GDAŃSK UNIVERSITY
OF TECHNOLOGY

Subject card

Subject name and code	Macroeconometrics, PG_00049956		
Field of study	Economic Analytics		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2023/2024
Education level	second-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	2	Language of instruction	Polish
Semester of study	4	ECTS credits	2.0
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	Ewa Majerowska	
	Teachers	Ewa Majerowska dr hab. Michał Pietrzak	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	30.0	0.0	0.0	30
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	30	3.0	17.0	50

Subject objectives

The aim of the course is to provide students with quantitative tools and econometric models that can enable them to analyze macroeconomic data.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W12] has a broad knowledge of the evolution of structures, institutions and socio-economic relations	Student knows how to synthetically draw conclusions based on the gathered empirical data about the national economy.	[SW3] Assessment of knowledge contained in written work and projects
[K7_U08] has the ability to implement analytical methods to independently propose solutions to economic problems and verify their effectiveness	Student will have the knowledge and practical skills that allow them to use and estimate macro-econometric models.	[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools

Subject contents

The aim of the course is to present the methods and models of econometric data analysis. Sources of macroeconomic data. Diagnostic and specification tests for the OLS estimator on time series and cross-sectional data. Models of time series analysis: VAR, VECM, cointegration and stationarity tests. Stochastic vs deterministic process. Stationarity and cointegration (ADF test and Engle-Granger cointegration tests). Vector Error Correction Model (VECM). Vector autoregression model (VAR).

Prerequisites and co-requisites

Knowledge of mathematics and statistics and basic econometrics.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Research project	60.0%	100.0%

Recommended reading	Basic literature	Maddala G.S.: Econometrics, Wydawnictwo Naukowe PWN, Warszawa 2006, Osińska M. (red), Ekonometria współczesna, Dom organizatora, Toruń 2007, Strzała, K:. Differently econometrics, Wyd. UG, Gdansk 1994,Mycielski, J.: Econometrics, Wyd. WNE UW, 2010 edition.
	Supplementary literature	Kufel, T.: Econometrics. Troubleshooting using Gretl, Wydawnictwo Naukowe PWN, Warszawa 2011.
	eResources addresses	Adresy na platformie eNauczanie: Makroekonometria 2023_2024s - Moodle ID: 38107 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=38107
Example issues/ example questions/ tasks being completed	Estimation of a macroeconomic multi-equation model for any economy. Study of the stationarity of series representing exchange rates. Determine the co-integration of the ranks. Building a VAR model using real data.Examining causality between interest rates or exchange rates.	
Work placement	Not applicable	