GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Automation of Business Processes, PG_00054288
Field of study	Informatics

Date of commencement of studies	February 2024	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	1	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	exam

Conducting unit	Department Of Computer Architecture -> Faculty Of Electronics Telecommunications And Informatics -> Wydziały Politechniki Gdańskiej

Name and surname of lecturer (lecturers)	Subject supervisor	mgr inż. Krystyna Dziubich
	Teachers	mgr inż. Krystyna Dziubich

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	10.0	35.0	75

Subject objectives	Presentation of business process automation

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W06] Knows and understands, to an increased extent, the basic processes taking place in the life cycle of devices, facilities and technical systems.	The student can perform the business process simulation using the tools that are available in the selected system.	[SW1] Assessment of factual knowledge
	[K7_W43] Knows and understands, to an increased extent, the nformal, technical and social aspects of the operation of complex information systems in the information society and in the global information n infrastructure.	The student knows and understands the operation and dependencies of X2Y systems. Understands BPMN models showing the contact between B2B systems	[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
	[K7_W09] Knows and understands, to an increased extent, the economic, legal and other conditions of various types of activities related to the given qualification, including the principles of protection of industrial property and copyright.	The student understands various aspects of business modeling (motivation model, organizational model, business process model, business rules model), in particular with regard to legal restrictions.	[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

Subject contents	1. Introduction (group work and workflow, WFMS) 2. Strategy, business modeling, 3. Business process, BPA, porcess management; 4. Modeling business processes - BPMN 5. Languages for the recording of business process definitions at the service orchestration level - BPEL; 6. Automation of operational processes - SOA Suite, BPM Suite; 7. Business Process Management

Prerequisites and co-requisites	No recomendations

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Exam	50.0%	60.0%
	Project	50.0%	40.0%

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 Busines Value" Morgan Kaufmann 2009 Bruce Bukovics: "Pro WF: Windows Workflow in .NET 3.0" Apress 2007
	eResources addresses	Adresy na platformie eNauczanie: Automatyzacja procesów biznesowych (2024) - Moodle ID: 37648 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=37648

Example issues/ example questions/ tasks being completed	# Process modeling in BPMN notation
Work placement	Not applicable

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