

Valid from 2025.HS

Module description: Financial Instruments & Portfolio Theory		
Module Code	w.BA.XX.3FIPT-BF-FLEX.XX	
ECTS Credits	6	
Language of Instruction/Examination	English	
Module Description	Students are introduced to the core concepts of finance, with a focus on understanding and calculating the risk and return profiles of various financial instruments, including bonds, options, and futures. They learn about the importance of diversification in reducing risk and explore methods for constructing efficient portfolios. Additionally, students analyze the role of financial products in portfolio management and are introduced to principles of sustainable investing, including ESG (environmental, social, and governance) components and strategies for aligning investments with measurable sustainability goals.	
Organizational Unit	Institut für Wealth & Asset Management	
Module Coordinator	Martin Schnauss	
Deputy Module Coordinator	Thomas Gramespacher	
Program and Specialization	<ul style="list-style-type: none"> <li>Business Administration - Specialization in Banking and Finance (FLEX)</li> </ul>	
Legal Framework	Academic Regulations BSc dated 29.01.2009, for the degree programs in Business Administration, International Management, Business Information Technology, Business Law, Business Law and Applied Law, first adopted on 12.05.2009	
Module Category	Module Type Compulsory	Program Phase Main Study Period
Prerequisite Knowledge	Basic knowledge of mathematics and statistics, particularly in probability theory and fundamental statistical concepts such as means, variance, and correlation. A basic understanding of financial mathematics, such as compound interest calculations, is helpful but not mandatory.	
Contribution to Program Learning Objectives (by the concerned Module)	<ul style="list-style-type: none"> <li>Professional Competence</li> <li>Methodological Competence</li> <li>Social Competence</li> <li>Self-Competence</li> </ul>	
Contribution to Program Learning Objectives	<p><b>Professional Competence</b></p> <ul style="list-style-type: none"> <li>Knowing and Understanding Content of Theoretical and Practical Relevance</li> <li>Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance</li> <li>Evaluate Content of Theoretical and Practical Relevance</li> </ul> <p><b>Methodological Competence</b></p> <ul style="list-style-type: none"> <li>Problem-Solving &amp; Critical Thinking</li> <li>Scientific Methodology</li> <li>Work Methods, Techniques, and Procedures</li> <li>Information Literacy</li> <li>Creativity &amp; Innovation</li> </ul> <p><b>Social Competence</b></p> <ul style="list-style-type: none"> <li>Written Communication</li> <li>Oral Communication</li> <li>Teamwork &amp; Conflict Management</li> <li>Intercultural Insight &amp; Ability to Change Perspective</li> </ul> <p><b>Self-Competence</b></p> <ul style="list-style-type: none"> <li>Self-Management &amp; Self-Reflection</li> <li>Ethical &amp; Social Responsibility</li> <li>Learning &amp; Change</li> </ul>	

