University of Gdańsk

Subject card

Subject name and code	Introduction to IT Business Solutions, PG_00177475		
Field of study	Informatics and Econometrics		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2026/2027
Education level	Master's studies	Subject group	Obligatory subject group in the field of study 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	1	Language of instruction	Polish
Semester of study	1	ECTS credits	4.0
Learning profile	academic	Assessment form	credit
Conducting unit	Department of Business Informatics -> Faculty of Management -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Dorota Buchnowska, prof. UG	
	Teachers	dr Dorota Buchnowska, prof. UG	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	45.0	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	3.0	52.0	100

Subject objectives

1. Familiarizing students with different types of business applications.
2. Familiarizing students with the characteristics and functionality of integrated business applications dedicated to SMEs.
3. Familiarizing students with the possibilities of developing custom solutions using low-code platforms.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[IiEMU2_W05] Possesses advanced knowledge and understanding of informatics, statistics, and econometrics techniques and tools used to acquire, process, or visualise data to aid in decision-making and verify research hypotheses	(1) The student knows and characterizes information systems used in enterprises. (2) The student explains how the use of selected information systems affects business processes within an enterprise. (3) The student knows and understands the specific characteristics of solutions designed for small and medium-sized enterprises (SMEs).	[SW2] presentation/project/paper/ report [SW5] implementation of a problem task
[IiEMU2_U12] Can adapt, design, create, and operate IT systems that support business entities	(1) The student is able to analyze the information needs of business users and appropriately select, customize, and use an information system. (2) The student is able to use low-code and AI tools to develop customized IT applications.	[SU2] presentation/project/paper/ report [SU8] observation of student's independent or team work
[IiEMU2_U03] Is able to obtain and verify data from properly selected sources and to collect, process, and visualize it using modern econometrics, informatics or statistics tools	(1) The student is able to use information systems supporting various areas of an enterprise's operations to support the execution and automation of business processes and decision-making. (2) The student is able to use information and reports available in enterprise information systems to support decision-making processes.	[SU2] presentation/project/paper/ report [SU8] observation of student's independent or team work
[IiEMU2_W01] Possesses a profound understanding of the nature and evolution of theories in management, quality sciences, economics, and finance. They know these fields' significance within the broader social sciences. Additionally, the student learns the main trends in developing informatics and statistics tools	(1) The student knows the theoretical and practical principles of the low-code approach and understands its impact on the speed of implementing customized business applications, as well as its limitations. (2) The student knows the possibilities of using AI in developing and enhancing business applications and understands the benefits and risks associated with its use.	[SW2] presentation/project/paper/ report

Subject contents

1. Classification of business applications.
2. The business applications market.
3. Business applications in the SME sector – specific characteristics.
4. Functionality of integrated business applications for small and medium-sized enterprises (SMEs)::
   - Areas of application and configuration of business applications.
   - Functionality of IT solutions in inventory management, procurement, and sales.
   - Functionality of IT solutions in human resources and payroll management.
   - Reporting in business applications.
5. Fundamentals of developing and customizing business applications using low-code platforms and AI.

Prerequisites and co-requisites

Knowledge of business processes implemented in enterprises.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
final project	51.0%	60.0%
tasks performed during classes	51.0%	40.0%

Recommended reading

Basic literature	1. Wrycza S., Maślankowski J., Informatyka ekonomiczna. Teoria i zastosowania, PWN, Warszawa 2019. 2. Stanusch M, Sztuczna inteligencja. Inspiracje dla biznesu, Business Readings, Gliwice 2025. 3. Materials published on the MESTWIN Educational Portal.
Supplementary literature	Documentation of the information technologies used during the classes and in the final project.
eResources addresses	

Example issues/ example questions/ tasks being completed

Based on an analysis of the problems faced by a selected enterprise, propose an IT solution that improves business processes. Define its scope of application and identify the potential benefits.

Work placement

Not applicable

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