

Faculty of Engineering Management				
Study programme:	Management and Production Engineering	Degree level: full-time programme:	Master degree	
Specialization	Process engineer	Diploma path:	-	
Module name:	Industrial process modelling			
Module type:	obligatory	Semester:	3	ECTS 1 Module ID: KSU031029
No. of hrs in semester:	L - 15	C -	LC- 30	P- SW- S-
Prerequisites:	Complete with prerequisites or "-"			
Teaching methods:	lecture, class, laboratory class, project, seminar, specialization workshop	Assessment:	Evaluation must be relevant to the intended learning outcomes	
		lecture - written test; laboratory class - written test		
Aims and objectives:	Learning key aspects of process management Acquiring skills and learning the principles of documenting, modelling and analysing processes. Getting to know IT systems supporting process modeling and analysis. Developing creativity and contextual thinking. Preparing a report on project tasks, presentation of results.			
Module content:	The concept and structure of the process. Principles of documenting processes. Notation of process modelling. Principles and criteria of evaluation of notation understanding. Types of process diagrams, purpose, principles of their use. Stages and principles of process modelling. Modelling and analysis of flows in processes using IT tools. Process modelling notation in business practice.			
Learning outcomes	Acquire skills and knowledge of the analysis and evaluation of business process. Applying this knowledge in practice at various levels of management. Cognition of professional tools for process management.		Relevance to the programme learning outcomes	
EK1	student: understand process management approach		I_W04	
EK2	student has knowledge in the field of modelling and diagnosing processes		I_W04, I_W11	
EK3	student develops process models using adequate notation and analyses the company's processes		I_U06	
EK4	independently solve research problems		I_U07, I_K03	
EK5	able to work in a team		I_K01	
learning outcomes	methods of assessing learning outcomes		type of class (if more than one) where the outcomes are assessed	
EK1	written test		L, LC	
EK2	written test		L, LC	
EK3	written test		L, LC	
EK4	written test, evaluating the student's reports and performance in classes		LC	
EK5	evaluating the student's reports and performance in classes		LC	
student workload	lecture attendance		15 x 1h =	15
	participation in laboratory classes		15 x 2h =	30
	preparation for laboratory classes		5h	5
	participation in student-teacher sessions related to the project		1h	1
			TOTAL:	51
quantitative indicators	Student workload - activities that require direct teacher participation		46	ECTS 2
	Student workload - practical skills activities		36	1
basic references:	Gawin B., Marcinkowski B.: Symulacja procesów biznesowych: standardy BPMS i BPMN w praktyce, Helion, Gliwice 2013; Jurczuk A., Wieloaspektowa identyfikacja i typologia źródeł niespójności procesów biznesowych, Oficyna Wydawnicza PB, Białystok 2019; Łunarski J, Projektowanie procesów: technicznych, produkcyjnych i gospodarczych, Oficyna Wydawnicza Politechniki Rzeszowskiej, Rzeszów 2012			
supplementary references:	Drejewicz Sz.: Zrozumieć BPMN: modelowanie procesów biznesowych, Helion, Gliwice 2017; Karagiannis, D., Mayr, H. C., Mylopoulos, J.: Domain-Specific Conceptual Modeling. Springer International Publishing, Basel, Switzerland 2016; Jacka M. J., Keller P. J.: Business process mapping: improving customer satisfaction. John Wiley a. Sons, Hoboken 2009			
Department:	Międzynarodowa Katedra Logistyki i Inżynierii Usług	Group instructors:	dr hab. inż. Arkadiusz Jurczuk	
Date:	24.02.2020	Coordinator:	dr hab. inż. Arkadiusz Jurczuk	