

## SHAHEEDSUKHDEV COLLEGE OF BUSINESS STUDIES

ShaheedSukhdev College of Business Studies is proud to announce the introduction of vocational course on '**Integrated Financial Modelling and Financial Econometrics (IFMFE)**' in association with BSE Institute Ltd, an arm of leading stock exchange, BSE. The course has been especially designed to equip students with specialized skills needed to meet the ever increasing challenges of the financial markets and develop them into competent financial professionals. A strong practical approach including case discussions, hands on practice and research orientation are key highlights of this course which will be delivered by most reputable industry experts and academicians.

The college is inviting registrations from the interested students for the first batch of IFMFE 2015 as per the following guidelines:

### **Eligibility**

#### **Essential**

- 12<sup>th</sup> Pass with minimum 75 % marks
- Pursuing / Completed Graduation or equivalent

#### **Desirable:**

- Basic knowledge of financial management, economics, statistics and mathematics

### **Admission Procedure**

- Candidates will be admitted on the basis of merit calculated from their graduation marks (till date) ( 70 % Weightage ) and Interview ( 30% Weightage )
- Shortlisted candidates will be called for interview on the basis of information furnished in the Registration Form
- Preference will be given to second, third year students and Graduates.

### **Important Dates**

**Last date of Registration** 9<sup>th</sup> October 2015

\* Registration fees of Rs. 200 by Cash or Demand draft in the name of 'Principal, ShaheedSukhdev College of Business Studies'

The Registration form and the fees are to be submitted in the administrative office, SSCBS.

Interview Process, Display of Merit fees and Payment of course fees (Rs 35000) will be done during 10-16<sup>th</sup> October' 2015

**Tentative Date of Commencement of Course:** 17<sup>th</sup> October, 2015

*\*Classes will be held during Weekend, Gazetted Holidays and Semester Break*

*\*Classes will be suspended from 15 November to 18 December due to University Examinations*

**Course Duration: 290 Hours**

**ANNEXURE I: DETAILED COURSE STRUCTURE**

**ANNEXURE II: REGISTRATION FORM**

**Course coordinators**

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# **ANNEXURE I : DETAILED COURSE STRUCTURE**

**Integrated Financial Modeling and Financial Econometrics (IFMFE) 290 hrs.**

## **Module1: Introduction to Financial Modeling and Spreadsheet Essentials**

- Introduction to Financial Modeling
  - Strengths and weaknesses of spreadsheets
  - Golden rules of spreadsheet design
  - Do we make the most of modeling?
- Spreadsheet essentials
  - Lookup and reference functions
  - NPV and IRR functions
  - Data tables
  - IF function
  - Excel Skills - Shortcuts, Formulas, Array Function and Pivot Tables
  - VBA
  - Macros
  - Simple exercise/models in excel

## **Module 2: Integrated financial modeling I (Data, cost and revenues)**

- Data Collection and Data Structuring
- Preliminary Scrutiny of the Data and Information
- Understand the Business Model and Operating Model
- Modeling the Historical Statement
- Business Drivers Identification and Modeling
- Modeling Assumptions for Future Action
  - Modeling Revenue Build-up - projecting the future revenues
  - Modeling Cost Build-up - projecting the future cost
  - Modeling the Asset Schedule

## **Module 3: Integrated financial modeling II (Tax planning)**

- Modeling the Depreciation Schedule - Book and Income Tax Depreciation
- Working Capital & Term Loan Modeling - Debt Infusion
- Tax Modeling
- Modeling MAT and MAT credit

- Modeling Impact of Accumulated Losses, Current Tax and Deferred Tax on Tax Payable
- **Case study 1**
- **Case study 2**
- **Case study 3**

#### **Module 4: Integrated financial modeling (Financial statement analysis)**

- Equity Modeling - Equity Infusion
- Modeling Paid Up Capital and Share Premium Account
- Modeling Retained Earning Schedule
- Modeling the projected P/L and BS
- Modeling the projected Cash Flow Statement
- Conducting Covenant Testing
- Performing Ratio Analysis
- WACC and Cost of Equity Analysis
- Performing Valuation using DCF (FCFF & Enterprise Value) and Comparable analysis (Relative Valuation)
- Performing sensitivity/scenario analysis

#### **Case study 1**

#### **Case study 2**

#### **Case study 3**

#### **Module 5: Measuring Risk**

- Estimating betas with regression analysis
- Using daily, weekly, and monthly data
- Testing market efficiency
  - With regression analysis
  - With pivot tables
  - Recording and editing macros

#### **Case study 1**

#### **Case study 2**

#### **Case study 3**

#### **Module 6: Advanced risk analysis**

- **Sensitivity, Scenario**
- Monte-Carlo simulation
- Risk analysis of discounted cash flow models
- Spreadsheet features
  - Using @Risk for Monte-Carlo simulation
  - Combining macros with @Risk

### **Case study 1**

### **Case study 2**

### **Case study 3**

## **Module 7: Portfolio Optimization**

- Mean-variance portfolio selection
  - Computing mean-variance portfolios
  - Back-testing portfolio performance
  - Research on portfolio selection
- Bond portfolio selection
- Capital budgeting
- Spreadsheet features
  - Matrix operations in Excel
  - Using Solver for optimization
- Using macros to generate the efficient frontier