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<b>Module Learning Objectives</b>	<p>Students...</p> <ul style="list-style-type: none"> <li>• understand the concept of risk and return for investments and the mechanism of diversification.</li> <li>• analyze the formation of prices in an equilibrium model of the capital market.</li> <li>• know the concept of the time value of money and its application in investment decisions.</li> <li>• understand the relationship between the structure of interest rates and bond prices.</li> <li>• identify the main drivers of option prices and their implications for market behavior.</li> <li>• gain insight into the characteristics and functioning of options and futures markets.</li> <li>• understand the link between spot and futures prices, including arbitrage opportunities.</li> <li>• calculate the risk and return of individual assets and diversified portfolios.</li> <li>• form portfolios on the efficient frontier and visualize them in a risk/return diagram.</li> <li>• calculate the fair price of risky assets using the capital asset pricing model (CAPM).</li> <li>• compute prices of financial instruments, including bonds, options, and futures.</li> <li>• construct appropriate option strategies aligned with specific market views.</li> <li>• apply risk-adjusted performance measures, such as the Sharpe ratio, to assess portfolio quality.</li> <li>• evaluate assets using the security market line (SML) and Jensen's alpha.</li> <li>• compare an asset's market price with its fair value to suggest appropriate investment actions.</li> <li>• incorporate ESG (environmental, social, and governance) principles into investment decisions, including understanding sustainable investment strategies like negative screening, thematic investing, and impact investing.</li> <li>• communicate the risk/return characteristics of a portfolio or fund effectively to potential clients, emphasizing ESG alignment where applicable.</li> </ul>	
<b>Module Content</b>	<ul style="list-style-type: none"> <li>• Risk and return of investments: Understanding the risk and return characteristics of individual assets and portfolios, including their impact on long-term financial strategies</li> <li>• Efficient diversification: Exploring concepts like minimum variance and optimum portfolio construction, emphasizing the role of diversification in reducing risk</li> <li>• The capital asset pricing model (CAPM): Application of CAPM to evaluate the fair value of assets, including the use of the capital market line (CML) and security market line (SML) to assess portfolio performance.</li> <li>• Risk and return of bonds: Analyzing the relationship between bond prices, yield structures, and interest rate risks to understand fixed-income investments.</li> <li>• Characteristics and prices of options and futures: Examining the valuation and strategic use of derivatives, including the computation of fair prices and their application in hedging and speculation.</li> <li>• Incorporating ESG Principles: Understanding environmental, social, and governance (ESG) criteria in investment decision-making. Topics include sustainable investing strategies (e.g., negative screening, thematic investing, and impact investing) and assessing the alignment of financial instruments with ESG goals.</li> </ul>	
<b>Links to other modules</b>	<p>This module is linked to the following modules:</p> <ul style="list-style-type: none"> <li>• w.BA.XX.2AIM.XX</li> <li>• w.BA.XX.2BF.XX</li> <li>• w.BA.XX.2CFRM.XX</li> <li>• w.BA.XX.2Mathe1.XX</li> <li>• w.BA.XX.2QMeth.XX</li> <li>• w.BA.XX.2Stat.XX</li> <li>• w.BA.XX.2WMC.XX</li> </ul>	
<b>Digital Learning Resources</b>	<ul style="list-style-type: none"> <li>• Teaching Videos</li> <li>• Practice and Application Exercises (with Key)</li> <li>• Case Studies (with Key)</li> <li>• Case studies (including solutions)</li> <li>• Instructional videos</li> <li>• Exercises and practical tasks (including solutions)</li> </ul>	
<b>Methods of Instruction</b>	<ul style="list-style-type: none"> <li>• Case Studies</li> <li>• Interactive Instruction</li> <li>• Problem-Oriented Teaching</li> <li>• Exercises</li> <li>• Application Tasks</li> <li>• Literature Review</li> </ul>	<p>Social Settings Used:</p> <ul style="list-style-type: none"> <li>• Individual Work</li> </ul>

## Module description: Financial Instruments & Portfolio Theory

Type of Instruction		Classroom Instruction	Guided Self-Study	Autonomous Self-Study	
	Large Class	24 h	88 h		
	Small Class	-	-		
	Group Instruction	-	-		
	Practical Work	-	-		
	Seminar	-	-		
	Total	24 h	88 h	68 h	
Performance Assessment	End-of-module exam		Form	Length (min.)	Weighting
	Written exam		Specified documentation	60	100.00
	Permitted Resources		Spec. calculator acc. to leaflet "Utilities"	With dictionary	
	Others	Assessment	Format	Length (min.)	Weighting
	-	-	-	-	-
Classroom Attendance Requirement	None				
Compulsory Reading	<ul style="list-style-type: none"><li>Kane, A. &amp; Bodi, Z. (2013). 9 Edition. New York: McGraw-Hill/Irwin. ISBN 978-0-07-714824-9. (A Kindle version is sufficient, Any edition after the 9th is also acceptable (the latest is the 12th edition from 2021)).</li></ul>				
Recommended Reading	<ul style="list-style-type: none"><li>CFA-Institute (2019). 11 Edition. New Jersey: Wiley. ISBN 978-1119531081. (Older versions are also acceptable. The overlap with CFA Level I is substantial).</li></ul>				
Comments	All editions of Bodi & Kane after the 8th edition are fine.				