

Subject card

Subject name and code	Cloud Computing Technology, PG_00156679						
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 Polish		
Semester of study	4		ECTS credits		2.0		
Learning profile	academic		Assessment form				
Conducting unit	Katedra Informatyki Ekonomicznej -> Faculty of Management						
Name and surname of lecturer (lecturers)	Subject supervisor		mgr Piotr Porzuczek				
	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	Prepare students to design and develop distributed mobile applications for the Android platform using web services and Cloud Computing.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[liEMU2_W04] The student has an in-depth knowledge of advanced mathematical, statistical, econometric and IT methods that enable the acquisition, processing and analysis of data reflecting the functioning and growth of the national economy and its components, as well as the phenomena and processes occurring in their environment.	liE2_W04: Knows advanced mathematical methods , statistical and computer science methods used in the analysis of data on the economy and business processes .	[SW2] presentation/project/paper/report
	[liEMU2_K01] The student understands the need for continuous completion and deepening of acquired knowledge. The student inspires and organizes others' learning processes.	liE2_K01: Cooperates in a programming, design and testing team.	[SK2] presentation/project/paper/report
	[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.	liE2_U02: Knows how to use libraries and troubleshooting tools for cloud applications.	[SU2] presentation/project/paper/report
	[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.	liE2_K02: Maintains a professional relationship with customers and translates their expectations into application features.	[SK2] presentation/project/paper/report
	[liEMU2_K05] The student can think and act in an entrepreneurial manner and flexibly adapt to changing environmental conditions. Thinks creatively and can go beyond the usual patterns.	liE2_K05: Understands the need for an ethical and balanced approach to professional work.	[SK2] presentation/project/paper/report
	[liEMU2_U01] The student can comprehensibly, orally and in writing, present and justify in depth advanced economic theories and apply them to explain the functioning of the national economy and its components. Understands and can explain the content of communications from economic institutions, articles in the economic press and scientific journals.	liE2_U01: Can develop mobile applications for the Android platform using RESTful services.	[SU2] presentation/project/paper/report
	[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.	liE2_U08: Knows how to install, configure and use modern information technologies in management of enterprises .	[SU2] presentation/project/paper/report
	[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.	liE2_W07: Knows the rules for building REST web services and security considerations in developing cloud applications.	[SW5] implementation of a problem task

	<table><tr><th>Course outcome</th><th>Subject outcome</th><th>Method of verification</th></tr><tr><td>[liEMU2_W05] The student has an in-depth knowledge of socio-economic data sources, their databases and how to create them.</td><td>liE2_W05 Has a basic knowledge of socio-economic data sources, their databases and how to create them</td><td>[SW5] implementation of a problem task</td></tr></table>	Course outcome	Subject outcome	Method of verification	[liEMU2_W05] The student has an in-depth knowledge of socio-economic data sources, their databases and how to create them.	liE2_W05 Has a basic knowledge of socio-economic data sources, their databases and how to create them	[SW5] implementation of a problem task			
Course outcome	Subject outcome	Method of verification								
[liEMU2_W05] The student has an in-depth knowledge of socio-economic data sources, their databases and how to create them.	liE2_W05 Has a basic knowledge of socio-economic data sources, their databases and how to create them	[SW5] implementation of a problem task								
Subject contents	Exercises: • Cloud Computing Technologies. • Client-server architecture in mobile applications. • RESTful Services programming. • Implementation of RESTful Services in the cloud for multi-platform applications.									
Prerequisites and co-requisites	Knowledge of programming dynamic websites. Fundamentals of programming.									
Assessment methods and criteria	<table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>Evaluation of practical design (complexity and quality of implementation).</td><td>50.0%</td><td>50.0%</td></tr><tr><td>Theoretical colloquium</td><td>50.0%</td><td>50.0%</td></tr></table>	Subject passing criteria	Passing threshold	Percentage of the final grade	Evaluation of practical design (complexity and quality of implementation).	50.0%	50.0%	Theoretical colloquium	50.0%	50.0%
Subject passing criteria	Passing threshold	Percentage of the final grade								
Evaluation of practical design (complexity and quality of implementation).	50.0%	50.0%								
Theoretical colloquium	50.0%	50.0%								
Recommended reading	<table><tr><td>Basic literature</td><td> • J. Webber, S. Parastatidis, I. Robinson (2010), <i>REST in Practice</i>, O'Reilly. • Dokumentacja Android: developer.android.com/training </td></tr><tr><td>Supplementary literature</td><td> • Subbu Allamaraju (2010), <i>RESTful Web Services Cookbook</i>, O'Reilly. • Thomas Erl (2013), <i>Cloud Computing: Concepts, Technology & Architecture</i>, Prentice Hall. </td></tr><tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr></table>	Basic literature	• J. Webber, S. Parastatidis, I. Robinson (2010), <i>REST in Practice</i>, O'Reilly. • Dokumentacja Android: developer.android.com/training	Supplementary literature	• Subbu Allamaraju (2010), <i>RESTful Web Services Cookbook</i>, O'Reilly. • Thomas Erl (2013), <i>Cloud Computing: Concepts, Technology & Architecture</i>, Prentice Hall.	eResources addresses	Adresy na platformie eNauczanie:			
Basic literature	• J. Webber, S. Parastatidis, I. Robinson (2010), <i>REST in Practice</i>, O'Reilly. • Dokumentacja Android: developer.android.com/training									
Supplementary literature	• Subbu Allamaraju (2010), <i>RESTful Web Services Cookbook</i>, O'Reilly. • Thomas Erl (2013), <i>Cloud Computing: Concepts, Technology & Architecture</i>, Prentice Hall.									
eResources addresses	Adresy na platformie eNauczanie:									
Example issues/ example questions/ tasks being completed	Developing mobile applications using cloud infrastructure. Building RESTful Services for cross-platform applications. Securing cloud applications according to best practices.									
Work placement	Not applicable									

Document generated electronically. Does not require a seal or signature.