment form	credit			
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Bartłomiej Gawin				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	45.0	0.0	0.0	60
	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	60		4.0	61.0	125	
Subject objectives	Skills improving of multidimensional modeling, parameterization, simulation and analysis of business processes in dedicated IT tools.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[IiEMU2_U06] Can utilize structured and detailed knowledge of management, quality sciences, economics, and finance to address dilemmas and develop innovative solutions for complex or unusual problems that arise in professional settings	Is able to integrate knowledge of business process management and decision rules to identify managerial dilemmas, as well as independently design and simulate innovative solutions within the Adonis system environment for complex economic processes.	[SU2] presentation/project/paper/ report
[IiEMU2_U12] Can adapt, design, create, and operate IT systems that support business entities	The student is able to design business processes that support the functioning of economic entities.	[SU2] presentation/project/paper/ report
[IiEMU2_U01] Can creatively and profoundly analyze complex social and economic processes using structured knowledge, econometrics, informatics, or statistics tools	The student is able to analyze and interpret complex and multidimensional business processes in an in-depth and creative way using structured knowledge and IT tools.	[SU2] presentation/project/paper/ report
[IiEMU2_U11] Can collaborate effectively in teams and assume leadership roles	The student is able to cooperate and work in process teams, direct their design work or take a leading role in them.	[SU2] presentation/project/paper/ report
[IiEMU2_W06] Possesses a structured understanding of the processes, methods, and tools necessary for the design, creation, development, and provision of suitable conditions for informatics, econometrics or statistics tools	The student has structured and theoretically based knowledge of business processes, tools and techniques for their design, parameterization, simulation and analysis.	[SW2] presentation/project/paper/ report

Subject contents

A. Lecture topics

Discussion of the basics of business process management
Discussion of design notations for modeling business processes and decision rules
Discussion of tools for designing, simulating, and analyzing business processes
Discussion of tools for designing, simulating, and analyzing decision rules in business processes

B. Exercise topics

Practical presentation and application of the Adonis tool in exercise work

Prerequisites and co-requisites

Prerequisites: Economic informatics, databases Additional requirements:

Basic knowledge of organizational management

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
work project	51.0%	100.0%

Recommended reading

Basic literature	Gawin B., Systemy informatyczne w zarządzaniu procesamiworkflow, PWN 2015 Gawin B., Marcinkowski B.: Symulacje procesów biznesowych.Standardy BPMS i BPMN w praktyce, Helion 2013
Supplementary literature	BOC: ADONIS User Manual Mathias Weske, Business Process Management: Concepts,Languages, Architectures, Springer 2012
eResources addresses	

Example issues/ example questions/ tasks being completed

Design a multidimensional business process model in ADONIS, parameterize it and perform path simulation and load analysis.

Work placement

Not applicable

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