



Subject card

Subject name and code	, PG_00053344						
Field of study	Biomedical Engineering, Biomedical Engineering, Biomedical Engineering						
Date of commencement of studies	February 2022		Academic year of realisation of subject		2022/2023		
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	3		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Intelligent Interactive Systems -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Jan Daciuk				
	Teachers		dr hab. inż. Jan Daciuk				
Lesson type and method of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	0.0	30
	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	30		2.0		18.0	50
Subject objectives	The goal of the course is to familiarize students with specificity of natural language (including Polish) as well as practical introduction into the domain of natural language processing.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K7_K02		The student is ready for critical assessment of perceived contents, appreciates contribution of science in solving cognitive and practical problems.		[SK5] Assessment of ability to solve problems that arise in practice		
	[K7_W01] Knows and understands, to an increased extent, mathematics to the extent necessary to formulate and solve complex issues related to the field of study.		The student comprehends and utilizes mathematical foundations of natural language processing methods.		[SW1] Assessment of factual knowledge		
	[K7_U05] can plan and conduct experiments related to the field of study, including computer simulations and measurements; interpret obtained results and draw conclusions		The student can conduct experiments involving natural language processing, can interpret their results, and can draw conclusions.		[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment		
	[K7_W08] Knows and understands, to an increased extent, the fundamental dilemmas of modern civilisation, the main development trends of scientific disciplines relevant to the field of education.		The student comprehends fundamental dilemmas of contemporary civilization, and the main development trends in natural language processing.		[SW1] Assessment of factual knowledge		

Subject contents	<p>Lecture:</p> <ol style="list-style-type: none"> 1. Introduction 2. Lexicon 3. Word embeddings 4. Document retrieval 5. Spelling correction 6. POS tagging 7. Syntax 8. Parsing 9. Dialog systems 10. Question answering 11. Reference resolution 12. Summarization 13. Machine translation <p>Project:</p> <ol style="list-style-type: none"> 1. Text preprocessing 2. Morphology 3. Document retrieval 4. Parsing 5. Dialog system 											
Prerequisites and co-requisites	Basic knowledge of artificial intelligence.											
Assessment methods and criteria	<table border="1" data-bbox="448 736 1485 837"> <thead> <tr> <th data-bbox="448 736 794 768">Subject passing criteria</th> <th data-bbox="794 736 1141 768">Passing threshold</th> <th data-bbox="1141 736 1485 768">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="448 768 794 799">five exercises for 10 points each</td> <td data-bbox="794 768 1141 799">40.0%</td> <td data-bbox="1141 768 1485 799">50.0%</td> </tr> <tr> <td data-bbox="448 799 794 837">exam</td> <td data-bbox="794 799 1141 837">40.0%</td> <td data-bbox="1141 799 1485 837">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	five exercises for 10 points each	40.0%	50.0%	exam	40.0%	50.0%
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Example issues/ example questions/ tasks being completed												
Work placement	Not applicable											