COURSE DESCRIPTION

Course code	full-time studies	
	part-time-studies	
Course name	**Informatyczne systemy zarządzania**	
Course name in English	**Management information systems**	
Valid from academic year	**2022/23**	

PLACEMENT IN THE TEACHING PROGRAM

Field of study	**Computer Science**
Level of education	**1st degree**
Studies profile	**General**
Form and method of teaching classes	**Full-time and part-time studies**
Specialization	**Information systems**
Organizational unit responsible for the course	**Katedra Informatyki Stosowanej**
Course coordinator	**Dr hab inż. Paweł Sitek prof. PŚK**
Approved by	**Dean of the Faculty of Electrical Engineering, Automatic Control and Computer Science Roman Deniziak, KUT prof., DSc, PhD**

GENERAL CHARACTERISTIC OF THE COURSE

Course affiliation		**Specialty education subject**
Course status		**Obligatory**
Language		**English**
Semester	full-time studies	**Semester V**
	part-time-studies	**Semester VI**
Requirements		
Exam (YES/NO)		**NO**
ECTS		**4**

Course form		lecture	classes	laboratory	project	other
Hours per semester	full-time studies	**30**		**30**		
	part-time-studies	**18**		**18**		

LEARNING RESULTS

Category	Result symbol	Learning results	References to the field of study results
Knowledge	W01	Knows and understands the principles of: construction, functioning and classification of IT management systems.	INF_W26
	W02	Knows and understands the various types of production and logistics processes.	INF_W26
	W03	Knows and understands the basic methods of designing and advanced planning and scheduling of production, logistics and auxiliary processes.	INF_W26
Skills	U01	Student can implement the designed structures in the IT management system.	INF_U26
	U02	Student is able to use methods of advanced planning and scheduling of production and logistics processes and to verify and analyze the results obtained.	INF_U26
Social competence	K01	Student is ready to prioritize actions.	INF_K1
	K02	Student is ready to work in a team, solve tasks together.	INF_K2

TREŚCI PROGRAMOWE

Course form	Content
lecture	1. Basic concepts concerning: classification, structure of IT management systems, production and logistics processes, types of production, etc. 2. An exemplary production company. Project: production structure, logistic structure, product structure as well as fixed and variable data. 3. Implementation of structures and data in an example ERP class system. Material Requirements Planning Method - MRP (assumptions, algorithm, numerical examples). MRP method in an example ERP system. 4. Advanced methods of planning and scheduling orders and operations - APS systems.
laboratory	1. Data design for an example discrete manufacturing company. 2. Input of constant data to the selected production control system. 3. Using the selected ERP class production management system, simulate the company's production processes.

LEARNING RESULTS VERIFICATION METHODS

Result symbol	Learning results verification methods					
	Oral exam	Written exam	Midterm	Project	Report	Others
W01			X		X	
W04			X		X	
W03			X		X	
W04			X		X	
U01					X	
U02					X	
U03					X	
K01					X	
K02					X	

ASSESSMENT FORMS AND CRITERIA

Course Form	Assessment Form	Assessment Criteria
lecture	pass with a grade	Obtaining at least 50% of the points in the written test
laboratory	pass with a grade	Average grade for completing tasks in class and reports.

STUDENT'S VOLUME OF WORK

No.	Activity Type	Student Involvement										Unit
		full-time studies					part-time-studies					
1.	Participation in classes according to the schedule	Lec	C	Lab	P	S	Lec	C	Lab	P	S	h
		30		30			18		18			
2.	Other (consultations, exams)	2		2			1		1			h
3.	**Total with the direct assist of an academic teacher**	**64**					**38**					h
4.	**Number of ECTS, that students obtains with the direct assist of an academic teacher**	**2,56**					**1,52**					ECTS
5.	**Hours of unassisted student work**	**36**					**62**					h
6.	**Number of ECTS that student obtains working unassisted**	**1,44**					**2,48**					ECTS
7.	**Practical classes volume of work**	**30**					**18**					h
8.	**Number of ECTS obtained by student at practical classes**	**1,20**					**0,72**					ECTS
9.	**Total student's volume of work expressed in hours**	**100**					**100**					h
10.	**ECTS**	**4**										ECTS

REFERENCES

1. Gospodarek T.: Systemy ERP. Modelowanie, projektowanie, wdrażanie, Helion 2015.
2. Landvater D.V., Gray C.D.: MRP II Standard System, Oliver Wight Publications, 1989.
3. Banaszak Z., Kłos S., Mleczko J. :ZINTEGROWANE SYSTEMY ZARZĄDZANIA, PWE ,2016
4. Skrzypek J., Kukuła K., Jędrzejczyk Z.: Badania operacyjne w przykładach i zadaniach, PWN, 2019.