

COURSE DESCRIPTION CARD

Bialystok University of Technology Faculty of Engineering Management										
Field of study	Management							Degree level and programme type	first degree/second degree	
Specialisation/ diploma path	-							Study profile	-	
Course name	Robotic Process Automation							Course code	IS-FM-00111S	
								Course type	elective	
Forms and number of hours of educational activities	L	C	LC	P	SW	FW	S	Semester	summer	
		30						No. of ECTS credits	6	
Entry requirements	-									
Course objectives	The aim of the course is to acquaint students with the fundamentals of business processes automation with the use of Robotic Process Automation technology. The students will gain practical skills in developing software robots for business process automation in the UiPath Studio software. The students will also develop social competencies through teamwork and public discussions.									
Course content	The assumptions and methods of business process automation with the use of Robotic Process Automation (RPA) technology, methods of process documentation (manuals, maps), software robots, advantages and limitations of RPA technology implementation, intelligent automation of business processes, rules for selecting a process for automation, UiPath Studio interface, introduction to terminology and UiPath objects, assignment and types of variables, flow notation, basic and advanced "activities" used in automation, conditional statements, loops, cooperation with MS Excel, web browser automation, e-mail automation, Data Scrapping from the websites, operations on files and folders, exception handling.									
Teaching methods	problem exercises, case study,									
Assessment method	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes									
Symbol of learning outcome	Learning outcomes								Reference to the learning outcomes for the field of study	
	Knowledge: the graduate knows and understands								-	
LO1	the assumptions of business processes automation								-	
LO2	the possibility of using software robots to automate simple operational tasks								-	

	Skills: the graduate is able to	-
L03	indicate business processes with high potential for robotization	-
L04	build software robots to automate selected business processes in the UiPath Studio software	-
	Social competence: the graduate is ready to	-
L05	discuss in public and present the results of the work carried out	-
Symbol of learning outcome	Methods of assessing the learning outcomes	Type of tuition during which the outcome is assessed
L01	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	C
L02	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	C
L03	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	C
L04	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	C
L05	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	C
Student workload (in hours)		No. of hours
Calculation	Participation in the classes	30
	Preparation for the classes	30
	Participation in consultations	5
	Individual case studies	25
	Individual literature studies	25
	Preparation of the practical exercises in the UiPath software	35
	TOTAL:	150
Quantitative indicators		HOURS No. of ECTS credits
Student workload – activities that require direct teacher participation		35 1,4
Student workload – practical activities		125 5
Basic references	1. Mary C. Lacity, Leslie P. Willcocks, John Hindle, <i>Becoming strategic with Robotic Process Automation</i> , Steve Brookes Publishing, 2019, 228 pp. 2. van der Aalst, W.M.P., Bichler, M. & Heinzl, A. Robotic Process Automation. Bus Inf Syst Eng 60, 269–272, 2018, https://doi.org/10.1007/s12599-018-0542-4	

Supplementary references	1. https://www.uipath.com/resources/all 2. Siderska J., Robotic Process Automation – a driver of digital transformation? Engineering Management in Production and Services, 12(2), 21-31, 2020, doi: 10.2478/emj-2020-0009	
Organisational unit conducting the course	International Department of Logistics and Service Engineering	Date of issuing the programme
Author of the programme	Julia Siderska, PhD	4.05.2023

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work, S – seminar