

Valid for 2024.FS

Module Name: Quantitative Investment Strategies		
Module Code	w.MA.XX.QIS-PiE.19HS	
Module Description	Advanced analyses of quantitative investment strategies, hedge funds, alternative investments, futures markets, commodities, structured products, derivatives including the link to the macro-environment and business cycles.	
Program and Specialization	Banking and Finance (PiE)	
Legal Framework	Academic Regulations MSc in Banking and Finance dated 29.09.2011, Appendix to the Academic Regulations for the degree program in Banking and Finance, first adopted on 28.08.2012	
Module Category	Module Type: Compulsory	
ECTS	6	
Organizational Unit	W Institut für Wealth & Asset Management	
Module Coordinator	Peter Schwendner (scwp)	
Deputy Module Coordinator	Jan-Alexander Posth (posh)	
Prerequisite Knowledge	Quantitative methods, active investment management, financial instruments and portfolio theory, statistics, investments.	
Contribution to Program Learning Goals (Affected by Module)	§ Professional Competence § Methodological Competence § Social Competence	
Contribution to Program Learning Objectives	Professional Competence § Knowing and Understanding Content of Theoretical and Practical Relevance § Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance § Evaluate Content of Theoretical and Practical Relevance Methodological Competence § Problem-Solving & Critical Thinking § Scientific Methodology § Information Literacy § Creativity & Innovation Social Competence § Written Communication § Oral Communication § Teamwork & Conflict Management § Intercultural Insight & Ability to Change Perspective	
Module Learning Objectives	Students... § can evaluate advanced quantitative investment strategies, alternative investment strategies, and factor-based strategies, apply all relevant methodologies, and set up their own investment processes. § can evaluate commodities and global futures markets and apply all necessary methodologies. § can evaluate the connection between the macro-environment, business cycles, and financial markets. § can evaluate structured derivative products and apply hedging strategies.	
Module Content	§ Quantitative investment strategies, alternative investments, and hedge funds § Commodities and advanced quant strategies. Relationship between macro-environment, business cycles, and investment decisions. § Derivatives: Forwards and futures; puts and calls; structured products; Black/Scholes, Binomial trees; arbitrage, replication and risk neutrality; sensitivities (greeks); option strategies and volatility trading § Investment manager due diligence	
Links to other modules	The content of this module is linked to the following modules: w.MA.XX.ILIN.19HS w.MA.XX.IN-PiE.19HS w.MA.XX.SIN-PiE.19HS	
Methods of Instruction	§ Lecture § Case Studies § Exercises § Literature Review	Social Settings Used: § Individual Work § Pair Work
Digital Resources	§ Teaching Materials § Case Studies (with Key) § FinanceLab / Rotman Interactive Trader Simulations	

Type of Instruction	Classroom Instruction	Guided Self-Study	Autonomous Self-Study	
Lecture	42 h	-		
Excercise	30 h	-		
Project Work	-	-		
Seminar	-	-		
Total	72 h	0 h	108 h	
Performance Assessment				
End-of-module exam	Form	Length (min.)	Weighting	
Written exam	Closed book	60	90.00%	
Permitted Resources	Approved calculator according to "Guidelines on Supplementary Materials"	With dictionary		
Others	Assessment	Length (min.)	Weighting	
Refinitiv Certificate	Grade	-	10.00%	
Students are not allowed to revise and resubmit performance assessment tasks.				
Classroom Attendance Requirement	Mandatory Attendance: None			
Language of Instruction/Examination	English			
Compulsory Reading	§ Pedersen, L. (2015). Efficiently Inefficient: How Smart Money Invests and Market Prices Are Determined. Princeton. ISBN 978-0691166193. § Baz, J., Granger, N. & Harvey, C. (2015). Dissecting Investment Strategies in the Cross Section and Time Series. https://ssrn.com/abstract=2695101 ,			
Recommended Reading	-			
Comments	-			