



Subject card

Subject name and code	MSc Diploma Thesis I, PG_00053404						
Field of study	Biomedical Engineering, Biomedical Engineering, Biomedical Engineering						
Date of commencement of studies	February 2023	Academic year of realisation of subject	2023/2024				
Education level	second-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study				
Mode of study	Full-time studies	Mode of delivery	at the university				
Year of study	1	Language of instruction	Polish				
Semester of study	2	ECTS credits	4.0				
Learning profile	general academic profile	Assessment form	assessment				
Conducting unit	Department of Biomedical Engineering -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Mariusz Kaczmarek					
	Teachers	dr hab. Marcin Gruszecki dr inż. Adam Bujnowski prof. dr hab. inż. Jerzy Wtorek dr Michał Kucewicz dr hab. inż. Piotr Szczuko dr Brygida Mielewska dr inż. Tomasz Kocejko dr Tomasz Neumann dr inż. Anna Węsierska dr inż. Magdalena Mazur-Milecka prof. dr hab. inż. Jacek Rumiński dr inż. Grzegorz Jasiński prof. dr hab. inż. Bożena Kostek dr hab. inż. Grzegorz Lentka prof. dr hab. inż. Grzegorz Redlarski dr hab. inż. Mariusz Kaczmarek					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	0.0	0
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	Number of study hours	0	30.0	70.0	100		
Subject objectives	To familiarize students with the process of definition of the research problem, methods of its analysis, the method of evaluation of results and techniques for documenting the various stages of research						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W09] Knows and understands, to an increased extent, the economic, legal and other conditions of various types of activities related to the given qualification, including the principles of protection of industrial property and copyright.	The student knows the rules of protection intellectual values. understands the impact of your actions on economics and environment in which operates.	[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation
	[K7_U10] can individually plan and pursue their own lifelong education and influence others in this aspect, also by means of advanced information and communication technologies (ICT), and communicate on specialist issues with diverse recipients, appropriately justify points of view, hold debates, present, assess and discuss different opinions and points of view, as well as use specialist terminology related to the field of study in communication	The student knows the basic techniques of data modeling, key standards for IT systems and equipment, medical security techniques, computer methods of supporting diagnostics, and TI used in various fields of health care.	[SU2] Assessment of ability to analyse information
	[K7_U08] while identifying and formulating engineering tasks specifications and solving these tasks, can: - apply analytical, simulation and experimental methods, - notice their systemic and non-technical aspects, - make a preliminary economic assessment of suggested solutions and engineering workn	The student knows the basic data modeling techniques, key standards for information systems. The student knows the principles of intellectual property protection. Understands the impact of their activities on the economics and environment in which they operate.	[SU1] Assessment of task fulfilment
	[K7_K02] is ready to provide critical evaluation of received content and to acknowledge the importance of knowledge in solving cognitive and practical problems	The student knows and understands the principles of scientific work, research methods, and determine the conditions of their use	[SK5] Assessment of ability to solve problems that arise in practice
	[K7_K03] is ready to meet social obligations, inspire and organise activities for the social environment, initiate actions for the public interest, think and act in an entrepreneurial way	Is able to work in a group, identify basic problems in the work environment and propose methods to solve them.	[SK1] Assessment of group work skills [SK5] Assessment of ability to solve problems that arise in practice
Subject contents	Literature studies the issues under consideration. Choice, justification and development of research methods. Testing, calculations, analysis of the results, the project proposal. The implementation of the project. Comparative analysis, conclusions.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Master Thesis	60.0%	100.0%
Recommended reading	Basic literature	Depends on studied topics	
	Supplementary literature	Depends on studied topics	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		