

## COURSE DESCRIPTION CARD

NOTE: If the course includes lectures and classes, the Course Description Card applies to both types of instruction.

**1. Course title:**  
Systemy Wspomagające Zarządzanie  
Przedsiębiorstwem

Corporate Management  
With Information System

**2. Course code:**  
Number of ECTS credits: 4  
Course completion mode: E  
Course commenced / Year 2022/23

**3. Major:** Finance and Accounting for Business

**4. Department of major coordinator:** Department of Banking and Financial Markets

**5. Name of course instructor:**  
Lecture dr inż. Anna Karmańska  
Classes mgr Maciej Tuskiewicz  
Lab classes -  
**Examiner** dr inż. Anna Karmańska

**6. Department of course instructor:** Department of Business Informatics and International Accounting

**7. Number of contact hours with students:**

Type of instruction	Full-time study	Part-time study
lectures	15	12
classes	30	21
foreign language classes		
lab classes		
seminars		
e-learning		
other		
<b>Total hours</b>	45	33
examination (hours)	3	3

**8. Course timeframe - no. of semesters:** 1

Course commencement / Year 2

Course commencement / Semester 3

**9. Level of tertiary education:** Master

**10. Course status**  
 Compulsory for the major

**11. Course prerequisites**  
Compulsory:-  
Recommended:-

**12. Course objectives:**

1. Presentation of specialist knowledge in the field of implementation and use of IT tools, especially integrated IT systems in an enterprise, with particular emphasis on their functionality in relation to various types of business processes.
2. Developing skills related to supporting business processes and decisions using IT systems, according to the changing needs of the enterprise.
3. Education of social competences related to the use and development of information systems in the enterprise.

**13. Teaching and learning methods:****A. Direct student-instructor contact:**

No.	Teaching methods	Description	Number of hours	
			Full-time study	Part-time study
1.	Active lecture	Multimedia presentation of theoretical issues and practical examples	15	12
2.	Active teaching using multimedia techniques	Discussion and case studies on the use of information systems in business	15	9
3.	Active teaching using multimedia techniques	work with IT systems	12	9
4.	Active teaching using multimedia techniques	Presentation of the final project - case study on the use of information systems in business	3	3
Total			AS:45	AN:33

**B. Self-study:**

No.	Learning methods	Description	Number of hours	
			Full-time study	Part-time study
1.	Solving case studies	Preparation of the final project - case study on the use of information systems in business	15	15
2.	Work using a computer	Solving practical tasks regarding the use of information systems in business	20	20
3.	Analysis of lecture and class notes	Preparation for problem discussions during the lecture and for the final project	10	16
4.	Cause-effect study using literature	Preparation for problem discussions during the lecture and for the final project	10	16
Total			BS: 55	BN:67

Total AS+BS = 100  
 Examination (E) = 3  
 Total AS+BS+E = 103

Total AN+BN = 100  
 Examination (E) = 3  
 Total AN+BN+E = 103

**14. Key words:** Information, IT management systems, business processes, ERP and MRP systems, knowledge, integrated IT systems

**15. Course content:**

**Lecture:**

1. Introduction - definition, features of the information system
2. Organization and business processes
3. IT infrastructure
4. Telecommunications and computer networks
5. Internet and Web 2.0
6. E-business, e-commerce, E-government, e-learning, social media, markets and digital products, virtualization
7. Managing Knowledge- expert systems, groupware, Warehouse Management Systems , Customer Management Systems (CMR), Decision Support Systems (DSS), Document Management Systems (DMS), Database Management Systems (DBMS), simulating systems
8. Office Automation (word processors, spreadsheets, Microsoft office, Google)
9. Genesis and functionality of IT systems supporting particular types of business processes and individual stages of process management - MRP I, MRP II, ERP.
10. Analysis of the functionality of ERP systems available on the market.
11. Enterprise management using ERP systems (case studies) - process and warehouse document management, process and sales document management, process and purchase document management, inventory, purchase and sales analysis.
12. Architecture, functionality and information flow in the ERP system on the example of selected ERP systems. Entering data and using the ERP system to manage selected business processes of the company - practical work with ERP systems.
13. Implementation and development of the ERP system according to the changing needs of the enterprise and the benefits of its use.
14. Electronic business systems - e-commerce, social media, digital markets and products, virtualization.
15. Implementation of IT systems in the enterprise - cost and benefit assessment. Protection of privacy and data security in information systems

**Classes:**

Management support tools in the organization. TRELLO tool (organization of work, tasks, projects)

- i. Introduction to TRELLO.com
- ii. process management at TRELLO.com
- iii. presentation of the most important options / functions in TRELLO
- iv. project management at TRELLO.com
- v. presenting an example project at TRELLO.com
- vi. implementation of exercises - creating a process, task list, project in TRELLO

ASANA tool (project management)

- i. project management in ASANA
- ii. presenting a sample project in ASANA
- iii. implementation of the project as described in the exercise in ASANA

