



Subject card

Subject name and code	Investment strategies, PG_00067412						
Field of study	Data Engineering						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2028/2029		
Education level	first-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	4		Language of instruction		English		
Semester of study	7		ECTS credits		3.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Finance -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Marcin Potrykus				
	Teachers		dr inż. Marcin Potrykus				
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		42.0	75
Subject objectives	Acquisition of knowledge and skills in the design of investment strategies with the use of selected tools.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U06] acquires new knowledge, planning its own development in aiming at achieving defined goals		Construct an optimal investment portfolio by Markowitz theory. Assesses the effectiveness of investments on the basis of the Beta coefficient and Alpha Jensen. Constructs a strategy based on the event analysis.		[SU1] Assessment of task fulfilment		
	[K6_K03] demonstrates the ability to think critically and analytically and integrates knowledge from many disciplines in order to make effective decisions		Uses various criteria for constructing an investment portfolio (strategies: minimizing investment risk, maximizing efficiency or maximizing the rate of return). Combines knowledge from corporate finance with the selection of an appropriate investment strategy.		[SK2] Assessment of progress of work		
	[K6_W03] identifies veracious sources of information relevant to the analyzed issues		Learns about reliable data sources containing historical transaction prices. Identifies their usefulness for the research methods learned.		[SW1] Assessment of factual knowledge		
Subject contents	The basic and complex area of investment analysis. Risk and return on investment - measurement methods; Theory of building an investment portfolio; Investment efficiency measures; Event analysis and its application in constructing an investment strategy; Derivatives in shaping the investment strategy.						
Prerequisites and co-requisites	Corporate Finance						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Mid-term tests during the semester	60.0%	100.0%
Recommended reading	Basic literature	Scott B. Smart, Lawrence J. Gitman, Michael D. Joehnk, Fundamentals of Investing, Essex 2014. Elton E.J., M.J. Gruber, S.J Brown, W.N. Goetzmann, Modern portfolio theory and investment analysis, 8th ed., Wiley 2010. Damodaran A., Investment Philosophies: Successful Strategies and the Investors Who Made Them Work, 2nd Edition, Wiley 2012.	
	Supplementary literature	Miner R., High Probability Trading Strategies: Entry to Exit Tactics for the Forex, Futures, and Stock Markets, Wiley 2008. Kufel T., Ekonometria. Rozwiązanie problemów z wykorzystaniem programu GRET, PWN, Warszawa 2013. Luszniewicz A., Słaby T., Statystyka z pakietem komputerowym STATISTICA PL, C.H.Beck, Warszawa 2008. Sharpe W. 1992. Asset allocation: management style and performance measurement. Journal of Portfolio Management 18, 719 (Article). Agarwal V., N. Y. Naik. 2004. Risks and portfolio decisions involving hedge funds. Review of Financial Studies 17, 63-98 (Article).	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Construction of an optimal investment portfolio. Choosing an investment strategy based on the set of specific criteria.		
Work placement	Not applicable		

Document generated electronically. Does not require a seal or signature.