

COURSE GUIDE

<u>Subject name</u>	ERP Management support systems
<u>Course of study</u>	Quality and Production Management
<u>The form of study</u>	Full-time
<u>Level of qualification</u>	First
<u>Year</u>	III
<u>Semester</u>	V
<u>The implementing entity</u>	Business Informatics Department
<u>The person responsible for preparing</u>	dr inż. Leszek Ziora dr inż. Tomasz Turek
<u>Profile</u>	General academic
<u>ECTS points</u>	4

TYPE OF TEACHING – NUMBER OF HOURS PER SEMESTER

LECTURE	CLASS	LABORATORY	PROJECT	SEMINAR
30E		30	-	-

COURSE AIMS

- C1. Getting to know students with the notion of ERP management support systems.
- C2. Getting to know students with the methodology of business process management using ICT solutions.
- C3. Acquiring theoretical and practical knowledge in the field of integrated management information systems.

ENTRY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Basic knowledge about organization and management in the enterprise.
2. Basic knowledge concerning the process approach in organization management.
3. Basic knowledge concerning the application of information technologies in the management of business organizations.
4. Basic knowledge of computer skills and internet services, MS Office package, etc.

LEARNING OUTCOMES

- EU1. The student is able to identify the basic types of information systems supporting enterprise management and to indicate the main business processes in the enterprise.
- EU2. The student is able to perform basic operations in the ERP information system: (entering data, editing, deleting, sorting, filtering).
- EU3. The student is able to map basic business processes in the ERP IT system.
- EU4. The student is able to work with ERP systems available in the computational cloud.

COURSE CONTENT

Type of teaching – LECTURE	Number of hours
W1. Characteristics of basic definitions: data, information, information and IT systems, technical and technological infrastructure of IT management systems, process approach in management, IT support of processes in management, tools for business process modeling.	2
W2. Information and IT systems in the enterprise.	2
W3. Development of integrated management information systems.	2
W4. The notion of ERP systems.	3
W5. ERP systems in the context of business processes in the enterprise (system modules: HR, payroll, trade, procurement, logistics, production, finance and accounting).	3
W6. Examples of ERP systems implementations (commercial, service and production	3

enterprises).	
W7. ERP systems in distributed organizations (diffusion of business processes, the need to integrate systems, etc.).	3
W8. Models of ERP information systems distribution (Cloud Computing, SaaS, ASP, etc.).	3
W9. Problems of implementing ERP systems (planning, analysis, programming, implementation, testing, usage, modernization).	3
W10. The importance of business analytics and data mining solutions in business management (Business Intelligence systems, solutions for collecting, processing and analyzing big data).	3
W11. Data security in ERP systems.	3
Type of teaching - LABORATORY	Number of hours
C1. Review of management supporting IT systems. Importance of ERP systems in enterprise management on the example of selected business entities.	2
C2. Fundamentals of designing system infrastructure and management processes. The use of graphic tools in the presentation of management processes and infrastructure (Visio).	2
C3. Introduction to the Macrologic Merit information system.	1
C4. Basic parameterization of the ERP system - Macrologic Merit.	1
C5. Process approach to the organization and its mapping in the ERP system modules.	2
C6. Supporting management in the area of Human Resources and Payroll.	4
C7. Supporting management in the area of Trade and Supply.	4
C8. Supporting management in the area of Logistics.	4
C9. Supporting management in the area of Finance and Accounting.	4
C10. Supporting management in the area of Production (creation of production technology of products, supporting production logistics).	4
C11. Supporting management in the area of Group Work.	2

TEACHING TOOLS

1. Books, monographs and instructions.
2. Audiovisual presentation.
3. Computers in a computer lab connected to the Internet.
4. Macrologic Merit IT system.

WAYS OF ASSESSMENT (F – FORMATIVE, P – SUMMATIVE)

- F1. Evaluation of tasks in the classroom.
F2. Assessment of tasks prepared in Macrologic Merit system.
P1. Final test.
P2. Written exam.

