GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Fundamentals of Economics II, PG_00069951		
Field of study	Real Estate 5.0		
Date of commencement of studies	February 2026	Academic year of realisation of subject	2026/2027
Education level	second-cycle 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	2	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Geodesy -> Faculty of Civil and Environmental Engineering -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Emilia Miszewska	
	Teachers	dr Katarzyna Kubiszewska dr Błażej Kochański dr inż. Ewa Mazurek-Krasodomska dr inż. Piotr Figura	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	30.0	0.0	0.0	0.0	60

E-learning hours included: 0.0

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Moodle ID: 7556 Podstawy wiedzy ekonomicznej II
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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	60	2.0	13.0	75

Subject objectives

The aim of the course is to familiarize students with fundamental concepts in finance, banking, accounting, statistics, econometrics, and the economic evaluation of investments, with particular emphasis on the real estate market. The course aims to develop students' skills in analyzing sources of financing, assessing investment profitability and risk, interpreting statistical data, and applying financial and economic information in real estate decision-making processes.

The course content takes into account the curriculum requirements established by the relevant ministry in the regulations governing education in the field of real estate valuation.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U02] is able to interpret changes occurring in the economic and financial environment that affect the functioning of the real estate market, accurately analyze and interpret detailed financial statements, and apply methods of statistical analysis, econometric modeling, and financial mathematics in real estate valuation, property management, real estate transactions, and other processes characteristic of the operation of the real estate market	The student is able to analyze and interpret basic economic and financial data related to the real estate market, evaluate sources of financing and the economic efficiency of investments, apply selected statistical and econometric methods, and interpret information presented in financial statements for the purpose of real estate market analysis.	[SU3] Assessment of ability to use knowledge gained from the subject
	[K7_W02] possesses advanced knowledge and understanding of selected issues concerning the economic foundations of the real estate market, has general basic knowledge in the field of consultancy and methods for assessing the effectiveness of real estate market investments, and is familiar with the practical applications of accounting, financial mathematics, statistics, and econometrics in property valuation, real estate management, real estate brokerage, and other areas of activity within the real estate sector.	The student knows and understands the fundamental principles of the financial and banking systems, sources of investment financing, and methods for evaluating the economic efficiency of investments, with particular emphasis on the real estate market. The student has basic knowledge of accounting, statistics, and econometrics and understands their potential applications in real estate analysis and valuation.	[SW2] Assessment of knowledge contained in presentation

Subject contents	Course content – lecture The course content complies with the curriculum requirements established by the competent minister in the regulations governing education in the field of real estate valuation. 1. Economic Evaluation of Investment Efficiency **- Definition, classification and role of investments** **- Specific characteristics of real estate investments** **- Investors in the real estate market** **- Objectives and principles of real estate investment** **- Risks associated with real estate investment** **- Criteria and examples of economic investment efficiency assessment** 2. Fundamentals of Finance and Banking **- Selected Aspects of the Financial System** • Financial markets and their functions • Financial market participants and structure • The role and functions of money • Characteristics of basic financial instruments **- Selected Aspects of the Banking System** • Legal framework of the banking system in Poland • The nature and objectives of banks in a market economy • Banking products • Assessment of bank customers' creditworthiness **- Financing of Investments and Real Estate** • Sources of financing – equity and debt financing • Criteria for selecting financing sources • Organisation of investment and real estate financing 3. Fundamentals of Accounting **- The Accounting Act of 29 September 1994 (Journal of Laws of 2023, items 120, 295 and 1598, and of 2024, item 619), Polish Accounting Standards and International Accounting Standards** **- Types, structure and objectives of financial statements** **- Real estate as a fixed asset and as an investment property** **- Depreciation methods and rates** 4. Fundamentals of Statistics and Econometrics

- Elements of Statistical Analysis

- Probability distributions of random variables
- Descriptive statistics
- Confidence intervals for means and proportions
- Fundamentals of statistical hypothesis testing

- Econometric Models and Their Components

- Selection of the functional form of a model
- Parameter estimation using the least squares method
- Model validation

Course content – exercises

The course content complies with the curriculum requirements established by the competent minister in the regulations governing education in the field of real estate valuation.

1. Economic Evaluation of Investment Efficiency

- Definition, classification and role of investments
- Specific characteristics of real estate investments
- Investors in the real estate market
- Objectives and principles of real estate investment
- Risks associated with real estate investment
- Criteria and examples of economic investment efficiency assessment

2. Fundamentals of Finance and Banking

- Selected Aspects of the Financial System

- Financial markets and their functions
- Financial market participants and structure
- The role and functions of money
- Characteristics of basic financial instruments

- Selected Aspects of the Banking System

- Legal framework of the banking system in Poland
- The nature and objectives of banks in a market economy
- Banking products

	• Assessment of bank customers' creditworthiness **- Financing of Investments and Real Estate** • Sources of financing – equity and debt financing • Criteria for selecting financing sources • Organisation of investment and real estate financing 3. Fundamentals of Accounting **- The Accounting Act of 29 September 1994 (Journal of Laws of 2023, items 120, 295 and 1598, and of 2024, item 619), Polish Accounting Standards and International Accounting Standards** **- Types, structure and objectives of financial statements** **- Real estate as a fixed asset and as an investment property** **- Depreciation methods and rates** 4. Fundamentals of Statistics and Econometrics **- Elements of Statistical Analysis** • Probability distributions of random variables • Descriptive statistics • Confidence intervals for means and proportions • Fundamentals of statistical hypothesis testing **- Econometric Models and Their Components** • Selection of the functional form of a model • Parameter estimation using the least squares method • Model validation
Prerequisites and co-requisites	
Assessment methods and criteria	

Subject passing criteria	Passing threshold	Percentage of the final grade
Test and Presentation	60.0%	33.0%
Knowledge Test	60.0%	14.0%
continuous assessment including solving practical tasks during classes	60.0%	20.0%
test with exercises	60.0%	33.0%

Recommended reading	Basic literature	Henryk Gawron, Metody oceny opłacalności inwestycji na rynku nieruchomości, Wydawnictwo Uniwersytetu Ekonomicznego (Poznań) 2011 Plaff J.: Rachunkowość – podstawy. SKwP, Warszawa 2025. Rachunkowość finansowa. Walińska E. (red.), Oficyna a Wolters Kluwer business, Warszawa 2014. Aczel, A. D. (2018). *Statystyka w zarzadzaniu* . Wydawnictwo Naukowe PWN. Dębski W., *Rynek finansowy i jego mechanizmy*, Wydawnictwo Naukowe PWN, Warszawa 2021.
	Supplementary literature	Rachunkowość finansowa z uwzględnieniem MSSF. Pfaff J. (red.), PWN, Warszawa 2017. Kot, S. M., Jakubowski, J., & Sokołowski, A. (2011). *Statystyka*. Difin. *Finansowanie budownictwa mieszkaniowego w Polsce*, red. A. Rzeczycka, PG, Gdańsk 2010.
	eResources addresses	
Example issues/ example questions/ tasks being completed	Assess the financial profitability of your real estate investment	
Practical activites within the subject	Not applicable	

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