



## Subject card

|   |   |   |          |                                     |  |            |     |
|---|---|---|----------|-------------------------------------|--|------------|-----|
| Subject name and code                       | BUSINESS INFORMATICS, PG_00058553   |   |          |                                     |  |            |     |
| Field of study                              | Economic Analytics  |   |          |                                     |  |            |     |
| Date of commencement of studies             | October 2024  | Academic year of realisation of subject   |          |                                     | 2024/2025  |            |     |
| Education level                             | first-cycle studies   | Subject group   |          |                                     | Obligatory subject group in the field of study<br>Subject group related to scientific research in the field of study   |            |     |
| Mode of study                               | Part-time studies (on-line)   | Mode of delivery  |          |                                     | blended-learning   |            |     |
| 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  |   |          |                                     |  |            |     |
| Lesson types and methods of instruction     | Lesson type   | Lecture   | Tutorial | Laboratory                          | Project  | Seminar    | SUM |
|   | Number of study hours   | 8.0   | 0.0      | 16.0                                | 0.0  | 0.0        | 24  |
|   | E-learning hours included: 18.0   |   |          |                                     |  |            |     |
| 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   | 24  |          | 10.0                                |  | 66.0       | 100 |
| Subject objectives                          | Identifies IT systems, defining their appropriate functioning and role in the organization  |   |          |                                     |  |            |     |
| Learning outcomes                           | Course outcome  | Subject outcome   |          |                                     | Method of verification   |            |     |
|   | [K6_W03] identifies reliable sources of information relevant to the analyzed issues   | uses information technologies adequate to the problem to be solved, ensuring effective obtaining of the results needed to make a decision |          |                                     | [SW1] Assessment of factual knowledge  |            |     |
|   | [K6_U07] uses information technologies to improve data analysis and decision-making processes   | uses information technology to solve specific economic problems, selecting appropriate data   |          |                                     | [SU4] Assessment of ability to use methods and tools<br>[SU3] Assessment of ability to use knowledge gained from the subject<br>[SU2] Assessment of ability to analyse information |            |     |
| Subject contents                            | <p>LECTURES</p> <p>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>LABORATORIES</p> <p>Using Excel as an analytical tool (sorting, filtering, searching and selecting of data).<br/>Data structures: tables, lists and databases.<br/>The use of financial formulas (loans, investments, discount and depreciation functions).<br/>Data format and presentation (date and time functions, non-standard data formats).<br/>Case study assignment based on actual market data.<br/>Final assignment.</p> |   |          |                                     |  |            |     |
| Prerequisites and co-requisites             | Foundational ability to use office applications for the analysis and presentation of data and phenomena.  |   |          |                                     |  |            |     |

| Assessment methods and criteria                                | Subject passing criteria  | Passing threshold  | Percentage of the final grade |
|--|---|--|-------------------------------|
|  | Labs and assignments assessment   | 50.0%  | 50.0%                         |
|  | Knowledge tests and assignments for lectures  | 50.0%  | 50.0%                         |
| Recommended reading  | Basic literature  | <p>Ciesielska, C., Musiatowicz-Podbiał, G. (2021) Zarys problematyki zarządzania zasobami informatycznymi w przedsiębiorstwie. Gdańsk: Wydawnictwo PG.</p> <p>Kisielnicki, J., Sroka, H. (2005). Systemy informacyjne biznesu; Informatyka dla zarządzania. Warszawa: AW Placet.</p> <p>Laudon, J., Laudon, K. (2007). Management Information Systems Managing the Digital Firm. New Jersey: Prentice Hall.</p> <p>Olszak, C., Ziemia, E. (red.) (2019). Strategie i modele gospodarki elektronicznej. Warszawa: PWN.</p> <p>Wrycza, S., Maślankowski, J. (red.) (2021). Informatyka ekonomiczna; wyd II. Warszawa: PWN.</p> |                               |
|  | Supplementary literature  | <p>Afuah, A., Tucci, C. (2003). Biznes internetowy, strategie i modele; Kraków: Oficyna Ekonomiczna.</p> <p>Cieciura, M. (2006). Podstawy technologii informatycznych z przykładami zastosowań. Warszawa: VIZJA PRESS&amp;IT Sp. z o.o.</p> <p>Grudzewski, W., Hejduk, I. (2002). Przedsiębiorstwo wirtualne. Warszawa: Difin.</p> <p>Januszewski, A. (2008). Funkcjonalność Informatycznych systemów zarządzania - Zintegrowane systemy transakcyjne. Warszawa: PWN.</p> <p>Januszewski, A. (2008). Funkcjonalność Informatycznych systemów zarządzania - Systemy Business Intelligence. Warszawa: PWN.</p>                 |                               |
|  | eResources addresses  | Adresy na platformie eNauczanie:   |                               |
| Example issues/<br>example questions/<br>tasks being completed | <p>What does intellectual capital represent?</p> <p>What is the role of the IT system in an enterprise depending on the sector?</p> <p>What are the possible applications of the Business Intelligence system?</p> <p>How CRM systems support customer relationship management?</p> <p>Please list 5 advantages of using MRP II system?</p> <p>What are biggest challenges of IT system implementation?</p> |  |                               |
| Work placement   | Not applicable  |  |                               |