

NOC:Probability and Stochastic for Finance II - Video course

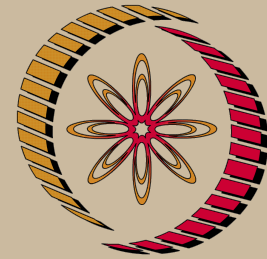
COURSE OUTLINE

This course provides the minimum mathematical requirements to study mathematical finance or more precisely the pricing of financial derivatives.

COURSE DETAIL

Week	Topics
1.	Fundamentals of Interest Rate Fixed income securities Term structure of Interest rate-I Term structure of Interest rate-II Optimization problems in Finance
2.	Crash course on Karush-Kuhn-Tucker Conditions Mean Variance Portfolio Optimization Marketing Model & Related Issues The Capital Asset Pricing Model-I The Capital Asset Pricing Model-II
3.	The Basics of Financial Markets & Financial Derivatives Binomial Trees and Arbitrage Pricing Options using Binomial Trees-I Pricing Options using Binomial Trees-II Girsanov's Theorem
4.	Black Scholes Formula:The Risk Neutral Approach More on Black Scholes Formula Dividend Paying Stocks Pricing Forwards & Futures-I Pricing Forwards & Futures-II

References:



NP-TEL

NPTEL

<http://nptel.ac.in>

Humanities and Social Sciences

Pre-requisites:

Mathematics should be at least a course among the minor subjects.

Coordinators:

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