Basic information about the subject (independent of the cycle)

Module name	**Business Process Automation**
Erasmus code	
ISCED code	
Language of instruction	English
Website	
Prerequisites	Basic theoretical knowledge in the field of management and computer science (computer and basic software).
ECTS points hour equivalents	**Contact hours (work with an academic teacher)** 30 **Total number of hours with an academic teacher** 30 **Number of ECTS points with an academic teacher** 3 **Non-contact hours (students' own work)** 60 **Total number of non-contact hours** 60 **Number of ECTS points for non-contact hours** 3 **Total number of ECTS points for the module** 6
Educational outcomes verification methods	Practical exercises, project (individual or in a group), case studies, presentation.
Description	The module covers the knowledge in the area of the business processes automation in the organization (enterprise) and tools (software) used for this. Process automation is becoming more and more important for enterprises. Human work is replaced by the work of machines (dedicated devices, e.g. robots) or specialized software. Thanks to this, it is possible to reduce the duration of individual tasks (it is possible to perform more tasks in a shorter time), ensure the required precision and repeatability, minimize the risk of human error, etc. The automation of processes can therefore affect the quality of tasks and indirectly also affect the maintenance and increasing competitive position. The module includes a synthetic introduction to the issue of process automation. During the course, students will learn the possibilities of automating simple office processes by combining the functionality of office software (text editor, spreadsheet, database, program for creating printed materials, etc.). For the automation of selected processes, dedicated software – Robotics Process Automation (RPA) software will also be used. Students will learn how to automate both simple and more advanced processes using specialized and user-friendly software. During the course, the following topics will also be discussed: access to data collected in various sources, downloading selected data from the Internet and functionalities in program add-ons.
Reading list	1. Dumas, M., La Rosa, M., Mendling, J., Reijers, Hajo A., Fundamentals of Business Process Management, Springer, 2018. 2. Majekodunmi, D., Business Process Automation with ProcessMaker 3.1. A Beginner's Guide, Apress,

	2018. 3. Ter Hofstede, A.H.M., Van der Aalst, W., Adams, M., Russell, N. (Eds.), Modern Business Process Automation, Springer, 2010. 4. Tripathi, A.M., Learning Robotic Process Automation. Create Software robots and automate business processes with the leading RPA tool – UiPath, Packt Publishing Ltd., 2018. 5. Ying, L.M., Robotic Process Automation with Blue Prism Quick Start Guide. Create software robots and automate business processes, Packt Publishing Ltd., 2018. 6. Blokdyk, G., Business Process Automation BPA. A Complete Guide - 2019 Edition, 5STARCooks, 2019. 7. Lacity, M.C., Willcocks, L.P., Robotic Process Automation and Risk Mitigation. The Definitive Guide, SB Publishing, 2017. 8. Wibbenmeyer. K., The Simple Implementation Guide to Robotic Process Automation (RPA). How to Best Implement RPA in an Organization, iUniverse, 2018. 9. https://www.uipath.com/rpa/academy 10. https://www.blueprism.com/university
Educational outcomes	**KNOWLEDGE** 1. Increasing knowledge about processes in the organization. 2. Business Process Reengineering. 3. The benefits of using RPA software in the organization. 4. Strengths, weaknesses, opportunities and threats related to the implementation of RPA software in the organization. **SKILLS** 1. Obtaining additional benefits (possibilities) by combining the functionality of office software. 2. Robotic Process Automation (RPA) software functionalities. 3. Creating tasks (functionalities) that work automatically. **ATTITUDES** 1. Understanding the operation and adaptability of RPA software. 2. Ability to work alone and in a group. 3. Independent search for solutions and overcoming problems.
Practice	✓ Processes in the organization – a model approach. ✓ Combining the functionality of office software. ✓ Automation of selected processes using RPA software (e.g. creation of a process block system with necessary modifications of block settings for the purposes of automatic operation).

Information about classes in the cycle

Website	
Educational outcomes verification methods	Practical exercises, project (individual or in a group), case studies, presentation.
Comments	–
Reading list	1. Dumas, M., La Rosa, M., Mendling, J., Reijers, Hajo A., Fundamentals of Business Process

	Management, Springer, 2018. 2. Majekodunmi, D., Business Process Automation with ProcessMaker 3.1. A Beginner's Guide, Apress, 2018. 3. Ter Hofstede, A.H.M., Van der Aalst, W., Adams, M., Russell, N. (Eds.), Modern Business Process Automation, Springer, 2010. 4. Tripathi, A.M., Learning Robotic Process Automation. Create Software robots and automate business processes with the leading RPA tool – UiPath, Packt Publishing Ltd., 2018. 5. Ying, L.M., Robotic Process Automation with Blue Prism Quick Start Guide. Create software robots and automate business processes, Packt Publishing Ltd., 2018. 6. Blokdyk, G., Business Process Automation BPA. A Complete Guide - 2019 Edition, 5STARCooks, 2019. 7. Lacity, M.C., Willcocks, L.P., Robotic Process Automation and Risk Mitigation. The Definitive Guide, SB Publishing, 2017. 8. Wibbenmeyer. K., The Simple Implementation Guide to Robotic Process Automation (RPA). How to Best Implement RPA in an Organization, iUniverse, 2018. 9. https://www.uipath.com/rpa/academy 10. https://www.blueprism.com/university
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A list of topics	1. Introduction to business processes. 2. Model view of business processes. 3. Process automation – basic concepts. 4. Combining office software functionality – serial correspondence. 5. Combining the functionality of office software – cooperation with databases. 6. Combining the functionality of office software – cooperation with the schematic editor and the program for creating printed materials. 7. Dedicated process automation software. 8. RPA software – introduction, user interface. 9. RPA software – creating simple processes.

	10. RPA software – downloading and processing data from various sources. 11. RPA software – downloading and processing data from the www. 12. RPA software – advanced (software) capabilities. 13. RPA software – use of add-on functionality. 14. Project development.
Teaching methods	Practical exercises, project (individual or in a group), case studies, presentation.
Assessment methods	Project (individual or in a group) and activity during the classes.