GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	ECONOMIC FORECASTING, PG_00058464		
Field of study	Economics		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2024/2025
Education level	first-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	3	Language of instruction	Polish
Semester of study	5	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	exam
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	30.0	0.0	0.0	0.0	45

E-learning hours included: 0.0

Additional information:
academic webquest
exercises conducted in a computer laboratory

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	45	10.0	45.0	100

Subject objectives

Distinguishes between the quality and accuracy measures of forecasts, being aware of the usefulness of expired forecasts verification measures to formulate recommendations for the use of specific forecasting methods, also taking into account the threats arising from demographic trends, technology development and the globalization of the economy

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W05] integrates data from multiple sources to analyze complex economic problems	forecasts economic phenomena at the micro and macroeconomic level, integrating data from many sources	[SW3] Assessment of knowledge contained in written work and projects
[K6_U07] uses information technologies to improve data analysis and decision-making processes	selects the appropriate forecasting method based on the course of the phenomenon over time, supporting analyses and inference with appropriately selected software	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task

Subject contents	Basic concepts and issues related to forecasting. Types of forecasts, methods and variables. Measurement of the quality of forecasts. Naive and adaptive methods of forecasting - introduction. Simple and weighted moving averages. Exponential smoothing - Brown, Holt and Winters model. Forecasting based on linear and nonlinear trends. Forecasting based on autoregressive models. Heuristic methods and analog forecasting. Scenarios and warning forecasts. Mega trends - forecasts for the world and Poland. Forecasting selected elements of the macro-environment of the enterprise. Forecasting selected elements of the micro-environment of the enterprise. Forecasting variables in the enterprise.
Prerequisites and co-requisites	microeconomics basic statistics macroeconomics statistics econometrics

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
academic webquest	60.0%	50.0%
test	60.0%	50.0%

Recommended reading

Basic literature	Cieślak, M. (2022). Prognozowanie gospodarcze metody i zastosowania. Warszawa: PWN. Dittmann, P.(2008). Prognozowanie w przedsiębiorstwie metody i ich zastosowania. Kraków: Wolters Kluwer. Dittmann, P, Szabela-Pasierbińska, E., Dittmann, I., Szpulak, A. (2017). Prognozowanie w zarządzaniu przedsiębiorstwem. Warszawa: Wydawnictwo Nieoczywiste Zeliaś, A., Pawełek, B., Wanat S. (2003). Prognozowanie ekonomiczne, teoria, przykłady, zadania. Warszawa; PWN.
Supplementary literature	Bukowski, M., Śniegowski, A., (2017). Megatrendy. Od akceptacji do działań. Warszawa: WiseEuropa-Fundacja Warszawski Instytut Studiów Ekonomicznych i Europejskich. Krys, Ch., Born, D.(2020). Trend Compendium 2050 Six megatrends that will shape the world. Munich: Roland Berger. Future State 2030. Światowe wyzwania dla liderów i przywódców (2014), KPMG International, MOWAT.
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed

Based on data from stat.gov.pl / macroeconomic indicators for the selected economic variable.

- Make a graph of the analyzed variable and determine the nature of its changes in the analysed period.
- Forecast this variable for the next period using an appropriate adaptive method and a trend or trend model with seasonality.
- Assess the usefulness of the selected method on the basis of the ex-ante and ex-post quality measures.
- Interpret the obtained results.

Work placement

Not applicable