## **Module 8: Mergers and Acquisitions**

- Overview of M&A
- Synergy and Accretion/Dilution Analysis
- Merger Plan - Ownership Vs Deal Price
- Modeling a financing plan
- Estimating value of a Merger Transaction
- Discounted Cash flow Analysis
- Comparable Company Analysis
- Comparable Transaction Analysis

### **Case study 1**

### **Case study 2**

### **Case study 3**

## **Module 9: Derivatives**

- Introduction
  - Specifications of futures contracts
  - Basis risk, why hedge?
  - Types, positions, spreads, margins, markets, underlying assets, options on futures
  - Factors affecting option prices, upper bounds, lower bounds, put & call parity.
  - Spreads, combinations, payoffs
- Black-Scholes formula
  - Pricing European options
  - Estimating implied stock return volatilities
- Greeks
  - Delta, Theta, Gamma, theta, Vega and Rho
  - Delta and gamma hedging on real data
  - Swaps: Interest rate swap and currency swaps

## **Module 10: Basic and Intermediate Econometrics**

- Introduction
  - Introduction to Basic Econometrics
  - Econometrics - Various Functional Forms and their Interpretation
  - Violation of Assumptions of OLS
  - Non-Stationarity and Stationarity in Time Series
  - Logit and Probit
  - Grangers Causality
  - Co-integration
  - ARCH & GRACH

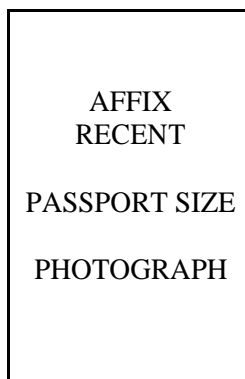
## **Module 11: Research Project (30\*3 = 90 hrs)**

**ANNEXURE II: REGISTRATION FORM**

**SHAHEED SUKHDEV COLLEGE OF BUSINESS STUDIES**

(UNIVERSITY OF DELHI)

VIVEK VIHAR, DELHI-110 095



**APPLICATION FORM FOR ADMISSION TO INTEGRATED FINANCIAL MODELING AND FINANCIAL ECONOMETRICS (2015)**

(TO BE FILLED UP BY THE CANDIDATE IN HIS / HER OWN HANDWRITING)

1 NAME OF APPLICANT: \_\_\_\_\_

*(IN CAPITAL LETTERS AND AS ENTERED IN THE CERTIFICATE OF QUALIFYING EXAM.)*

2. NATIONALITY: \_\_\_\_\_ COLLEGE/DEPT \_\_\_\_\_

3. E MAIL: \_\_\_\_\_

4. DOB (DD/MM/YYYY) \_\_\_\_\_

5. LOCAL/MAILING ADDRESS: \_\_\_\_\_

\_\_\_\_\_ PIN: \_\_\_\_\_ PHONE/MOBILE: \_\_\_\_\_

6. FATHER'S NAME: \_\_\_\_\_

OCCUPATION: \_\_\_\_\_ PHONE/ MOBILE: \_\_\_\_\_

7. MOTHER'S NAME: \_\_\_\_\_

8. QUALIFICATIONS:

CERTIFICATE / DEGREE	UNIVERSITY / BOARD	SCHOOL/COLLEGE	MONTH AND YEAR*	PERCENTAGE MARKS
1				
2				
3				

\* Actual date of completion or expected date of completion if currently enrolled

9.WORK/INTERNSHIP EXPERIENCE:

S. NO.	EMPLOYER	DESIGNATION	START DATE	END DATE
1				
2				
3				

\_\_\_\_\_  
APPLICANT'S SIGNATURE

UNDERTAKING

(1) I SHALL ABIDE BY THE RULES & REGULATIONS W.R.T. THE COURSE DESIGNED & ISSUED BY THE COLLEGE FROM TIME TO TIME.

(2) I UNDERSTAND THAT IN CASE I AM FOUND INELIGIBLE FOR ADMISSION AT ANY STAGE, MY ADMISSION TO THIS COURSE SHALL STAND CANCELLED.

(3) I ALSO UNDERSTAND THAT FEE ONCE DEPOSITED IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCE.

\_\_\_\_\_  
APPLICANT'S SIGNATURE



FOR OFFICE USE

ROLL NO. \_\_\_\_\_

CLASS & SECTION \_\_\_\_\_

DUES PAID RS \_\_\_\_\_

DD NO \_\_\_\_\_ BANK \_\_\_\_\_

FEE RECEIPT NO \_\_\_\_\_ DATE \_\_\_\_\_

\_\_\_\_\_  
CASHIER

**ADMISSION ORDER**

ADMIT PROVISIONALLY MR. / MS. \_\_\_\_\_ TO  
**INTEGRATED FINANCIAL MODELING AND FINANCIAL ECONOMETRICS (2015) ONPAYMENT**  
OF THE PRESCRIBED FEES. THE ADMISSION IS SUBJECT TO THE APPROVAL OF THE **BSE**.

PRINCIPAL

**COUNTER SIGNED BY:**

DEALING ASSISTANT COURSE CO-ORDINATOR