



## Subject card

Subject name and code	Automation of Business Processes, PG_00064481						
Field of study	Informatics						
Date of commencement of studies	February 2027	Academic year of realisation of subject			2026/2027		
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	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Computer Architecture -> Faculty of Electronics Telecommunications and Informatics -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Tomasz Dziubich					
	Teachers	mgr inż. Krystyna Dziubich					
Lesson types	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		6.0		39.0	75
Subject objectives	Familiarising students with business processes (their identification, modelling, simulation, implementation and automation) and IT systems used at various stages.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W11] knows and understands, to an increased extent, the general principles of creation and development of forms of individual entrepreneurship and the economic, legal and other conditions of various types of activities related to the awarded qualification, including the principles of protection of industrial property and copyright law	is able to identify business rules and rules resulting from legal constraints and determine their impact on the form of the business process	[SW3] Assessment of knowledge contained in written work and projects
	[K7_W10] knows and understands, to an increased extent, the basic processes occurring in the life cycle of equipment, objects and technical systems, as well as methods of supporting processes and functions, specific to the field of study	knows and understands the life cycle of processes and is able to identify systems useful at particular stages of the cycle	[SW1] Assessment of factual knowledge
	[K7_W03] knows and understands, to an increased extent, the construction and operating principles of components and systems related to the field of study, including theories, methods and complex relationships between them and selected specific issues - appropriate for the curriculum	Understands the construction and use of IT architecture in the context of the enterprise's business architecture	[SW1] Assessment of factual knowledge
[K7_U08] while identifying and formulating engineering tasks specifications and solving these tasks, can: - apply analytical, simulation and experimental methods, - notice their systemic and non-technical aspects, - make a preliminary economic assessment of suggested solutions and engineering work	It models business processes, simulates the process, takes actions to optimize the process in terms of time or costs. Implements business processes	[SU4] Assessment of ability to use methods and tools	
Subject contents	Course content – lecture		
	1. Strategy, business modeling,  2. Business process, BPA, process management;  3. Modeling business processes - BPMN  4. BPEL;  5. Automation of operational processes - SOA Suite, BPM Suite;  6. Business Process Management		
Prerequisites and co-requisites	Course content – project		
	Business process modelling in BPMN notation Business process simulation (verification of deadlocks and bottlenecks) Process implementation and process instance launch		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	50.0%	40.0%
	Exam	50.0%	60.0%
Recommended reading	Basic literature	J.Freund, B.Rucker, Real-Life BPMN, 2012 camunda, isbn: 978-1480034983	
	Supplementary literature	D.M. Bridgeland, R.Zahavi: "Business Modeling - A practical Guide to Realizing Business Value" Morgan Kaufmann 2009 Bruce Bukovics: "Pro WF: Windows Workflow in .NET 3.0" Apress 2007	
	eResources addresses		

Example issues/ example questions/ tasks being completed	Model the given process in BPMN notation. What is process simulation and what is its purpose? What types of activities are not subject to process automation? What types of processes are good candidates for automation? Give examples of applications or IT systems that can be used at each stage of the process life cycle.
Practical activities within the subject	Not applicable

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