



## **First Course in Financial Derivatives**

### **OVERVIEW**

This course is designed to provide participants with a thorough understanding of the derivatives markets & instruments for both OTC and exchange-traded instruments and how derivatives are used daily to manage both exposures and provide solutions. Participants will gain a comprehensive understanding of the major classes of derivatives.

### **COURSE CONTENT**

- What is a derivative?
- Uses of derivatives
- Advantages
- OTC vs. exchange-traded products
- The clearing process
- Options payoff
- Uses of options
- Types of Forward contracts.
- Pricing Forward / forward rates
- Interest rate swaps
- Currency swaps
- Commodity swap
- Basis swaps
- Volatility swap
- Relationship between swaps and forwards
- Cash flow analysis of options contracts
- Binomial model of pricing options
- Black-Scholes model
- Put-call parity
- Cash flow analysis of forward contracts
- Valuing equity forward contract
- Valuing bond forward contracts
- Valuing foreign exchange forward contract
- Valuing forward rate agreements
- Cash flow analysis of futures contracts
- Forward versus futures contracts
- Futures contracts on bonds
- Futures contracts on interest rate
- Marking-to-market an interest rate swap
- Marking-to-market a currency rate swap
- Nature of hedging
- Hedging with options contracts
- Hedging with forwards and swaps
- Hedging with futures contracts



**DR. JAFFAR  
MOHAMMED**

CONSULTING AND TRAINING

- swaps applications in asset/liability management
- hedging using Caps, floors, Collars
- hedging using Swaptions
- Total return swaps
- Credit default swaps
- Credit-linked notes