GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Macroeconometrics, PG_00050001		
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	Part-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	16.0	0.0	0.0	16
	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	16	4.0	30.0	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 knowledge and practical skills that allow them to use and estimate macroeconometric models.	[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information

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 OSL estimator on time series and cross-sectional data. Models of time series analysis: VAR, VECM, cointegration and stationarity tests. 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.: Ekonometria, Wydawnictwo Naukowe PWN, Warszawa 2006, Osińska M. (red), Ekonometria współczesna, Dom organizatora, Toruń, 2007, Strzała, K:. Ekonometria inaczej, Wyd. UG, Gdańsk 1994.

	Supplementary literature	Kufel, T.: Econometrics. Troubleshooting using Gretl, Wydawnictwo Naukowe PWN, Warszawa 2011.
	eResources addresses	Adresy na platformie eNauczanie: Makroekonometria 2023_2024n - Moodle ID: 38108 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=38108
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