

Workshop on Financial Engineering



OVERVIEW

In developing the theory, the course will cover stochastic calculus, the valuation of securities via martingale methods and valuation via partial differential equations as well as the necessary numerical methods. Application will include exchange options, quantos, exotics (binaries, barrier options, asian options, lookbacks), interest rate derivatives & credit risk derivatives. We will also discuss the measurement and management of market risk and credit risk and employ Value-at-Risk.

The course is necessarily quantitative and symbolically oriented, although practical applications are emphasized. Basic ideas from statistics and calculus will be assumed but not required. We will develop what we need in the class.

LEARNING OBJECTIVES

The objective of this course is to provide the participants with the necessary mathematical skills to value a wide variety of financial instruments including but not limited to the traditional Derivative Contracts as well some Exotics. The course presents a systematic, unified approach to the pricing of such contingent claims and adopts cutting edge methods throughout. Continuous-time mathematics is developed and employed as the main tool of analysis due to its practical application. There are very few learning alternatives for these specialized skills in Pakistan and the demand for such skills is increasing due to the changing regulatory framework for financial institutions globally including Pakistan.

TOPICS COVERED

1. Continuous Time Finance
2. Security Valuation Paradigm
3. Black-Scholes Valuation Model
4. Market Risk Measurement & Management
5. Various types of Derivatives
6. Numerical Methods

WHO SHOULD ATTEND

The course is suitable for anyone with some quantitative background who is seeking an understanding of the structuring, pricing, hedging and use of complex instruments. It will primarily be of interest to those students who are engaged in or looking to start careers in Banking, Markets/Treasury, Insurance, Asset Management, Quantitative Analysis, Risk Management or Structuring, but also relevant if you expect to encounter these instruments in the corporate context.

THE INSTRUCTOR

Mr. Omer J. Ghani is a graduate of the University of Pennsylvania and London Business School. He has over 10 years of experience in creating and trading alternative investment and risk transfer solutions for institutional clients globally. Initially an Actuary at Swiss Re in New York, Mr. Ghani went on to run the Insurance Derivative Solutions team at Bear Stearns in London, specialising in dealing with senior institutional clients. Mr. Ghani joined Macquarie Bank in 2008 as Head of Emerging Markets in the Institutional Investment Solutions Department and was also the co-founder of Old Park Capital, a UK based AMC. He was also a Visiting Faculty in the Department of Accounting & Finance at LUMS. He is currently Visiting Faculty at IBA, Karachi and a Senior Executive at Magnus Investment Advisors Limited."

Workshop Fees

PKR 40,000/participant

Inclusive of Course material, IBA Workshop Certificate, Lunch, Refreshments, Group Photograph & Business Networking.

Discount Policy

*10% Discount for 2 or more than 2 participants from the same organization

**15% Discount for 5 or more than 5 participants from the same organization

***25% Discount to Members of ICAP (ICAP Members will get 14 CPD Hours in each module)

FOR REGISTRATION:

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