

Subject card

Subject name and code	Business Process Modeling in ARIS Tool, PG_00156610						
Field of study	Informatics and Econometrics						
Date of commencement of studies	October 2024		Academic year of realisation of subject		2024/2025		
Education level	Master's studies		Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	part-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		Polish		
Semester of study	1		ECTS credits		4.0		
Learning profile	academic		Assessment form		exam		
Conducting unit	Department of Logistics -> Faculty of Economics -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Cezary Mańkowski, prof. UG				
	Teachers		dr hab. Cezary Mańkowski, prof. UG				
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	9.0	0.0	9.0	0.0	0.0	18
	E-learning hours included: 0.0						
	Additional information:						
	- Analysis of cases in the form of selected business processes						
	- Project method (reference, research, implementation, practical project)						
- Conversational lecture							
- Lecture with multimedia presentation							
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	18		20.0		65.0	103
Subject objectives	Achieving the effects of learning knowledge, skills and social competences in the field of business process modeling in the ARIS tool						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[liEMU2_K01] The student understands the need for continuous completion and deepening of acquired knowledge. The student inspires and organizes others' learning processes.	Understands the need to continuously supplement and deepen the acquired knowledge in the field of business process modeling in the ARIS tool	[SK2] presentation/project/paper/report
	[liEMU2_W04] The student has an in-depth knowledge of advanced mathematical, statistical, econometric and IT methods that enable the acquisition, processing and analysis of data reflecting the functioning and growth of the national economy and its components, as well as the phenomena and processes occurring in their environment.	Has in-depth knowledge of advanced methods of business process modeling and IT tools enabling the modeling of these processes	[SW2] presentation/project/paper/report
	[liEMU2_U03] The student is able to identify, to an in-depth degree, the institutional-legal and social constraints on the functioning of economic structures and institutions and reflect them in modeling, forecasting and optimization.	Can identify institutional, legal and social constraints of business process management to a greater extent and reflect them in modeling	[SU2] presentation/project/paper/report
	[liEMU2_U07] The student is able to build advanced formal models of complex economic phenomena and processes, estimate them, carry out their verification and apply them to modeling, forecasting and optimization of resources of economic institutions of varying degrees of complexity, their structure and the course of processes in them.	Can build advanced models of business processes, analyze them and use them to forecast and optimize the resources of economic institutions of varying complexity, their structure and the course of processes occurring in them	[SU2] presentation/project/paper/report
	[liEMU2_W03] The student has an in-depth knowledge of man as a subject who creates economic structures and institutions.	Has in-depth knowledge of business processes	[SW2] presentation/project/paper/report
	[liEMU2_K03] The student is able to communicate freely with the public inside and outside the workplace, transfer his knowledge and share his skills through various media.	Can communicate freely with the environment in and outside the workplace, convey his/her knowledge and share his/her skills using various media	[SK2] presentation/project/paper/report
Subject contents	1. Business process structure Ontology. Reism, eventism, processualism, relationism, systemism. Business process modeling architectures (IDEF, ARIS, CIM OSA, Zachmans framework). Business process classification (PKD, PKWiU). Business process parameters (attributes) 2. Building a business process model Methods/standards/notations for business process modeling (EPC, BPMN, UML, BPEL, WSDL). Business process modeling tools (ARIS Architect&Designer, ARIS Express). Building a model of a selected business process in EPC notation using the ARIS tool 3. Evaluation of the built business process model Heuristics, benchmarking, redesigning, reengineering, simulation, analysis of time-cost efficiency of the business process 4. Presentation, discussion, certification Presentation of the built business process model, group discussion, approach to the certified Software AG exam		
Prerequisites and co-requisites	Computer skills and Microsoft Windows environment Basic knowledge of management and economic informatics		

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Verbal description of the business process model	51.0%	50.0%
	Graphical Business Process Model	51.0%	50.0%
Recommended reading	Basic literature	1) Business Process Excellence. ARIS in Practice. (Ed.) A-W. Scheer et al. Springer-Verlag Berlin Heidelberg 2002 2) Gabryelczyk R.: Aris w modelowaniu procesów biznesu. Difin. Warszawa 2006 3) Mańkowski C.: Modelowanie procesów logistycznych. Wyd. Uniwersytetu Gdańskiego, Gdańsk 2020 (do pobrania TUTAJ) 4) Mańkowski C.: Ontological Foundations for Business Logistic Process Modeling. "Railway Transport and Logistics" 2007, no.2, p. 30-38 (do pobrania ze strony nauczyciela TUTAJ /Modelowanie procesów biznesowych.../Artykuł Ontologie/hasło podane na zajęciach) 5) Mańkowski C.: Model symulacyjny logistyki produkcji wyrobów szklanych [W:] Zeszyty Naukowe Uniwersytetu Gdanskiego.Ekonomia Transportu Ladowego. Nr 39/2010 (do pobrania ze strony nauczyciela TUTAJ /Modelowanie procesów biznesowych.../Artykuł Proces logistyki wyrobów.../hasło podane na zajęciach)	
	Supplementary literature	1) Rosing M., A-W. Scheer, H. Scheel: The Complete Business Process Modeling Handbook. Body of Knowledge from Process Modeling to BPM (Volume 1). Morgan Kaufmann, Waltham 2015 2) Mańkowski C.: iGrafx jako instrument modelowania systemów wsparcia logistycznego [W:] Informatyczne narzędzia procesów logistycznych. Red. M. Chaberek, A. Jezierski. CeDeWu, Warszawa 2010, rozdział 12, s. 139 - 149 3) Portals: http://www.ariscommunity.com http://www.softwareag.com http://www.idef.com	
	eResources addresses		
	Example issues/ example questions/ tasks being completed	Modeling a selected business process according to the EPC notation in the ARIS architecture Extending the model of a selected business process with the flow of resources Using the EPC notation to describe the model verbally	
Work placement	Not applicable		

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