ERP class system, e.g. ERPNEXT

- i. Tool presentation
- ii. providing an example of the scope of data entry
- iii. Exercises - customer input process, invoice issuing
- iv. Exercises - the process of entering data and generating summary reports

CRM class system, e.g. BITRIX24

- i. Presentation of the tool
- ii. providing an example of the scope of data entry
- iii. exercises - entering customer data iv. exercises - modifying customer data v. exercises - entering invoice data

Requirements management system

- i. presentation - how to define requirements for an erp system
- ii. exemplary requirements for the erp system
- iii. presentation of a tool for defining requirements
- iv. Exercises - defining the scope of requirements for the erp system

**16. Course learning outcomes as related to the learning outcomes of the major and methods for assessing student attainment**

Intended learning outcomes of the major / Symbols	Intended learning outcomes of the course	Methods for assessing student learning outcomes	Documentation
<u>Knowledge</u>			
FAB2_W01#	Student knows and understands in greater depth the methods used in finance and accounting, in particular mathematical and statistical methods, methods of analysis and effective processing of financial data, using modern IT tools for company management.	1. Final project 2.Examination	set of final projects, exam report
FAB2_W05#	Student knows and understands in depth economic, financial, legal, ethical conditions of IT systems for enterprise management.	1. Final project 2.Examination	set of final projects, exam report
<u>Skills</u>			
FAB2_U01#	Student is able to use in-depth knowledge acquired to critically evaluate enterprise management systems. Student is able to solve and analyze unusual problems through the selection of appropriate, modern IT and communication tools.	1. Final project 2.Examination	set of final projects, exam report
FAB2_U04#	Student is able to use English at B2 + level and specialist terminology in the field of the corporate management systems	1. Final project 2.Examination	set of final projects, exam report
<u>Social competences</u>			
FAB2_K02#	The student is ready to accept the importance of knowledge, especially in finance and accounting, solving cognitive and practical problems, and using experts'opinions in the case of difficulties in settlingthem on his own in the field of service and practical use of IT tools in business management.	1. Final project 2.Examination	set of final projects, exam report

**17. Method for determining the final course grade:**

No.	Methods for awarding credits and course completion requirements	Description	Percentage of the final course grade*
1.	Lecture: written exam without the possibility of using textbooks	exam in the form of a test	50%
2.	Classes: group work on case study	Project assessment on the practical use of IT tools, especially ERP systems, in business	40%
3.	Classes: activity during classes	activity evaluation	10%

\* If students are required to obtain both a class grade and an exam grade, the class grade constitutes at least 30% of the final course grade.

## 18. Reading list

### Mandatory readings:

1. Kenneth C. Laudon, Jane P. Laudon: Management Information Systems Managing the digital firm. Wyd. Pearson Prentice Hall, 2012.
2. James A. Hall: Accounting Information System. Wyd. South-Western Cengage Learning, Stany Zjednoczone, 2011.
3. Anna Karmańska Business Intelligence in consolidation of financial statements *Informatyka Ekonomiczna* 2019(4 (54)):19-28 DOI: **10.15611/ie.2019.4.02**
4. Anna Karmańska The benefits of HR analytics *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu* 64(8):30-39 DOI: **10.15611/pn.2020.8.03**
5. Anna Karmańska (2021). Critical success factors for FinTech. W: A. Marszk, E. Lechman (red.) *The Digitalization of Financial Markets. The Socioeconomic Impact of Financial Technologies* (s. ), Abingdon; New York : Routledge 2021 (e-ISBN 978-0-367-55834-5)
6. Anna Karmańska. Internet of Things in the accounting field - benefits and challenges, *Operations Research and Decisions*, 2021, vol. 31, no. 3, s. 23-39, <https://doi.org/10.37190/ord210302> Anna Karmańska, Maciej Tuskiewicz. Perspectives on the importance and usage of new technologies in accounting, *Innovation Management and information Technology impact on Global Economy in the Era of Pandemic. Proceedings of the 37th International Business Information Management Association Conference (IBIMA), 30-31 May 2021, Cordoba, Spain / ed. Khalid S. Soliman, International Business Information Management Association (IBIMA), 2021, s. 4215-4223*
7. Anna Karmańska The benefits of connected vehicles within organizations, *International Conference on Knowledge-Based and Intelligent Information and Engineering Systems [KES]*, *Procedia Computer Science*, 2021, 192, s. 4721-4731 (<https://doi.org/10.1016/j.procs.2021.09.250>)

### Suggested readings:

1. Hirschheim R., Heinzl A., Dibbern J (2006) *Information Systems Outsourcing, Enduring Themes, New Perspectives and Global Challenges*, Springer, Berlin.
2. Pańkowska M., Sroka H: *Management and Marketing Information Systems*. Wyd. AE, Katowice, 2005.

## 19. Language of instruction: English

## 20. Course instructors' recommendations: