



MODULE DESCRIPTION

Module code	full-time studies:	Z-ZIP1-E-609
	part-time studies:	Z-ZIPN1-E-609
Module name	Fundamentals of Research Methodology	
Module name in Polish	Podstawy metodologii badań naukowych	
Valid from academic year	2019/2020	

MODULE PLACEMENT IN THE SYLLABUS

Field of study	MANAGEMENT AND PRODUCTION ENGINEERING
Level of education	1st degree
Studies profile	General
Form and method of conducting classes	Full-time and Part-time
Specialisation	All
Unit conducting the module	Department of Production Engineering
Module co-ordinator	Bożena Kaczmarska, PhD, DSc
Approved by:	Dariusz Bojczuk, PhD, DSc

MODULE OVERVIEW

Type of subject / group of subjects	Major
Module status	Compulsory
Language of conducting classes	English
Module placement in the syllabus - semester	Semester VI
Initial requirements	No requirements
Examination (YES/NO)	NO
Number of ECTS credit points	1

Method of conducting classes		Lecture	Classes	Laboratory	Project	Other
Per semester	full-time studies:	15				
	part-time studies:	9				

TEACHING RESULTS AND THE METHODS OF ASSESSING TEACHING RESULTS

Category	Symbol	Learning outcomes	Assignations to the directional learning outcomes
Knowledge	W01	The student has a knowledge of the essence and concept of science, its classification, specificity and diversity of social, humanities and technical sciences.	ZIP1_W07 ZIP1_W13 ZIP1_W15
	W02	The student has a knowledge of various research methods and their usefulness in conducting scientific research.	ZIP1_W02
	W03	The student has knowledge of the organization of scientific research in Poland, forms of presentation of research results, with particular emphasis on written works	ZIP1_W08
Skills	U01	The student is able to formulate a simple research problem, research topic, purpose and scope of the study, falling within the area of management and production engineering	ZIP1_U04
	U02	The student is able to identify the necessary range of literature sources and information for the purpose of conducting a formulated study.	ZIP1_U01
Social competences	K01	The student understands the need to constantly supplement the knowledge about the results of scientific research in the field of a wide range of logistics issues	ZIP1_K01

TEACHING CONTENTS

Method of conducting classes	Teaching contents
Lecture	<p>Elements of the history of science and technology - industrial revolutions.</p> <p>Reductionism and systems approach in research processes.</p> <p>The essence of scientific research methodology - methodology and research method.</p> <p>Areas of science and research areas - entities carrying out research.</p> <p>Formulating research problems - hypothesis and research goal.</p> <p>Research methods, tools and techniques.</p> <p>Organization and stages of research - presentation of the results.</p> <p>Elements of research in diploma theses - the aim of the work in terms of scientific research.</p> <p>Examples of hypotheses and research goals in MPE (MANAGEMENT AND PRODUCTION ENGINEERING) diploma theses.</p>

METHODS OF ASSESSING TEACHING RESULTS

Symbol	Methods of checking the learning outcomes (select X)					
	Oral exam	Written exam	Test	Project	Statement	Other
W01					X	X
W02					X	X
W03					X	X
U01					X	X
U02					X	X
K01					X	X

FORM AND CONDITIONS OF PASSING

Form of classes	Form of credit	Passing conditions
Lecture	Credit with grade	Preparation of a report on your own diploma thesis - discussion on the elements of scientific research in the diploma thesis.

STUDENT WORKLOAD

Balance of ECTS points												
No.	Type of student's activity	Student's workload										Unit
		full-time					part-time					
		Lc	C	Lb	P	O	Lc	C	Lb	P	O	
1.	Participation in the activities	15					9					h
2.	Other (consultation, exam)	2					2					h
3.	Number of hours of a student's assisted work	17					11					h
4.	Number of ECTS credit points which are allocated for assisted work	0,7					0,4					ECTS
5.	Number of hours of a student's unassisted work	8					14					h
6.	Number of ECTS credit points which a student receives for unassisted work	0,3					0,6					ECTS
7.	Work input connected with practical classes	0					0					h
8.	Number of ECTS credit points which a student receives for practical classes	0,0					0,0					ECTS
9.	Total number of hours of a student's work	25					25					h
10.	Punkty ECTS za modul <i>1 ECTS=25 hours</i>	1										ECTS

LITERATURE

1. Bielik L. (2019), *Methodology of Science. An Introduction*, Comenius University in Bratislava (https://fphil.uniba.sk/fileadmin/fif/katedry_pracoviska/klmv/bielik/Bielik-Methodology_of_Science.pdf)
2. Kothari C.R. (2004), *Research Methodology. Methods and Techniques*, New Age International (<https://ccsuniversity.ac.in/bridge-library/pdf/Research-Methodology-CR-Kothari.pdf>)
3. Wa-Mbaleka S. (2018), *Writing your thesis and dissertation qualitatively: Fear no more*, Oikos Biblios Publishing Hous (https://www.researchgate.net/publication/344782866_Writing_your_thesis_and_dissertation_qualitatively_Fear_no_more)