



## Subject card

Subject name and code	Enterprise Information Systems, PG_00053097						
Field of study	Data Engineering						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2022/2023		
Education level	first-cycle studies	Subject group			Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	3	Language of instruction			English		
Semester of study	5	ECTS credits			5.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Radosław Drozd					
	Teachers	dr inż. Radosław Drozd					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	0.0	0.0	45
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours		Self-study		SUM
	Number of study hours	45	4.0		76.0		125
Subject objectives	The aim of the course is to make students aware about the principles and practice of enterprise information systems.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W09] has basic knowledge of the nature of economic sciences and ways of its description with IT tools	A student is able to describe and classify information technologies and environments applied to build information systems  A student is able to describe and classify concepts related to the management of the information technology projects			[SW1] Assessment of factual knowledge		
	[K6_U08] can acquire and apply basic theoretical knowledge of economic sciences to analyse economic processes	A student is able to determine the effectiveness of information technology projects			[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment		

Subject contents	<p>LECTURES</p> <ul style="list-style-type: none"> <li>• Introduction to information systems and digitization strategies</li> <li>• Modelling business processes including methods and tools</li> <li>• Enterprise information systems Enterprise Resource Planning (ERP), Material Resource Planning (MRP), Product Lifecycle Management (PLM), Supply Chain Management (SCM), etc. including system characterization and application examples</li> <li>• Information systems supporting Customer Relationships Management (CRM) including system characterization, potential for integration with ERP systems, and application examples</li> <li>• Financial information systems, information systems for public administration and intelligent systems</li> <li>• Technologies and platforms supporting information systems development, including Computer-Aided Software Engineering (CASE) and various open source and closed-source platforms such as J2EE and .NET</li> <li>• Management of information technology projects, including management of project teams and management methods such as PMM, RUP, Agile, PRINCE2 and PMBoK good practices</li> <li>• Measuring the effectiveness of information technology projects including definition of effectiveness, efficiency and efficacy, as well as quantitative, qualitative and mixed methods</li> </ul> <p>LAB</p> <ul style="list-style-type: none"> <li>• Enterprise and process description in terms of ERP system categories</li> <li>• Realization of purchase and sale functions in ERP systems</li> <li>• Planning in MRP systems</li> <li>• Simulation of production systems</li> <li>• Realization of an integrated customer order processing system in selected enterprises</li> </ul>														
Prerequisites and co-requisites	Foundations of informatics														
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="456 871 794 898">Subject passing criteria</th> <th data-bbox="801 871 1139 898">Passing threshold</th> <th data-bbox="1145 871 1482 898">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="456 907 794 934">Laboratory reports</td> <td data-bbox="801 907 1139 934">60.0%</td> <td data-bbox="1145 907 1482 934">20.0%</td> </tr> <tr> <td data-bbox="456 943 794 969">Final test</td> <td data-bbox="801 943 1139 969">60.0%</td> <td data-bbox="1145 943 1482 969">45.0%</td> </tr> <tr> <td data-bbox="456 978 794 1005">Project</td> <td data-bbox="801 978 1139 1005">60.0%</td> <td data-bbox="1145 978 1482 1005">35.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Laboratory reports	60.0%	20.0%	Final test	60.0%	45.0%	Project	60.0%	35.0%
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Recommended reading	Basic literature	<ol style="list-style-type: none"> <li>1. Durlik I.: Restrukturyzacja procesów gospodarczych - reengineering, teoria i praktyka. Wyd. Placet, W-wa 1998 r.</li> <li>2. Monnox A., J2EE. Podstawy programowania aplikacji korporacyjnych, Wydawnictwo: Helion, Listopad 2005</li> <li>3. Orłowski C. Model rozmyty zarządzania przedsiębiorstwami informatycznymi, Politechnika Gdańska, 2004</li> <li>4. Orłowski C., Projektowanie hybrydowych systemów informatycznych do wspomagania zarządzania, Gdańsk, 1999</li> <li>5. Phillips Joseph, Zarządzanie projektami IT, Wydawnictwo: One Press, 2004</li> <li>6. Platt D., Podstawy Microsoft NET, Wydawnictwo: Read Me 2005</li> <li>7. Sommerville I., Inżynieria oprogramowania, wydawnictwo: Wydawnictwa Naukowo-Techniczne, 2003</li> <li>8. Szejko S.: (red.) Metody wytwarzania oprogramowania. Warszawa: Mikom 2002</li> <li>9. Szyjewski Z.: Zarządzanie projektami informatycznymi. Metodyka tworzenia systemów informatycznych. Warszawa, Agencja Placet 2001</li> </ol>													
	Supplementary literature	Own teaching materials for conducting exercises.													
	eResources addresses	Podstawowe <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=26124">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=26124</a> - Link to the Enterprise Information Systems subject - on the eNauczanie portal													
Example issues/ example questions/ tasks being completed	<p>What is the difference between Enterprise Architecture and Service-Oriented Architecture?</p> <p>How to create Model-Driven Architectures?</p> <p>What methods exist to modify ERP system functions?</p>														
Work placement	Not applicable														