GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Fundamentals of Economic Forecasting, PG_00068586
Field of study	Economic Analytics

Date of commencement of studies	October 2025	Academic year of realisation of subject	2026/2027
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	Part-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	5.0
Learning profile	general academic profile	Assessment form	exam

Conducting unit	Department Of Statistics And Econometrics -> Faculty Of Management And Economics -> Wydziały Politechniki Gdańskiej

Name and surname of lecturer (lecturers)	Subject supervisor	
	Teachers	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	16.0	0.0	16.0	0.0	0.0	32
	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	32	6.0	87.0	125

Subject objectives	Selects forecasting methods appropriate to the studied phenomenon, obtaining economically and socially valuable results, which is confirmed by the conducted assessment

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_K03] is prepared to critically assess the knowledge they possess, which is necessary for solving cognitive and practical problems, and to supplement any gaps with opinions from external experts.	is ready to assess the limitations of their own knowledge in the field of economic forecasting and to seek expert opinions when analyzing future economic phenomena	[SK5] Assessment of ability to solve problems that arise in practice [SK3] Assessment of ability to organize work
	[K6_U05] leverages the knowledge acquired in the field of economic analytics to solve challenging problems, achieving results that are economically and socially valuable.	is able to select an appropriate forecasting method based on the behavior of a phenomenon over time, achieving results that are valuable both economically and socially	[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information
	[K6_W05] possesses advanced knowledge in integrating data from various sources and in methods that enable a comprehensive analysis of economic problems.	has the knowledge to forecast micro- and macroeconomic phenomena by integrating data from various sources	[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge

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. 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 basics of statistics macroeconomics

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Exam	60.0%	50.0%
	project	60.0%	25.0%
	colloquium	60.0%	25.0%

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 analysed variable and determine the nature of its changes in the analysed period. • Predict this variable for the next period using the appropriate adaptive method. • evaluate the suitability of the selected method on the basis of the forecast quality measures in the adopted test period. • Interpret the obtained results.

Work placement	Not applicable

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