



# MANAGEMENT OF FIXED INCOME SECURITIES

## PROF. JITENDRA MAHAKUD

Department of Humanities and Social Sciences  
IIT Kharagpur

**PRE-REQUISITES :** Financial Institutions and Markets

**INTENDED AUDIENCE :** MBA Finance, Economics and Commerce

**INDUSTRY SUPPORT :** Financial Consulting Companies, Investment Firms, Brokerage Houses

### COURSE OUTLINE :

This course provides an overview of valuation and management of various fixed income securities such as bonds, interest rate derivatives, interest rate swaps and credit default swaps. This course introduces the basic feature of various fixed income securities and markets. It presents the various methods used for valuation of bonds, theories related to interest rate determination, measure the alternative risk associated with fixed income securities. Various bond portfolio investments strategies are discussed. Further, various techniques used for valuation of bond with embedded options and estimation of binomial trees are also covered. A thorough discussion on different derivative instruments such as interest rate derivatives, interest rate swaps and credit default swaps are also analyzed.

### ABOUT INSTRUCTOR :

Prof. Jitendra Mahakud is Professor of Economics and Finance at the Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur. He is also a joint faculty at the Vinod Gupta School of Management, IIT Kharagpur, in the area of finance. He obtained his PhD from the Indian Institute of Technology, Mumbai. He has published more than 65 papers in leading national and international journals. He has co-authored a book titled Financial Institutions and Markets: Structure, Growth and Innovations published by McGraw Hill Education. He has edited two books one on Advances in Research in Business and Finance (Corporate Finance) and the other on Advances in Research in Business and Finance (Investment Management). His areas of teaching and research include financial markets and institutions, corporate finance, investment management, financial economics, behavioral finance and banking.

### COURSE PLAN :

**Week 1:** Introduction to Bonds and Bonds Market

**Week 2:** Valuation of Bonds

**Week 3:** Term Structure of Interest Rates

**Week 4:** Bond Risk

**Week 5:** Bond Investment Strategies

**Week 6:** Valuation of Bonds with Embedded Options

**Week 7:** Estimating the Binomial Tree

**Week 8:** Introduction to Bond Derivatives

**Week 9:** Management of Fixed Income position with interest rate derivatives

**Week 10:** Interest rate Swaps

**Week 11:** Swap Derivatives

**Week 12:** Currency and Credit Default Swaps