



## Subject card

Subject name and code	ECONOMETRICS, PG_00061119						
Field of study	Management						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2024/2025		
Education level	second-cycle studies	Subject group			Optional subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			English		
Semester of study	3	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	dr Aneta Sobiechowska-Ziegert					
	Teachers	dr Aneta Sobiechowska-Ziegert					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	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	Explains the principles of using econometric models to support management decisions, making an in-depth interpretation of the results obtained						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_U04] prepares and presents convincing, professional presentations of analysis results, with their in-depth interpretation		presents in a professional manner the results of the econometric analysis, making advanced interpretation		[SU5] Assessment of ability to present the results of task		
	[K7_K01] recognizes the importance of knowledge related to the field of study in solving cognitive and practical problems		explains cognitive and practical economic problems using various econometric models		[SK5] Assessment of ability to solve problems that arise in practice		
Subject contents	LECTURE Econometrics and econometric model - basic concepts Least squares method Model fit measures Numerical and stochastic assumptions of the OLS method Testing the significance of model structural parameters and autocorrelation Other statistical tests verifying the assumptions of the OLS method Non-linear regression - transformation to linear form, estimation, verification and interpretation Linear and non-linear trend models Artificial variables - seasonality analysis Econometric models of the market, production and costs LABORATORY Getting acquainted with the computer software MFit for Windows/Gretl - basic operations Database creation Creating linear econometric models and their estimation Testing the significance of parameters, fit and autocorrelation of the random component Full verification of the econometric model and its modifications Estimation and interpretation of trend and trend models with seasonality in additive and multiplicative versions Non-linear cause-and-effect models						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Tutorial tasks		60.0%		50.0%		
	Test		60.0%		50.0%		

Recommended reading	Basic literature	Schmidt St.: Econometrics, McGraw-Hill, 2005; Studenmund A.H.: Using Econometrics a practical guide, Pearson Education, 2006
	Supplementary literature	Verbeek Marno: A guide to modern econometrics, John Wiley&Sons Ltd, Chichester, 2008
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Using the database on net wages in Poland in the selected year, estimate the trend of these wages and carry out a full verification of the model (suggest an analytical form of the trend appropriate for the analyzed variable)	
Work placement	Not applicable	