

**Subject card**

<b>Subject name and code</b>	Master Seminar 2, PG_00177524						
<b>Field of study</b>	Informatics and Econometrics						
<b>Date of commencement of studies</b>	October 2026	<b>Academic year of realisation of subject</b>			2027/2028		
<b>Education level</b>	Master's studies	<b>Subject group</b>			Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study		
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>			at the university		
<b>Year of study</b>	2	<b>Language of instruction</b>			Polish		
<b>Semester of study</b>	3	<b>ECTS credits</b>			2.0		
<b>Learning profile</b>	academic	<b>Assessment form</b>			credit		
<b>Conducting unit</b>	Department of Business Informatics -> Faculty of Management -> Rector						
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>		dr hab. Jerzy Auksztol				
	<b>Teachers</b>						
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	0.0	0.0	0.0	0.0	30.0	30
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	<b>Number of study hours</b>	30		4.0		16.0	50
<b>Subject objectives</b>	<p>The aim of the master's seminar, consisting of three semester parts, is to prepare participants to: (i) plan a scientific study on the subdiscipline of business informatics, (ii) conduct it, and (iii) prepare a master's thesis on this basis, summarizing the entire process and the obtained results of the study. The additional aim is to prepare the student to effectively defend the work they have prepared in front of the examination committee.</p> <p>In the second semester, the seminar participants are to conduct the research specified in the first semester and prepare selected chapters of the diploma thesis.</p>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[liEMU2_U03] The student is able to obtain and verify data from properly selected sources and to collect, process, and visualize it using modern econometrics, informatics or statistics tools.	The student is able to design the process of collecting research data, obtaining, evaluating and analyzing them for the purposes of the conducted study.	[SU5] implementation of a problem task [SU6] demonstration of practical skills
	[liEMU2_W05] The student possesses advanced knowledge and understanding of informatics, statistics, and econometrics techniques and tools used to acquire, process, or visualise data to aid in decision-making and verify research hypotheses.	The student has knowledge of the methods and tools of business informatics, making appropriate choices in the research process in conditions of complexity of technical and social phenomena.	[SW5] implementation of a problem task
	[liEMU2_K01] The student is ready to acquire and deepen the knowledge needed to solve cognitive and practical problems, in particular in the field of econometrics, informatics or statistics, as well as to evaluate the knowledge and the received content critically and to consult experts in the event of difficulties with solving the problem on their own.	The student is able to conduct the study specified in the first semester of the seminar cycle, using the methods and research tools of business informatics.	[SK5] implementation of a problem task
	[liEMU2_U02] Students can use conventional or innovative statistics, econometrics or informatics tools to analyze economic and social phenomena.	The student is able to creatively adapt the research methods and tools of business informatics during conducting the study on complex technical and social phenomena.	[SU5] implementation of a problem task [SU6] demonstration of practical skills
	[liEMU2_U13] The student can formulate and verify hypotheses about simple research problems using advanced, structured knowledge and appropriately selected research methods in econometrics, informatics, or statistics.	The student is able to maintain the discipline of the research process in accordance with the assumed goals defined in the first semester, while at the same time being able to consciously introduce changes according to the agile project management method.	[SU5] implementation of a problem task [SU6] demonstration of practical skills
	[liEMU2_U07] Students can prepare detailed written papers, presentations, and oral speeches on econometrics, informatics, or statistics issues.	The student is able to develop selected chapters of a diploma thesis in accordance with the framework defined for scientific publications.	[SU3] text preparation/written work
Subject contents	<p>1. Content, formal and editorial requirements for master's theses.</p> <p>2. The process of collecting and documenting data for the needs of the study,</p> <p>3. Analysis of the data obtained using IT tools.</p> <p>4. Preparation of fragments of the diploma thesis documenting the study.</p> <p>Topics proposed by supervisors::</p> <p><i>dr hab. Jerzy Auksztol, prof. UG</i></p> <ol style="list-style-type: none"> <li>1. Information systems development and maintenance</li> <li>2. Legal aspects of business informatics.</li> <li>3. Software engineering.</li> <li>4. Software development project management.</li> <li>5. E-administration research.</li> <li>6. Language models in application.</li> </ol> <p><i>dr hab. Bartłomiej Gawin, prof. UG</i></p> <ol style="list-style-type: none"> <li>1. Business process management using dedicated IT tools (process design, simulation, implementation, analysis and optimization);</li> <li>2. Design and implementation of IT systems;</li> <li>3. Energy efficiency management using dedicated IT tools (building energy strategies for enterprises, telemetry and renewable energy source control systems, multi-source data analysis);</li> <li>4. IT project management;</li> <li>5. Data collection, processing, visualization and analysis.</li> </ol>		

