

Subject card

Subject name and code	Diploma Seminar I, PG_00136750						
Field of study	Informatics and Econometrics						
Date of commencement of studies	October 2024		Academic year of realisation of subject		2026/2027		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study Optional subject group		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		3.0		
Learning profile	academic		Assessment form		credit		
Conducting unit	Department of Business Informatics -> Faculty of Management -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Anna Lenart				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	30.0	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		10.0		35.0	75
Subject objectives	1. Preparation of a diploma thesis in accordance with ethical requirements and the rules of writing works according to the standard specified by the Dean of the Faculty. 2. Preparing to defend.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[liEL3_U02] The student is able to acquire basic information about economic processes and phenomena by direct observation, planned experiment or database queries, and collect and process it using modern information technology tools.	The student is able to acquire information about processes and collect and process it using modern IT tools.	[SU1] oral statement/conversation/discussion [SU3] text preparation/written work
	[liEL3_W04] The student has advanced knowledge of mathematical, statistical, econometric and computer methods of obtaining, processing and analysing data depicting the functioning and development of the national economy and its elements, as well as the phenomena and processes occurring in their environment.	The student has advanced knowledge of IT methods of acquiring, processing and analysis data about processes in organization and its environment.	[SW1] oral statement/conversation/discussion [SW3] text preparation/written work
	[liEL3_K05] The student is aware of the need for ethical, sustainable and socially responsible behavior in professional and social life.	The student is aware of ethical and socially responsible behavior.	[SK1] oral statement/conversation/discussion [SK3] text preparation/written work
	[liEL3_U09] The student can prepare a typical written work, oral speech and multimedia presentation on the functioning and development of the national economy and its elements, the course of simple economic phenomena and processes, obtaining data about them, collecting, processing and analyzing them. and economic processes, obtaining data about them, their collection, processing and analysis using modern mathematical, statistical, econometric and IT techniques, econometric and information technology, as well as their use in modeling, forecasting and optimization.	The student can prepare a written work and oral speech on economic and IT processes flow, acquiring the data about them, their collection, processing and analysis using modern IT tools.	[SU1] oral statement/conversation/discussion [SU3] text preparation/written work
	[liEL3_U01] The student can comprehensibly, orally and in writing, present and justify advanced economic theories and apply them to explain the functioning of the national economy and its elements. Understands and can explain the content of communications of economic institutions, articles published in the economic press and scientific journals.	The student is able to discuss, describe, justify and apply economic and IT methods in an understandable way, both orally and in writing. Understands the content of articles published in economic and IT scientific journals.	[SU1] oral statement/conversation/discussion [SU3] text preparation/written work
	[liEL3_K03] The student can work in, co-create and manage a team; adapts his/her behavior and conduct to his/her role in it; is ready to take responsibility for the team and bear the consequences; understands the necessity of regularity and consistency in action; is open to other team members and critical of himself.	The student understands the necessity of regularity and consistency in writing the diploma thesis; is critical of himself.	[SK1] oral statement/conversation/discussion [SK3] text preparation/written work

Subject contents	1. Getting to know the ethical principles of creating a diploma thesis. 2. Development of the research problem and the aim of the work. 3. Development of a work plan and structure. 4. Preparation of appropriate, up-to-date literature and materials. 5. Development of stages of research procedure and use of appropriate research methods. 6. Development of the cognitive theory part or empirical part. 7. Student's own work and successive consultation of the content of individual parts of the diploma thesis. Seminar Topics: 1. Application design and development 2. Testing 3. Information systems in production and management 4. Business Intelligence and data warehouse engineering 5. Neural networks in economics and management dr Dariusz Kralewski 1. Digitalization of the public sector 2. Smart city 3. Utilizing open data for application design 4. Web scraping 5. IT risk and security management 6. Cybersecurity dr Patrycja Krauze-Maślankowska 1. Design and development of server-side information systems 2. Design and development of client-side information systems 3. Software acceptance and adoption research 4. Information systems in the economy 5. Utilizing artificial intelligence models in applications dr Sławomir Radomski		
Prerequisites and co-requisites	Passed Proseminar subject.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	work plan and literature list	51.0%	20.0%
	written work (chapter of the diploma thesis)	51.0%	70.0%
	research problem and methods	51.0%	10.0%
Recommended reading	Basic literature	The latest specialist literature in the subject area of the prepared bachelor's thesis, verified by the person conducting the diploma seminar.	
	Supplementary literature	1. Wrycza S., Maślankowski J. (red.), Informatyka ekonomiczna. Teoria i zastosowania, PWN, Warszawa 2019. 2. Creswell J.W., Projektowanie badań naukowych: metody jakościowe, ilościowe i mieszane, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2013. 3. Czakon W., Podstawy metodologii badań w naukach o zarządzaniu, Wydawnictwo Nieoczywiste, Warszawa 2016. 4. Szreder M., Metody i techniki sondażowych badań opinii, PWE, Warszawa 2010. 5. Trocki M. (red. nauk.), Metodyki i standardy zarządzania projektami, PWE, Warszawa 2017. 6. Zenderowski R., Technika pisanie prac magisterskich i licencjackich: poradnik, CeDeWu, Warszawa 2017.	
	eResources addresses		
Example issues/ example questions/ tasks being completed	Proposed topic of bachelor's theses 1. Database, Internet and mobile applications in business (e.g. design, programming, testing, use, administration, access in the service model). 2. Computer networks in business (e.g. design, administration, security). 3. Hybridization in business. 4. Internet of Things, Industry 4.0. 5. Implementation and construction projects of IT applications according to business sector areas. 6. Security of ICT solutions. 7. Student proposals (topics resulting from professional practice, in the research stream of the Faculty and Department).		
Work placement	Not applicable		

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