

NIRMA UNIVERSITY
Institute of Management
Master of Business Administration (Full Time) Programme/
Integrated Bachelor of Business Administration-Master of Business
Administration Programme/
Master of Business Administration (Family Business &
Entrepreneurship) Programme

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Course Code	MFT5SEEF04 MBM5SEEF04 MFB5SEEF04
Course Title	Derivatives and Risk Management

Course Learning Outcomes (CLO):

At the end of the course, the students will be able to:

1. Explain the application of financial derivative instruments for hedging, trading and arbitrage purposes and understand their regulatory framework.
2. Apply the principles and models for valuation of financial derivatives.
3. Apply the principles and models for measuring risk.

Syllabus

Teaching Hours

<p>Unit I: Overview of Financial Derivatives</p> <ul style="list-style-type: none"> • Enterprise Risk Management and Derivatives • Types of derivatives: Forward and Futures, Options, Swaps • Financial derivatives markets: OTC, Exchange-traded • Scope of financial derivatives: Stocks & Indices, Foreign Exchange, Interest Rates 	03
<p>Unit II: Forward and Futures</p> <ul style="list-style-type: none"> • Understanding the forward and futures contracts • Hedging with forward/futures • Determination of forward/futures prices • Stock and Index Futures • Currency Futures • Interest Rate Futures 	07
<p>Unit III: Options</p> <ul style="list-style-type: none"> • Understanding the option contracts • Hedging with options • Determination of option prices: Black-Scholes-Merton Model • Stock and Index Options • Currency Options • Interest Rate Options • Volatility Smiles • Option trading strategies 	11

<ul style="list-style-type: none"> • Option Greeks 	
Unit IV: Swaps <ul style="list-style-type: none"> • Understanding the swap contracts • Designing the swaps: Interest Rates, Currency 	03
Unit V: Value at Risk <ul style="list-style-type: none"> • Concept of VaR • Measuring VaR: Single Security and Portfolio 	03
Unit VI: Other Derivatives <ul style="list-style-type: none"> • Introduction to Commodity Derivatives • Introduction to Credit Derivatives 	03

Suggested Readings:

1. Hull, J. C., *Options futures and other derivatives*. Pearson Education India.
2. Chance, D. M., & Brooks, R., *Derivatives and Risk Management Basics*. Cengage Learning, New.
3. Sundaram, R. K., & Das, S. R., *Derivatives: principles and practice*. New York, NY: McGraw-Hill Irwin.
4. Vohra, N.D., *Futures and Options*. Tata McGraw Hill Education Pvt. Limited.
5. Janakiraman, S., *Derivatives and risk management*. Pearson Education India.
6. Madhumathi, R., *Derivatives and Risk Management*. Pearson Education India.

w.e.f. Academic Year 2019-20 and onwards