Prerequisites and co-requisites	<ol style="list-style-type: none"> <li>1. Completed the second semester of second-cycle studies.</li> <li>2. Have knowledge of methods and ways of building IT systems and statistical methods enabling data acquisition, processing and analysis.</li> <li>3. Have knowledge of selected text composition tools, such as Microsoft Word, LibreOffice, LaTeX.</li> <li>4. Have the ability to freely formulate thoughts in a descriptive form.</li> </ol>											
Assessment methods and criteria	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Subject passing criteria</th> <th style="width: 30%;">Passing threshold</th> <th style="width: 30%;">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td>Selected chapters of the diploma thesis</td> <td>51.0%</td> <td>50.0%</td> </tr> <tr> <td>Results of the conducted research</td> <td>51.0%</td> <td>50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Selected chapters of the diploma thesis	51.0%	50.0%	Results of the conducted research	51.0%	50.0%
Subject passing criteria	Passing threshold	Percentage of the final grade										
Selected chapters of the diploma thesis	51.0%	50.0%										
Results of the conducted research	51.0%	50.0%										
Recommended reading	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Basic literature</td> <td colspan="2" data-bbox="799 479 1477 898"> <p>Dyhdalewicz, A. (2022). Ramy koncepcyjne prac magisterskich. Wybrane problemy metodyczne. Akademia Zarządzania, 6(1), 183-205.</p> <p>Pułto A. (2000). Prace magisterskie i licencjackie, Wydawnictwa Prawnicze PWN, Warszawa.</p> <p>Wrycza, S. i Maślankowski, J. (eds.) (2019). Informatyka ekonomiczna: teoria i zastosowania. Wydawnictwo Naukowe PWN. Warszawa.</p> <p>Węglińska, M. (2013). Jak pisać pracę magisterską? Poradnik dla studentów. Wydawnictwo Impuls, Kraków.</p> </td> </tr> <tr> <td>Supplementary literature</td> <td colspan="2" data-bbox="799 904 1477 976">Literature items from the area of business informatics, information technology, computer science and management corresponding to the topic of the master's thesis.</td> </tr> <tr> <td>eResources addresses</td> <td colspan="2" data-bbox="799 983 1477 1010"></td> </tr> </table>			Basic literature	<p>Dyhdalewicz, A. (2022). Ramy koncepcyjne prac magisterskich. Wybrane problemy metodyczne. Akademia Zarządzania, 6(1), 183-205.</p> <p>Pułto A. (2000). Prace magisterskie i licencjackie, Wydawnictwa Prawnicze PWN, Warszawa.</p> <p>Wrycza, S. i Maślankowski, J. (eds.) (2019). Informatyka ekonomiczna: teoria i zastosowania. Wydawnictwo Naukowe PWN. Warszawa.</p> <p>Węglińska, M. (2013). Jak pisać pracę magisterską? Poradnik dla studentów. Wydawnictwo Impuls, Kraków.</p>		Supplementary literature	Literature items from the area of business informatics, information technology, computer science and management corresponding to the topic of the master's thesis.		eResources addresses		
Basic literature	<p>Dyhdalewicz, A. (2022). Ramy koncepcyjne prac magisterskich. Wybrane problemy metodyczne. Akademia Zarządzania, 6(1), 183-205.</p> <p>Pułto A. (2000). Prace magisterskie i licencjackie, Wydawnictwa Prawnicze PWN, Warszawa.</p> <p>Wrycza, S. i Maślankowski, J. (eds.) (2019). Informatyka ekonomiczna: teoria i zastosowania. Wydawnictwo Naukowe PWN. Warszawa.</p> <p>Węglińska, M. (2013). Jak pisać pracę magisterską? Poradnik dla studentów. Wydawnictwo Impuls, Kraków.</p>											
Supplementary literature	Literature items from the area of business informatics, information technology, computer science and management corresponding to the topic of the master's thesis.											
eResources addresses												
Example issues/ example questions/ tasks being completed	<p>Conducting research in accordance with the assumptions defined in the first semester of the seminar. Discussion of the content of selected chapters describing the essence, scope and process of conducting own research.</p>											
Work placement	Not applicable											

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