GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	MICROECONOMETRICS, PG_00060733		
Field of study	Economic Analytics		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
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	Part-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Katedra Statystyki i Ekonometrii -> Faculty of Management and Economics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Dagmara Nikulin	
	Teachers	dr Dagmara Nikulin dr inż. Sabina Szymczak	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	8.0	0.0	16.0	0.0	0.0	24

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	24	6.0	45.0	75

Subject objectives

Explains the importance and interrelations between factors describing economic and social phenomena, based on microdata, selecting appropriate econometric tools allowing for their proper interpretation.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W02] explains the meaning and interdependence of key components describing economic processes, using in-depth knowledge consistent with the main trends in the development of scientific disciplines related to the field of study	selects appropriate econometric methods to describe microeconomic relationships in economic and social phenomena	[SW1] Assessment of factual knowledge
[K7_U03] formulates research problems and selects appropriate analytical methods for their effective solution, using advanced IT tools, and evaluates the results critically	formulates research problems and effectively solves them using properly selected econometric methods	[SU4] Assessment of ability to use methods and tools

Subject contents

Introduction to microeconometrics
Linear models
Blinder-Oaxaca decomposition
Models of qualitative binomial variables (logit, probit)
Models of polynomial variables (logit polynomial model, conditional logit model)
Tobit model and Heckman selection
Multi-level models
Proportional Hazard Model: Cox Model

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Written laboratory test	60.0%	50.0%
Final written exam	60.0%	50.0%

Recommended reading	Basic literature	Gruszczynski, M. (red. nauk.), Mikroekonometria. Modele i metody analizy danych indywidualnych. Wolters Kluwer Polska, 2012. Cameron, C.A. and Trivedi, P.K. Microeconometrics: methods and applications. Cambridge University Press, 2005.
	Supplementary literature	https://www.ecb.europa.eu/stats/ecb_surveys/safe/html/index.en.html - Survey on the access to finance of enterprises (SAFE). Badanie obejmuje mikro-, małe, srednie i duze firmy i dostarcza informacji na temat warunkow finansowania, z ktorymi maja do czynienia małe i srednie firmy w porownaniu z warunkami duzych przedsiebiorstw w ciagu ostatnich szesciu miesiecy. http://microdata.worldbank.org - Biblioteka mikrodanych ułatwia dostep do danych zebranych podczas badan reprezentacyjnych gospodarstw domowych, przedsiebiorstw i innych obiektow. Te zestawy "mikrodanych" moga rowniez pochodzic ze spisow powszechnych ludnosci, mieszkan lub gospodarstw rolnych lub z procesow gromadzenia danych administracyjnych.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Problem:Using the available microdata from Eurostat, analyze the probability of becoming unemployed using the available individual data.' Discuss the results.Estimate a model explaining wage development in European Union countries using a multi-level logit model.	
Work placement	Not applicable	