



Subject card

Subject name and code	Artificial intelligence in computer games, PG_00061799						
Field of study	Automation, Robotics and Control Systems						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2024/2025		
Education level	first-cycle studies	Subject group					
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	4	Language of instruction			Polish		
Semester of study	7	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Katedra Elektrotechniki i Inżynierii Wysokich Napięć -> Faculty of Electrical and Control Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Paweł Kowalski				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	10.0	0.0	0.0	20.0	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		5.0		40.0	75
Subject objectives	Exploring the application of artificial intelligence in computer games and developing an agent that plays a chosen computer game.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
Subject contents	<ul style="list-style-type: none">Markov Decision ProcessReinforcement learning						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Lecture assignment		50.0%		40.0%		
	Project		50.0%		60.0%		
Recommended reading	Basic literature		Neural Networks and Deep Learning by Michael A. Nielsen, http://neuralnetworksanddeeplearning.com/				
	Supplementary literature		Reinforcement Learning by Richard S. Sutton and Andrew G. Barto, http://incompleteideas.net/book/the-book-2nd.html				
	eResources addresses		Adresy na platformie eNauczenie:				
Example issues/ example questions/ tasks being completed	Development of a bot playing a selected computer game.						
Work placement	Not applicable						