WSB University							
Field of study: Production Management and Engineering							
Course: Problem Based Learning							
Educational profile: practical							
Education level: first-cycle studies							
Number of hours per semester	1		2		3		4
	I	II	III	IV	V	VI	VII
Full-time studies (L/C/lab/pr/e)*						14	
Part-time studies (L/C/lab/pr/e)*						12	
LECTURER							
FORM	Classes						
COURSE OBJECTIVES	Becoming acquainted with and learning to use the Problem Based Learning method in solving practical problems related to production management and engineering.						

Field-related learning outcome	Reference to PQF	Description of learning outcomes	Method of verification of learning outcomes
		Knowledge The student	
ZIP_W02	P6S-WG	Has the advanced knowledge and understanding of Problem Based Learning concepts, knows how to use them in management and understands the practical application of this knowledge.	Assessment of the student's answers during classes (teamwork, participation in group discussions). Assessment of the student's performance during the end-of-semester presentation.
		Skills The student	
ZIP_U06 **ZIP_U08**	P6S_UW, Eng. P6S_UW, Eng.	Can integrate the acquired knowledge using the methodology of problem based learning and can critically analyze and assess the functioning of existing solutions, at the same time proposing improvements in the field of production management and engineering.	Assessment of the student's answers during classes (teamwork, participation in group discussions). Assessment of the student`s involvement in the preparation of the end-of-semester presentation.
		Social competences The student	
ZIP_KO1	P6S-KK	The student is aware of his/ her knowledge and is ready to make managerial decisions, taking into account the usefulness of typical methods, procedures and best practices as well as suggested managerial solutions.	Assessment of teamwork during classes. Assessment of the student's performance during the end-of-semester presentation.
ZIP_KO2	P6S-KK	Is ready to use expert opinion in case	Assessment of teamwork during

		of difficulties in solving practical problems and while performing managerial and engineering tasks.	classes. Assessment of the extent to which the student is able to make use of the knowledge offered during classes by an external supervisor - practitioner with experience in the implementation of industrial projects.

Student's own workload (1h teaching hour=45 minutes)**

Full-time	**Part-time**
participation in lectures = participation in classes = 14 preparation for classes = 14 analyzing the literature on the subject, watching online tutorials preparation for lectures = preparation for an end-of-semester test/examination = 18 - end-of-semester assignment preparation project tasks = e-learning = credit/examination = 2 other = 2 consultation **Total:50h** **ECTS points: 2** **including practical classes: 2**	participation in lectures = participation in classes = 12 preparation for classes = 16 analyzing the literature on the subject, watching online tutorials preparation for lectures = preparation for an end-of-semester test//examination = 18 end-of-semester assignment preparation project tasks = e-learning = credit/examination = 2 other = 2h consultation **Total:50h** **ECTS points: 2** **including practical classes: 2h**

PREREQUISITES	Ability to work in a group.
COURSE CONTENT	Contact hours (Classes via the MS Teams platform). 1. Classic problem solving methods used in the practice of project management in comparison with the assumptions of using Problem Based Learning as an innovative method of solving problems in the practice of project management. 2. Principles of problem solving using the Problem Based Learning method: defining the problem, collecting data about the problem and using sources, cooperation with owners and stakeholders of the problem, tasks and roles in the group, work schedule and distribution of work, developing a work plan, developing a solution to the problem related to business practice in the field of industrial projects. 3. Solving the problem presented to the group using the Problem Based Learning method. 4. Facilitation of cooperation between members of the group engaged in solving a problem. 5.Knowledge-exchange sessions. 6.Presentation of the solution to the problem which was found by means of the Problem Based Learning method. e-learning: not applicable
COMPULSORY LITERATURE	Effective project management: traditional, agile, extreme, hybrid / Robert K. Wysocki. - 8th ed. - Indianapolis, IN : John Wiley & Sons, cop. 2019

OPTIONAL LITERATURE	Aalborg University, Problem based learning. The basic principle of the Aalborg model , 2019 Savin−Baden M: Problem−Based Learning in Higher Education: Untold Stories SRHE & Open−University Press, Buckingham 2000 Presentations and online tutorials: https://www.en.aau.dk/education/problem-based-learning/ https://www.youtube.com/watch?v=hooS7QgZhXo https://www.youtube.com/watch?v=O3-qtvaPtH8 https://www.en.aau.dk/education/master/sustainable-design https://www.en.aau.dk/education/master/sustainable-design https://www.youtube.com/watch?v=RGoJIQYGpYk https://www.youtube.com/watch?v=5p3RAkRNLpU
TEACHING METHODS	Contact hours (Classes via the MS Teams platform). teamwork, group discussion, discussing case studies, thematic exercises, knowledge exchange sessions, group facilitation, involvement of an external supervisor - practitioner with experience in the implementation of industrial projects e-learning: not applicable
TEACHING AIDS	Case study prepared by the lecturer, a Power Point presentation, online tutorials
PROJECT (if implemented in the framework of the class module)	not applicable
FORM AND CONDITIONS OF ASSESSMENT	- Good attendance record (the student has to be present in at least 75% of classes (camera - switched on, active participation required) - Oral answers to the lecturer`s questions during teamwork – this component constitutes 50% of the final grade (the lecturer's assessment during the exercises done as teamwork) - Participation in group work aimed at solving the problem posed for the group and related to the field of production management and engineering – it constitutes 50% of the final grade (evaluation of the presentation method made by the lecturer and an external stakeholder specializing in the subject of the implemented project).

** L-lecture, C- classes, lab- laboratory, pr- project, e- e-learning*