GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	BUSINESS INFORMATICS, PG_00053180		
Field of study	Economic Analytics		
Date of commencement of studies	October 2020	Academic year of realisation of subject	2020/2021
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	e-learning
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	3.0
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: 45.0

BUSINESS INFORMATICS - STAC -2020/21 sem.letni - Moodle ID: 6120
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=6120

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	5.0	25.0	75

Subject objectives

Developing skills in the classification and use of information systems in organizations.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_K01] Understands the need for continuous learning, improving professional, personal and social competences.	Implementation of the project a final summary, the findings obtained	[SK2] Assessment of progress of work [SK5] Assessment of ability to solve problems that arise in practice
[K6_U02] Can use basic theoretical knowledge of economics and finance and obtain data to analyse processes and economic phenomena.	The student can use information tools to solve specific economic problems.	[SU1] Assessment of task fulfilment
[K6_U07] Can use quantitative methods to analyse and solve economic problems using information technologies.	The student has the knowledge necessary to analyze economic problems and apply IT solutions specific to these problems.	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment
[K6_W02] Knows how to describe economic phenomena using quantitative methods with the use of IT tools.	The student can use a spreadsheet to solve the economic problems.	[SW1] Assessment of factual knowledge

Subject contents

LECTURES:

1. Applied informatics as a tool supporting an economic object.
2. Information Theory.
3. Data, information, knowledge, information capital, knowledge-based economy.
4. Information attributes and information security breaches
5. Information system: structure, typology, development trends.
6. Information system life cycle.
7. MRP (II) / ERP integrated systems.
8. CRM systems. 9. Economic communication - e-business environment.
9. Internet, portals, search engines.
10. E-business environment, Electronic markets, Auctions
11. E-economy, E-commerce, Web 2.0
12. Omnichaneling; Search engines, Web 3.0, 4.0
13. Virtual organizations.

LABORATORIES

1. Tables And Lists Sheet (Analytical Database Service),
2. Credit and Investment Formulas,
3. Discount and amortization formulas,
4. Creating Custom Number Formats. Date and Time Functions,
5. Arrays. Counting and Adding Techniques,
6. Search Features,
7. What-if analysis. Scenario Manager. Search for Result. Solver,
8. Statistical Analysis. Analysis Toolpak,
9. Forms And Controls,
10. Analysis Hierarchical Problem (AHP) method,
11. Consolidation Of Sheets,
12. Abc / Xyz analysis. Activex formats
13. Activex controls. VBA,
14. Final project

Prerequisites and co-requisites

Basic knowledge of spreadsheet

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
The results of two final tests	60.0%	50.0%
The laboratory evaluation (Test + Project)	60.0%	50.0%

Recommended reading

Basic literature

- Arkadiusz Januszewski; Funkcjonalność Informatycznych systemów zarządzania - Zintegrowane systemy transakcyjne; PWN W-wa 2008;
- Arkadiusz Januszewski; Funkcjonalność Informatycznych systemów zarządzania - Systemy Business Intelligence ;PWN W-wa 2008;
- Stanisław Wrycza (red.); Informatyka ekonomiczna; PWE Warszawa 2010;
- Celina Olszak, Ewa Ziemba (red.); Strategie i modele gospodarki elektronicznej; PWN W-wa 2007
- Stanisław Wrycza (red.); Informatyka ekonomiczna; PWE Warszawa 2010;

Supplementary literature

- Afuah A., Tucci C., Biznes internetowy, strategie i modele; Oficyna Ekonomiczna Kraków 2003;
- Cieciura M., Podstawy technologii informatycznych z przykładami zastosowań; VIZJA PRESS&IT Sp. z o.o. Warszawa 2006;
- Grudzewski W., Hejduk I., Przedsiębiorstwo wirtualne; Difin Warszawa 2002;
- Kisielnicki J., Sroka H., Systemy informacyjne biznesu; Agencja Wydawnicza Placet Warszawa 1999;
- Scheer A., Wstęp do informatyki gospodarczej; Wydawnictwo Uniwersytetu Warszawskiego 1996

eResources addresses

Example issues/ example questions/ tasks being completed

1. What is the role of the IT system in an enterprise, depending on its industry?
2. What are the possible applications of the Business Intelligence system?
3. How do CRM systems support the decision making of production organization managers?
4. Enumerate 5 benefits of MRP II system.
5. What it is intellectual capital and how can be used in the enterprise?
6. What are the phases of IT system life cycle?

Work placement

Not applicable