STUDENT WORKLOAD

Form of activity		Average number of hours for realization of the activity		
		[h]	ECTS	ECTS
Contact hours with the teacher	Lecture	30	1.2	1.92
Preparation for exam		15	0.6	
Exam		3	0.12	
Contact hours with the teacher	Laboratory	30	1.2	1.68
Tasks to complete at home		12	0.48	
Getting acquainted with the indicated literature		5	0.2	0.2
Consultation		5	0.2	0.2
TOTAL NUMBER OF HOURS / ECTS POINTS FOR THE COURSE		100	4	

BASIC AND SUPPLEMENTARY RESOURCE MATERIALS

Basic resources

1. Beynon-Davies P. Business Information Systems. Palgrave, New York 2009.
2. Nowicki A., Turek T. Technologie informacyjne dla ekonomistów. Narzędzia. Zastosowania. UE Wrocław, Wrocław 2010.
3. Nowicki A., Sitarzka M. Procesy informacyjne w zarządzaniu. UE Wrocław, Wrocław 2010.
4. Peppard J., Ward J. The Strategic Management of Information Systems: Building a Digital Strategy. Hohn Wiley and Sons, 2016.
5. Power D.J. Data-Based Decision Making and Digital Transformation. New York: Business Expert Press, 2018.

Supplementary resources

6. Kisielnicki J., Pańkowska M., Sroka H. Zintegrowane systemy informatyczne: dobre praktyki wdrożeń systemów klasy ERP. PWN, Warszawa 2012.
7. Nowicki A. (eds.) Komputerowe wspomaganie biznesu. Wydawnictwo Placet. Warszawa 2006.

TEACHERS (NAME, SURNAME, E-MAIL ADDRESS)

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MATRIX OF LEARNING OUTCOMES REALISATION

Learning outcome	Reference of given outcome to outcomes defined for whole program (PRK)	Course aims	Course content	Teaching tools	Ways of assessment
EU1	K_W02, K_W05, K_W07, K_W08, K_W09, K_U01, K_U02, K_U03, K_U06, K_U07, K_U08, K_U09, K_U10	C1-C3	W1-W4	1, 2, 3	F1, P1
EU2	W02, K_W05, K_W07, K_W08, K_W09, K_U01, K_U02, K_U03, K_U06, K_U07, K_U08, K_U09, K_U10	C1-C3	W1-W11, C3-C11	1, 2, 3, 4	F1, F2, P1, P2
EU3	K_W02, K_W05, K_W07, K_W08, K_W09, K_U01, K_U02, K_U03, K_U06, K_U07, K_U08, K_U09, K_U10	C1-C3	W1-W11, C3-C11	1, 2, 3, 4	F1, F2, P1, P2
EU4	W02, K_W05, K_W07, K_W08, K_W09, K_U01, K_U02, K_U03, K_U06, K_U07, K_U08, K_U09, K_U10	C1-C3	W1-W11, C3-C11	1, 2, 3, 4	F1, F2, P1, P2

FORM OF ASSESSMENT - DETAILS

	grade 2	grade 3	grade 4	grade 5
EU1	The student is not able to identify the basic types of information systems supporting business management and to indicate the main business processes in the enterprise.	The student is able to identify only a few basic types of information systems supporting enterprise management and to indicate several business processes in the enterprise.	The student is able to identify the majority of basic types of information systems supporting business management and to indicate the majority of business processes in the enterprise.	Student fluently lists and characterizes all types of IT systems supporting business management and can point and describe any business process taking place in the company. It gives practical examples with

				ease.
EU2	Student is not able to perform basic operations in the ERP information system: (data entry, editing, deleting, sorting, filtering).	The student is able to perform several basic operations in the ERP information system: (data entry, editing, deleting, sorting, filtering).	The student can do most of the basic operations in the ERP information system: (data entry, editing, deleting, sorting, filtering).	The student is able to perform all basic operations in the ERP information system: (entering data, editing, deleting, sorting, filtering).
EU3	The student cannot reproduce basic business processes in the ERP IT system.	The student can map one basic business process in the ERP IT system.	The student can map several basic business processes in the ERP IT system.	The student can map most of the basic and auxiliary business processes in the ERP information system.
EU4	The student cannot work with ERP systems available in the cloud.	The student can perform a few basic operations and knows a few functions of ERP systems available in the cloud.	The student can do most of basic operations and knows many functions of ERP systems available in the cloud.	The student can perform all operations and knows all the functions of ERP systems available in the cloud.

ADDITIONAL USEFUL INFORMATION ABOUT THE COURSE

1. Information where presentation of classes, instruction, subjects of seminars can be found, etc. - presented to students during first classes, if required by the formula classes are sent electronically to the e-mail addresses of individual dean groups.
2. Information about the place of classes - Information can be found on the website of the Faculty of Management.
3. Information about the timing of classes (day of the week / time) - Information can be found on the website of the Faculty of Management.
4. Information about the consultation (time + place) - Information can be found on the website of the Faculty of Management.