



Subject card

Subject name and code	MSc Diploma Thesis, PG_00030020						
Field of study	Mathematics						
Date of commencement of studies	October 2022	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	2	Language of instruction			Polish		
Semester of study	4	ECTS credits			18.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Instytut Matematyki Stosowanej -> Faculty of Applied Physics and Mathematics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Zdzisław Dzedzej					
	Teachers	prof. dr hab. Joanna Janczewska dr hab. Zdzisław Dzedzej					
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	60.0	60
	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	60	40.0		350.0	450	
Subject objectives	Organization of the master thesis writing process. Introduction of the graduates into advanced innovative technologies and creative approaches to their solutions.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K7_K04	Is able to verify his theses			[SK4] Assessment of communication skills, including language correctness		
	K7_K01	Student knows the literature of his subject			[SK2] Assessment of progress of work [SK5] Assessment of ability to solve problems that arise in practice		
	K7_U01	Student is able to edit mathematical text			[SU5] Assessment of ability to present the results of task [SU1] Assessment of task fulfilment		
	K7_U10	Student thinks logically			[SU1] Assessment of task fulfilment		
K7_W03	Student possesses mathematical culture			[SW3] Assessment of knowledge contained in written work and projects			
Subject contents	Solving advanced and complex particular or general tasks coming from innovative technological sectors or from pure sciences.						
Prerequisites and co-requisites	depends on the subject and speciality						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	diploma thesis	51.0%			100.0%		
Recommended reading	Basic literature	No recommendations					

	Supplementary literature	No recommendations
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	<p>Description of a disease evolution. The hazard functions of cancer diseases. Mathematical modelling of medical and pension schemes. Mathematical modelling of an enterprise, branch, society, state progress or ruin. Operator ergodic theory. Branching processes. Birth and death processes. Cancer phylogeny. Graph Theory in social-economic sciences. Chaos Theory of financial markets. Computer methods of innovative technologies. Statistical analysis. Game theory in biology.</p> <p>Methods of nonlinear analysis.</p>	
Work placement	Not applicable	