

MOVE AHEAD IN
THE FINANCIAL
WORLD



WHAT WE OFFER

Certificate in Financial Risk
Management

This certificate consists of
following courses:

1. Quantitative methods in finance
2. Financial Risk Management
3. Derivatives Pricing
4. Time series analysis and
forecasting in finance

CONTACT US NOW

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CERTIFICATE IN FINANCIAL RISK MANAGEMENT

Contents:

1. Quantitative methods in finance:

Time value of money – present and future value of an annuity – discounted cash flow applications – NPV and IRR – Portfolio return measurement – Money and time weighted rate of return – Money market yields. Statistical concepts and market returns – measures of central tendency – measures of location – Sharpe ratio – symmetry and skewness – Probability – expected value and variance – Baye's formula – Common probability distributions – Uniform, Binomial and Normal distributions.

2. Financial Risk Management:

Financial Risks in Banks. The Basel II&III Capital Accords. Operational Risk Analysis and Management – A Four-Step Measurement Process for Operational Risk. The Basel II Operational Risk Capital Charge – Basic Indicator Approach (BIA) & The Standardized Approach (TSA). Mapping of Business Lines – Advanced Measurement Approach (AMA) for Operational risk. Actuarial Risk Models and Model Risk. Credit Risk Analysis & Management for the Retail Portfolio, Probability of Default, Loss Given Default, Exposure at Default. Market Risk Analysis & Management (Foreign Exchange, Interest Rates, Commodities, Equities)-Historical Simulation-Monte Carlo Simulation.

3. Derivatives Pricing:

Derivative markets and instruments, forward markets and contracts, Pricing And Valuation Of Forward Contracts, Generic Pricing and Valuation of a Forward Contract, Pricing and Valuation of Equity Forward Contracts, Pricing and Valuation of Fixed-Income and Interest Rate Forward Contracts, Pricing and Valuation of Currency Forward Contracts. Futures markets and contracts: Types Of Futures Contracts -Short-Term interest Rate Futures Contracts-Intermediate- and Long-Term interest Rate Futures Contracts - Stock index Futures Contracts- Currency Futures Contracts - Pricing And Valuation Of Futures Contracts -Generic Pricing and Valuation of a Futures Contract- Pricing interest Rate Futures. Option markets and contracts: Basic Characteristics of Options -Types of Options - Principles Of Option Pricing - Payoff Values-Boundary Conditions- Effect of a Difference in Exercise Price/Time to Expiration. Discrete-Time Option Pricing: The Binomial Model - Continuous-Time Option Pricing: The Black-Scholes-Merton Model. Swaps.

Pricing Options On Forward And Futures Contracts and An Application To Interest Rate Option Pricing. Swap markets and contracts: Characteristics of Swap Contracts -Termination of a Swap -Pricing And Valuation Of

4. Time Series analysis and forecasting:

Correlation Analysis – Correlation Coefficient –Testing Significance of Correlation Coefficient. Regression – Linear Regression – Multiple Regression – Using Dummy Variables in Regression – Violations of Regression Assumptions – Model Specification and Errors in Specification – Models with Qualitative Dependent Variables. Principles of Forecasting Time-Series Analysis and Forecasting – Components of Time Series – Trend Analysis – Forecasting Model Selection – Moving Average and Exponential Smoothing – Forecasting with Regression Methods – Time Series Decomposition – ARIMA (Box-Jenkins)-Type Forecasting – The Forecast Process and Choosing the Right Forecasting Technique.