

SYLLABUS

Course description

Course code		Course	Systemy ERP		
ME/O/I/ST/C2a			ERP systems		
Language of instruction		English			
Academic year		2025/2026			
field of study:		Mechanical Engineering			
field of specialisation:		All			
Educational level		first-cycle studies			
Education profile		General academic			
Mode of study		Full-time studies			
Semester(s)		5			
Affiliation with a group of classes		C. Group of courses to choose from			
Course status		Electable			
Types of classes, instruction hours, ECTS credits		Types of classes	Number of instruction hours	Number of ECTS credits	
		Lecture	15 [h]	4 ECTS	
		Classes	-- [h]		
		Lab	30 [h]		
Linkage of the course	with the education profile	Related to the conducted scientific activity in the discipline to which the field of study is assigned		1 ECTS	
	with qualifications	It is used to acquire engineering competences by the student		4 ECTS	
	with science discipline	Mechanical engineering		2 ECTS	
Form of teaching		Traditional – classes organized at the University /classes conducted using distance learning methods and techniques			
Prerequisites		knowledge of mathematics, mechatronics, economy			
Department		Faculty of Mechanical Engineering			
Coordinator		dr inż. Marcin Wikło, prof. URad			
The website of the basic organizational unit		http://wm.uniwersytetradom.pl			
E-mail address, phone number of the coordinator		m.wiklo@urad.edu.pl			

LEARNING OUTCOMES, CURRICULUM CONTENT, TEACHING CLASSES, VERIFICATION OF LEARNING OUTCOMES

Learning Objective:	The aim of the education is to present the role of ERP systems in modern manufacturing enterprises.
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Curriculum Content:	In the scope of ERP systems, the basic functionalities of ERP systems will be discussed, such as: sales, purchases/orders, production, storage, human resources, document flow, analytics and reporting. Modularity will also be discussed, which allows for the extension of functionality supporting the management of key business areas of manufacturing companies. The last element in the scope of ERP systems will be the topic of databases, their analysis and the need for continuous expansion of the system along with the changing business environment.
Didactic (educational) methods:	Informative lecture and calculation exercises
Course assessment type, the criteria for assessing the achieved learning outcomes, and the method of calculating the final grade:	The condition for passing the course is to achieve all the required learning out comes specified for the course....

Learning outcomes for the course in relation to the field of study learning outcomes and the type of classes				Methods of verifying learning outcomes	
Learning outcome number	Description of the learning outcomes for the course (PEU) A student who has passed the course (W) knows and understands / (U) can / (K) is ready to:	Field of study learning outcome (KEU)	Types of classes	Form of verification (credits)	Methods of testing and assessment
W1	Has knowledge of the use of ERP information systems in managing the production of machine parts.	K_WG15	Lectures	in class tests	Tests grades
U1	Is able to manage documentation in the process of manufacturing machine parts in a manufacturing enterprise.	K_UW04 K_UK17	Project	Projects	Project grades
K1	Is able to cooperate and work in a group and understands the non-technical aspects of the engineer-mechanic activity, including the impact on the environment	K_KK01, K_KO02, K_KO04	Lectures / Project	Verbal evaluation	Verbal evaluation

Literature and teaching aids
<p>Primary literature:</p> <p>[1] K. Ganesh, Sanjay Mohapatra, S. P. Anbuudayasankar, P. Sivakumar, Enterprise Resource Planning: Fundamentals of Design and Implementation, Springer, 2014</p> <p>[2] Daniel Edmund O'Leary, Enterprise Resource Planning Systems: Systems, Life Cycle, Electronic Commerce, and Risk</p> <p>[3] Jerzy Auksztol, Piotr Balwierz, Magdalena Chomuszko, SAP Zrozumieć system ERP, Wydawnictwo Naukowe PWN, Warszawa, 1, 2020</p> <p>[4] Ireneusz Rutkowski, Rozwój nowego produktu. Metody i uwarunkowania, Wydawnictwo PWE, 2015</p> <p>Additional literature:</p> <p>Study aids:</p>

Student workload required to achieve the assumed learning outcomes – the balance of ECTS credits		
Attendance, participation	Student workload [h].	
	Student's self-study hours Classes without a teacher (ZBN)	Classes
Participation in lectures/classes/lab	X	45[h]
Preparation for lectures/classes/lab , Preparation for ... credit / exam	55 [h]	X

Total student workload Preparation for ... credit / exam	55 [h]/ 2.2 ECTS	45 [h]/ 1.8 ECTS
ECTS points per subject	4 ECTS	

Additional information, comments
<p>In the case of students with special needs, including disabilities, and chronic illnesses, the methods and forms of verification of learning outcomes specified above (in the syllabus) are adapted to the individual needs of these students, as appropriate.</p> <p>Detailed rules and forms of support for students with special needs, including those with disabilities and chronically ill, during classes, credits, and exams are specified in: University Regulations (Regulamin Studiów Uniwersytetu Technologiczno-Humanistycznego w Radomiu), Study Regulations (Zasady Studiowania), and Procedure for Ensuring Accessibility of the Educational Process to Students with Special Needs, Including Those with Disabilities and Chronically ill (Procedura dotycząca zapewnienia dostępności procesu kształcenia studentom ze szczególnymi potrzebami, w tym: z niepełnosprawnością, przewlekle chorych).</p>