NOC:Probability and Stochastics for finance - 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 .No	Topic
1	Basic Probability Interesting problems in probablity Random variables,distribution functions and independence Chebyshev inequality,Borel-Cantelli lemmas and related issues Law of Large Numbers and Central Limit Theorem
2	Conditional Expectation Martingales Brownian Motion
3	Deterministic vs random differential equation Stochastic Integrals Ito Calculus
4	Stochastic Differential Equations:Definitions and Examples Properties of the solution of stochastic differential equations

NP-TEL

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http://nptel.ac.in

Mathematics

Coordinators:

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