



## Subject card

Subject name and code	BUSINESS INFORMATICS, PG_00058497						
Field of study	Economic Analytics						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2023/2024		
Education level	first-cycle 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	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			4.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr Grażyna Musiatowicz-Podbiał					
	Teachers	dr Grażyna Musiatowicz-Podbiał					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	0.0	0.0	45
	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	45	10.0		45.0	100	
Subject objectives	Acquisition of the ability to use information systems in organizations.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W03] identifies reliable sources of information relevant to the analyzed issues	acquires knowledge from a variety of sources, appropriately supplementing it with data and observations, in order to properly understand the issues			[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
	[K6_U07] uses information technologies to improve data analysis and decision-making processes	uses information technologies adequate to the problem to be solved, ensuring effective obtaining of the results needed to make a decision			[SU1] Assessment of task fulfilment [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools		

Subject contents	<p><b>LECTURES</b>  Information technology as a tool supporting organizations  Information theory.  Data, information, knowledge, information capital, knowledge-based economy.  Information attributes and information security.  Information system: structure, typology, development trends.  Software Development Life Cycle.  Integrated systems of the MRP / MRP (II) / ERP.  CRM systems.  Decision-support systems (incl. AI tools)  E-business environment.  Digital economy, digital business, digital transformation of organizations.  Digital channels, multi-channeling, omnichanneling.  Network and virtual organizations.  Industry 5.0 and Society 5.0.  SDLC.</p> <p><b>LABORATORIES</b>  Using Excel as an analytical tool (sorting, filtering, searching and selecting of data).  Data structures: tables, lists and databases.  The use of financial formulas (loans, investments, discount and depreciation functions).  Data format and presentation (date and time functions, non-standard data formats).  Case study assignment based on actual market data.  Final assignment.</p>											
Prerequisites and co-requisites	Foundational ability to use office applications for the analysis and presentation of data and phenomena, in particular referring to MS Excel.											
Assessment methods and criteria	<table border="1" data-bbox="448 792 1477 920"> <thead> <tr> <th data-bbox="448 792 794 831">Subject passing criteria</th> <th data-bbox="794 792 1141 831">Passing threshold</th> <th data-bbox="1141 792 1477 831">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="448 831 794 891">Knowledge tests and assignments to lectures</td> <td data-bbox="794 831 1141 891">50.0%</td> <td data-bbox="1141 831 1477 891">50.0%</td> </tr> <tr> <td data-bbox="448 891 794 920">Labs and assignments assessment</td> <td data-bbox="794 891 1141 920">50.0%</td> <td data-bbox="1141 891 1477 920">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Knowledge tests and assignments to lectures	50.0%	50.0%	Labs and assignments assessment	50.0%	50.0%
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Recommended reading	Basic literature	Ciesielska, C., Musiatowicz-Podbiał, G.(2021) Zarys problematyki zarządzania zasobami informatycznymi w przedsiębiorstwie. Gdańsk: Wydawnictwo PG. Kisielnicki, J., Sroka, H. (2005). Systemy informacyjne biznesu; Informatyka dla zarządzania. Warszawa: AW Placet. Laudon, J., Laudon, K. (2007). Management Information Systems Managing the Digital Firm. New Jersey: Prentice Hall. Olszak, C., Ziemia, E. (red.) (2019). Strategie i modele gospodarki elektronicznej. Warszawa: PWN. Wrycza, S, Maślankowski, J. (red.) (2021). Informatyka ekonomiczna; wyd II. Warszawa: PWN.										
	Supplementary literature	Afuah, A., Tucci, C. (2003). Biznes internetowy, strategie i modele; Kraków: Oficyna Ekonomiczna. Cieciura, M. (2006). Podstawy technologii informatycznych z przykładami zastosowań. Warszawa: VIZJA PRESS&IT Sp. z o.o. Grudzewski, W., Hejduk, I. (2002). Przedsiębiorstwo wirtualne. Warszawa: Difin. Januszewski, A. (2008). Funkcjonalność Informatycznych systemów zarządzania - Zintegrowane systemy transakcyjne. Warszawa: PWN. Januszewski, A.(2008). Funkcjonalność Informatycznych systemów zarządzania - Systemy Business Intelligence. Warszawa: PWN.										
	eResources addresses	Adresy na platformie eNauczenie: INFORMATYKA BIZNESOWA STAC 23/24 - Moodle ID: 35326 <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=35326">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=35326</a>										
Example issues/ example questions/ tasks being completed	What is the role of the IT system in an enterprise depending on the sector? How CRM systems support customer relationship management? Please list 5 advantages of using ERP system? Name the most important elements of Information Era. What are the biggest challenges of IT system implementation? Describe Software Development Life Cycle.											
Work placement	Not applicable											