Table of Curriculum

Classification	Course No.	Computer Code	Course Name	Lecture; Lab.; Credit (Assignment)	Semester	Note
Manda-tory major courses	FE501		Stochastic Calculus for Finance	1.5:0:1.5	Spring	
	FE503		Fundamentals of Investment and Asset Pricing	1.5:0:1.5	Spring	
	FE504		Analysis of Fixed Income Securities	1.5:0:1.5	Spring	
	FE505		Derivatives	1.5:0:1.5	Spring	
	FE506		Financial Accounting	1.5:0:1.5	Summer	
	FE507		Financial Statement Analysis	1.5:0:1.5	Fall	☐ FE506
	FE508		Computer Programming for Financial Engineering I	1.5:3:1.5	Spring	
	FE510		Computer Programming for Financial Engineering II	1.5:3:1.5	Fall	☐ FE508
	FE511		Applications in Stochastic Calculus for Finance	1.5:0:1.5	Spring	☐ FE501
	FE538		Computer Programming for Financial Engineering III	2:3:3	Fall	
	FE539		Computational Finance	3:0:3	Fall	
	FE639		Research Methods in Financial Engineering I	1.5:0:1.5	Fall	
	FE649		Research Methods in Financial Engineering II	1.5:0:1.5	Fall	☐ FE639
Elective major courses	FE502		Statistical Analysis for Finance	1.5:0:1.5	Spring	
	FE509		Modelling in Financial Engineering	1.5:0:1.5	Spring	☐ FE505
	FE520		Financial Security Design	1.5:0:1.5	Fall	
	FE512		Econometric Analysis for Finance	1.5:0:1.5	Spring	☐ FE502
	FE513		Portfolio Optimization and Management	1.5:0:1.5	Spring	☐ FE503
	FE514		Term Structure of Interest Rates	1.5:0:1.5	Spring	☐ FE504
	FE515		Advanced Derivatives	1.5:0:1.5	Spring	☐ FE505
	FE517		Analysis of Economic Indicators and Forecasting	1.5:0:1.5	Fall	☐ FE512
	FE518		Principles of Insurance and Risk	1.5:0:1.5	Fall	
	FE519		Estimation of Financial Engineering Models	1.5:0:1.5	Fall	☐ FE512
	FE521		Simulation Methods for Finance	1.5:0:1.5	Fall	☐ FE501, FE505
	FE522		Advanced Econometric Analysis for Finance	1.5:0:1.5	Fall	☐ FE512
	FE523		Real Estate Investments	1.5:0:1.5	Fall	
	FE524		Interest Rate Derivatives	1.5:0:1.5	Fall	☐ FE514
	FE525		Management of Derivative Positions	1.5:0:1.5	Fall	☐ FE515
	FE526		Operational Risk Management	1.5:0:1.5	Fall	
	FE527		Security Analysis and Trading Strategies	1.5:0:1.5	Fall	
	FE528		Financial Market Risk Management	1.5:0:1.5	Fall	☐ FE505

	FE531		Numerical Methods in Finance	1.5:0:1.5	Fall	☐ FE511
	FE532		Financial Time Series Analysis	1.5:0:1.5	Fall	☐ FE512
	FE533		Behavioral Finance	1.5:0:1.5	Fall	
	FE534		Credit Risk Modeling and Credit Derivatives	1.5:0:1.5	Fall	☐ FE514
	FE535		Derivatives Trading Strategies	1.5:0:1.5	Fall	☐ FE515
	FE537		Statistical Arbitrage	1.5:0:1.5	Fall	☐ FE512
	FE540		Artificial Intelligence and Machine Learning for Financial Engineering	3:0:3	Fall	
	FE541		Mathematics for Insurance	1.5:0:1.5	Fall	
	FE542		Advanced Financial Time Series Analysis	1.5:0:1.5	Fall	☐ FE532
	FE543		Financial Market Microstructure	1.5:0:1.5	Fall	
	FE544		Mortgage Backed Securities & Other Structured Securities	1.5:0:1.5	Fall	☐ FE504
	FE545		Contemporary Topics in Derivatives	1.5:0:1.5	Fall	☐ FE515
	FE547		Algorithmic Trading and Quantitative Trading	1.5:0:1.5	Fall	
	FE553		Alternative Investment	1.5:0:1.5	Fall	
	FE554		Fixed Income Portfolio Management	1.5:0:1.5	Fall	☐ FE504, FE513
	FE557		Commodity Trading	1.5:0:1.5	Fall	
	FE563		Investments in Venture	1.5:0:1.5	Fall	
	FE564		Introduction to FinTech	1.5:0:1.5	Fall	
	FE565		Financial Information and Security Design	1.5:0:1.5	Fall	
	FE566		Cross-Sectional Financial Data Analysis	1.5:0:1.5	Fall	
	FE567		Financial Data Analysis with Big Data	1.5:0:1.5	Fall	
	FE568		Big Data Analysis on Credit Risks	1.5:0:1.5	Fall	
	FE573		Investments in Private Markets	1.5:0:1.5	Fall	
	FE583		Foreign Currency Investment	1.5:0:1.5	Fall	
	FE587		Estimation of Asset Pricing Models	1.5:0:1.5	Fall	☐ FE512
	FE600		Special Topics in Financial Engineering	1.5:0:1.5	Spring, Summer, Fall	
	FE617		Distinguished Lectures in Asset Management	1.5:0:1.5	Fall	
	FE619		Distinguished Lectures in Financial Engineering	1.5:0:1.5	Fall	
	FE627		Cases in Asset Management	1.5:0:1.5	Fall	
	FE628		Case Studies on Risk Management	1.5:0:1.5	Fall	☐ FE528
Research	FE960		Thesis Research (Master)	0:0:9		