COURSE DESCRIPTION CARD

<table>
<tr><td colspan="10" align="center">Bialystok University of Technology
Faculty of Engineering Management</td></tr>
<tr><td>Field of study</td><td colspan="7" align="center">Management</td><td>Degree level and programme type</td><td>first degree/second degree</td></tr>
<tr><td>Specialisation/ diploma path</td><td colspan="7" align="center">-</td><td>Study profile</td><td>-</td></tr>
<tr><td rowspan="2">Course name</td><td colspan="7" rowspan="2" align="center">Robotic Process Automation</td><td>Course code</td><td>IS-FM-00111S</td></tr>
<tr><td>Course type</td><td>elective</td></tr>
<tr><td rowspan="2">Forms and number of hours of educational activities</td><td>L</td><td>C</td><td>LC</td><td>P</td><td>SW</td><td>FW</td><td>S</td><td>Semester</td><td>summer</td></tr>
<tr><td></td><td>30</td><td></td><td></td><td></td><td></td><td></td><td>No. of ECTS credits</td><td>6</td></tr>
<tr><td>Entry requirements</td><td colspan="9" align="center">-</td></tr>
<tr><td>Course objectives</td><td colspan="9">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.</td></tr>
<tr><td>Course content</td><td colspan="9">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.</td></tr>
<tr><td>Teaching methods</td><td colspan="9">problem exercises, case study,</td></tr>
<tr><td>Assessment method</td><td colspan="9">The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes</td></tr>
<tr><td>Symbol of learning outcome</td><td colspan="8" align="center">Learning outcomes</td><td>Reference to the learning outcomes for the field of study</td></tr>
<tr><td></td><td colspan="8" align="center">Knowledge: the graduate knows and understands</td><td>-</td></tr>
<tr><td>LO1</td><td colspan="8">the assumptions of business processes automation</td><td>-</td></tr>
<tr><td>LO2</td><td colspan="8">the possibility of using software robots to automate simple operational tasks</td><td>-</td></tr>
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	Skills: the graduate is able to	-
LO3	indicate business processes with high potential for robotization	**-**
LO4	build software robots to automate selected business processes in the UiPath Studio software	**-**
	Social competence: the graduate is ready to	**-**
LO5	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
LO1	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	**C**
LO2	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	**C**
LO3	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	**C**
LO4	The evaluation of the exercises performed by students and the assessment of the practical problems solved during the classes	**C**
LO5	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, *Becoming strategic with Robotic Process Automation*, 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