

Two Day Course in Investment, Risk and Financial Engineering

Day	Time	Area	Topic	Contents	Method of Delivery	Hook Question	
One	10 am - 1 pm	Investment Selection Process and Capital Market Theories	Investment Process	Relationship between Risk and Return: single and multiple HPR, Geometric Mean, Cumulative Return, Standard Dev, Variance, Risk Free rate, Risk Premium, Risky assets, Return Variability, Normal Distribution, Correlation and Covariance	Lecture/workshop to use real world data of Stocks, Bonds, Bills and Inflation	<i>Will I be Rich?</i>	
				Asset Allocation and Capital Allocation Line, Asset allocation for Two Risky Assets, Efficient Diversification, Mean Variance Criterion, Optimal Portfolio with A Risk Free Asset, Diversification with many risky assets	Lecture/workshop to use real world data of listed companies in Poland		
			<i>10 minutes break</i>				
		Capital Market Theories	Application of Single Index, CAPM, APT and EMH	Lecture/workshop to use real world data for all capital market theories			
	<i>Lunch Break</i>						
		2 pm - 5 pm	Multi Factor Model, Cost of Capital and Bond Market Analysis	Multi Factor Models	Fama and French Three Factor Model and Carhart Model of estimations	Lecture/workshop to discuss the development of models and empirical findings	<i>What is my required rate of return?</i>
Cost of Capital	Investment project and diversification, Beta, YTM approach of cost of debt, WACC			Lecture/workshop to discuss advanced case of an investment appraisal project			
<i>10 minutes break</i>							
		Fixed Income	Duration, convexity, Term Structure of Interest Rates, Immunization, and Bond Portfolio Management	Lecture/workshop to discuss an illustrative example of bond portfolio management	<i>How about Fixed Income?</i>		
Two	10 am - 1 pm	Investment Strategy in Action	Active, Passive Strategy and ESG consideration in Investment	Application of Active Vs Passive management of portfolio, Fama and French Three Factor and Carhart model estimations	Lecture/workshop to use real world data of listed companies	<i>How can I do it?</i>	
			<i>10 minutes break</i>				
			Active, Passive Strategy and ESG consideration in Investment	Portfolio Evaluation including MSR and CEQ techniques.	Lecture/workshop to use real world data of listed companies		
	<i>Lunch Break</i>						
		2 pm - 5 pm	Market Risk	Value at Risk	Bootstrapping, Historical Simulation and Monte Carlo methods of calculating VaR of an Investment	Lecture/workshop to use real world data of listed companies in Poland	<i>How much I may Lose?</i>
			Developments in Investment Theory - Irrational Part.	Behavioural Finance	Traditional finance perspectives on individual behaviour, prospect theory and behavioural biases	Lecture/workshop to test behavioural biases of students	<i>Why can't we be Rational always?</i>
<i>Collection of Feedback (10 minutes)</i>							