



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

COURSE CONTENT

RISK MANAGEMENT AND FINANCIAL DERIVATIVES								
III Semester: MBA								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIA	SEE	Total
CMBD34	Elective	4	-	-	4	40	60	100
		Contact Classes: 45		Tutorial Classes: Nil		Practical Classes: Nil		Total Classes: 45
Prerequisite: Financial Management								

I. COURSE OVERVIEW:

The course enlightens the student's knowledge in terms of basic concept of risk, its types, and the need for risk management and their significance in regulating banking risks. Detailed examination of interest rate risk, market risk, credit risk, operational risk, and exchange rate risk. The objective of this course is to make students efficient in the area of Derivatives, such as Forwards, Future Markets, Swaps and Option Strategies. It gives understanding about the derivatives in stock, commodity and FOREX markets with changes in interest rates, exchange rates, stock prices, commodity prices, inflation, weather, etc.

II. COURSES OBJECTIVES:

The students will try to learn:

- I. The concepts of Risk Management, measurements and risk management strategies using derivatives.
- II. Provide understanding of various risk measurement tools.
- III. Impart knowledge of various aspects in derivatives market.
- IV. The various aspects in Risk Management and techniques in Risk Management.

III. COURSE OUTCOMES:

At the end of the course students should be able to:

CO1	Discuss the various types of risks and their implications on business and financial markets.
CO2	Make use of tools such as VaR and CaR for measuring and managing different types of risks.
CO3	Explain the derivative market system and its origin and structure for better investment decisions.
CO4	Classify the prices and interest rates of futures and forwards markets for controlling currency fluctuations.
CO5	Explain the need, importance, principles and characteristics of options markets to promote strategic contracts and different pricing models, strategies and advanced options in hedging and currency options for promoting the trading
CO6	Summarize the currency, commodity and equity index swaps and its valuation to fix the risk managed prices..

IV. COURSE CONTENT:

MODULE – I: INTRODUCTION TO RISK MANAGEMENT (08)

Risk Management, Scope of Risk Management, Benefits of Risk Management, Classification of Risks: Systematic Risk and Unsystematic Risk, Business Risk, Financial Risk. Financial Markets, Market Risk: Price Risk, Currency Risk, Liquidity Risk, Interest Risk, Credit and Counterparty Risk, Operational Risk, Model Risk, Risk Management Process.

MODULE - II: RISK MEASUREMENT TOOLS (09)

Capital Adequacy Ratio, Basel Norm: Basel Accord I, II & III, Need and Scope of studying Basel Norms, Types of risk: Interest Rate Risk, Market Risk, Credit Risk, Operational Risk, Exchange Rate Risk, Liquidity Risk. Value at Risk (VaR), Cash Flow at Risk: Applications and Problems on VaR&CaR.

MODULE - III: INTRODUCTION TO DERIVATIVE MARKETS (10)

Derivative Market, Types of Derivatives, Development and Growth of Derivative Markets, Factors influencing the Growth of Derivatives Market in India, Regulations of Derivative Market. Forward and Future Contracts: Forward Contract, Pricing Forward Contracts, Foreign Currency Forward Contract, Commodity Forward Contract, Counterparty Risk in the Forward Contract, Difference between Forward and Spot Market.

Futures Contract: Future Contract Design, Physical Settlement, Delivery Options and Cash Settlement, Future Market, Global Futures Market size, Commodity Futures, Equity Futures, Stock Index Futures, Currency Futures, Futures on Government Bonds, Notes and Bills, Cost of Carry Model for Futures and Forwards.

MODULE - IV: RISK MANAGEMENT TECHNIQUES – OPTIONS CONTRACT (09)

Options Contract and The Structure of Option Market, Types of Options, Option Strategies, Principles of Call Option Pricing, Put Option Pricing, Put - Call Parity Theorem: Option Pricing, Arbitrage Pricing. Binomial Pricing Model: The Black- Scholes Options Pricing Model, Uses of Options Strategies.

MODULE - V: RISK MANAGEMENT TECHNIQUES – SWAPS CONTRACT (09)

SWAP Market and its Evolution, Interest Rate Swap: Structure of a Typical Interest Rate Swap, Pricing and Valuation of Interest Swaps, Interest Rate Swap Strategies, Interest Rate Swaps in India. Currency Swaps: Currency Swaps Stature, Currency Swaps Pricing and Valuing Currency Swap, Currency Swap in India, Equity Swap: Equity Swap Pricing and Valuing of Equity Swap, Equity Swap Strategies, Pricing and Valuing of Commodity Swap, Carbon Credit, Weather Derivatives.

V. TEXT BOOKS:

1. John C Hull, “Risk Management and Financial Institutions”, Wiley, 5e, 2018.
2. Jayanth Rama Varma, “Derivatives and Risk management”, Tata McGraw Hill, 1e, 2011.
3. Don M Chance, Robert Brooks, “An Introduction to Derivatives and Risk Management”, 9e, Cengage, 2013.

V. REFERENCE BOOKS:

1. Dhanesh K. Khatri, Derivatives and Risk Management, Macmillan, 1e, 2012
2. Rene M. Stulz, Risk Management & Derivatives, Cengage Learning, 1e, 2003.

VI. Web References:

1. <https://www.scribd.com/document/184434634/45790874-mba-3-sem-finance-notes-bangalore-university>.

2. <http://www.slideshare.net/venkykk/fifm-2013-final-financial-institutions-and-notes-as-per-bput-syllabus-for-mba-2nd>.

VIII. E-Text Books:

1. http://iimsnepal.com/download/e%20book%20materials/mba%20ebook%20material/mba%203rd%20semester%20ebook%20materials/dmgt512_financial_institutions_and_services.pdf.
2. <http://www.ddegjust.ac.in/studymaterial/mba/fm-404.pdf>.