

Subject card

Subject name and code	Internet of Things, PG_00156645						
Field of study	Information Science and Econometrics						
Date of commencement of studies	October 2024		Academic year of realisation of subject		2025/2026		
Education level	postgraduate studies		Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	part-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	academic		Assessment form				
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Dariusz Kralewski				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	9.0	0.0	0.0	9
	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	9		10.0		35.0	54
Subject objectives	- to familiarize students with the basic problems, methods, techniques and tools of the Internet of Things, - raise awareness of the progress in the use of the Internet of Things						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[liEMU2_K02] The student can communicate freely with the public on specialised topics in the field of computer science and econometrics in and outside the workplace, communicate his knowledge and share his skills through various media. Culturally participates in discussions, is not afraid to ask questions and knows how to give constructive criticism.	- Demonstrates responsibility for effective Internet of Things solutions,	[SK6] demonstration of practical skills
	[liEMU2_W03] The student has an in-depth knowledge of man as a subject who creates economic structures and institutions.	- recognizes and understands the pillars of the Internet of Things, - identifies the devices of the Internet of Things, - draws conclusions from the changes occurring under the influence of the application of the Internet of Things.	[SW5] implementation of a problem task
	[liEMU2_W07] The student has an extended and established knowledge of ethical norms applicable to business, good practices for its conduct and legal regulations for the protection of intellectual property. The student has an extended knowledge of the risks and responsibilities associated with the computerization of business processes. The student knows the principles of netiquette.	- recognizes and understands the pillars of the Internet of Things, - identifies the devices of the Internet of Things, - draws conclusions from the changes occurring under the influence of the application of the Internet of Things.	[SW5] implementation of a problem task
	[liEMU2_K01] The student understands the need for continuous completion and deepening of acquired knowledge. The student inspires and organizes others' learning processes.	- Demonstrates responsibility for effective Internet of Things solutions,	[SK6] demonstration of practical skills
	[liEMU2_U02] The student is able to proficiently acquire detailed information about economic processes and phenomena through direct observation, planned experimentation or database queries, as well as collect and process it using modern information technology tools.	- solves problems associated with the application of the Internet of Things, - anticipates risks associated with the implementation of the Internet of Things.	[SU6] demonstration of practical skills
	[liEMU2_U08] The student can analyse business needs and, as appropriate, configure and apply modern information and communication technologies in business management and business communication.	- solves problems associated with the application of the Internet of Things, - anticipates risks associated with the implementation of the Internet of Things.	[SU5] implementation of a problem task
Subject contents	• What is the Internet of Things • Pillars of the Internet of Things • Connecting elements not yet connected to the network • Transitioning to the IoT		
Prerequisites and co-requisites	Basic knowledge of computer science and computer networks		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	project	50.0%	100.0%
Recommended reading	Basic literature	• Guinard Dominique, Trifa Vlad, Internet rzeczy, Helion, 2017 • Michael Miller, Internet Rzeczy, PWN, 2017	
	Supplementary literature	• Dominique Guinard, Vlad Trifa, Internet rzeczy. Budowa sieci z wykorzystaniem technologii webowych i Raspberry Pi • Jerzy Krawiec, Internet Rzeczy (IoT). Problemy cyberbezpieczeństwa	
	eResources addresses	Adresy na platformie eNauczanie:	

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable

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