



COURSE SPECIFICATION

Course code	full-time studies	Z-ZB-E-507b
	part-time studies	-
Course title in English	ERP and CRM Systems in Business Management	
Course title in Polish	Systemy ERP i CRM w zarządzaniu biznesowym	
Valid from academic year	2025/2026	

PLACEMENT IN THE TEACHING PROGRAM

Programme of study	BUSINESS MANAGMENT
Level of education	1st degree
Studies profile	academic
Form and mode of study	full-time programme
Scope	e-commerce
Academic unit responsible for the course	Department of Production Engineering
Course coordinator	dr inż. Sławomir Luściński
Approved by	dr hab. inż. Dariusz Bojczuk, prof. uczelni

GENERAL CHARACTERISTIC OF THE COURSE

Teaching block		Specialist subject
Course status		Obligatory
Language of instruction		English
Semester of delivery	full-time studies	Semester V
	part-time-studies	-
Prerequisites		
Exam (YES/NO)		YES
ECTS		3

Method of conducting classes		lecture	classes	laboratory	project	other
Number of hours per semester	full-time	15		15		
	part-time					



LEARNING OUTCOMES

Category	Outcome code	Course learning outcomes	Reference to the directional learning effect
Knowledge	W01	The student has knowledge of the information and decision-making approach to organisational management. He/she knows and understands the essence and structure of an information system, a management information system (MIS). The student also has knowledge of information systems and business applications in organisational management.	ZB1_W07 ZB1_W09
	W02	The student knows and understands the ontological, semantic, and functional models of ERP systems and has knowledge of how the ERP system implementation process is organised in the pre-enterprise.	ZB1_W07
	W03	The student knows and understands CRM systems' architecture and application areas, identifies CRM as a management strategy, and knows business analytics's basic properties and applications in customer knowledge management. Has knowledge about the organisation of the process of CRM system implementation in a company.	ZB1_W07
Skills	U01	The student can use an IT system to perform business management tasks e.g. production management.	ZB1_U01
	U02	The student can operate a complex management information system.	ZB1_U01
	U03	The student can use advanced data analysis methods, verify the results obtained, and critically evaluate them.	ZB1_U02 ZB1_U05
Social competences	K01	The student understands the need for lifelong learning to improve his professional skills in developing IT applications in management.	ZB1_K02
	K02	The student can supplement and improve his ERP and CRM management information systems knowledge.	ZB1_K02

COURSE CONTENT

Method of conducting classes	Course content
lecture	Information systems and business applications in organisational management. ERP systems: origins and evolution. ERP ontological model. The semantic model of ERP. ERP system implementation. ERP functional model. ERP system as an integrated information system. CRM as a management strategy. Architecture and application areas of CRM systems. Business analytics in customer knowledge management. Implementation of CRM systems.
laboratory	Familiarise with the architecture and application of ERP and CRM information systems using a selected complex integrated management system. Operation of selected functional modules.



METHODS FOR VERIFYING LEARNING OUTCOMES

Outcome code	Learning outcomes verification methods					
	Oral examination	Written examination	Test	Project	Report	Other
W01		X				
W02		X				
W03		X				
U01		X			X	X
U02					X	X
U03					X	X
K01					X	X
K02					X	X

FORM AND CONDITIONS OF ASSESSMENT

Form of classes	Assessment type	Assessment Criteria
lecture	Examination	Achieving 50% of the pass mark in the credit test.
laboratory	Credit with grade	Observation of the student's attitude during laboratory activities and discussions during class. Achieving 50% of the total points from evaluating the realised laboratory exercise scenarios report.

STUDENT WORKLOAD

ECTS Balance							
No.	Activity type	Student workload					Unit
		full-time					
1.	Scheduled contact hours	W	C	L	P	S	h
		15		15			
2.	Other (consultations, exams)	4		2			h
3.	Total number of contact hours	36					h
4.	Number of ECTS credits for contact hours	1,4					ECTS
5.	Number of hours of independent student work	39					h
6.	Number of ECTS points that a student obtains through independent work	1,6					ECTS
7.	Workload related to practical classes	38					h
8.	Number of ECTS credit points which a student receives for practical classes	1,5					ECTS
9.	Total number of hours of a student's work	75					
10.	ECTS credits for the course <i>1 1 ECTS credit =25 student learning hours</i>	3					ECTS

W - LECTURE C - CLASSES L - LABORATORY P- PROJECT S - SEMINAR



READING LIST

1. Barfdord, M. (2020) Modern ERP: Select, Implement, and Use Today's Advanced Business Systems, Fourth Edition, ISBN 978-0578697987
2. Buttle,F., Maklan,S. (2019), Customer Relationship Management: Concepts and Technologies , 4ed, Routledge, ISBN: 978-1138498266
3. Issa, T., Nau,S.Z.(2024). Management Information Systems: Harnessing Technologies for Business & Society, SAGE PUB, ISBN: 1529781183.
4. Lafond,S. (2024),Successfully Implementing ERP, Leaders Press, ISBN: 163735231X
5. Pardy, W.,Andrews, T. (2019), Integrated Management Systems, Rowman & Littlefield, ISBN: 164143371X