

## **M.Sc. (FINANCIAL ECONOMICS)**

### **FE-A-101: MICROECONOMICS**

### **FE-A-102: MACROECONOMICS AND FINANCE**

This course has been specially designed to provide understanding of macroeconomics by focusing on the relation between financial markets, monetary economics and macroeconomics. The subject is placed in the context of Indian macro economy and financial sector, aiming to show how theoretical and empirical knowledge of macroeconomics and financial markets provides ways to analyse the salient problems faced by macroeconomic policy makers. It also aims at giving insight into the role of macroeconomic variables, indicators and policy measures in decision making by businesses and investors.

### **FE-A-103: ACCOUNTANCY, IFRS AND FINANCIAL STATEMENT ANALYSIS**

The course aims at providing a thorough understanding of various essential concepts of accountancy and preparation of financial statements using the IFRS framework. The course adopts a decision-maker perspective of accounting by emphasizing the relation between accounting data and the underlying economic implications for various security market and firm level portfolio management decisions.

### **FE-A-105: FINANCIAL INSTITUTIONS, MARKETS AND REGULATIONS**

The objective of the course is to provide a comprehensive understanding the nature and Economic functions of the several types of financial institutions that are present in the market. It is expected that students will develop critical skills in assessing the relevance of the principles of finance and financial intermediation to real world situations, and to better understand the role that financial markets play in the business environment that they will face in the future. The focus will be on the description of Indian financial markets, institutions, instruments and policies. The Financial Regulation Course is designed to provide with the background; rationale and regimes of financial regulation in India. This understanding provides an essential background for decision making and analysis of security market transactions or policies.

### **FE-A-106: CORPORATE FINANCE AND CAPITAL BUDGETING**

The course aims at providing understanding of capital budgeting techniques, the advantages of using Net Present Value versus Internal Rate of Return to calculate the value of financing decisions or projects, when and how to use payback periods and risk analysis to rank financing decisions, identify the formulas for calculating cash flows resulting from investments and their use to determine the profitability of a financing decision or project for a business.

In terms of corporate finance best practices, students will also learn about the financial and strategic basis for financing decisions, various public and private techniques and products available for both short term and long term financing, techniques for cash flow management, forecasting and planning, and best practices of cash flow management as it applies to real life examples.

## **FE-A-107: SECURITY ANALYSIS & PORTFOLIO MANAGEMENT**

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This course aims at providing an in depth understanding of the theories, principles, and techniques of security valuation, analysis and portfolio management of fixed income securities, equity and derivative securities as well as portfolio management of index funds and insurance companies.

## **FE-A-108: COMPUTATIONAL FINANCE**

This course aims at providing an introduction to the computational issues in financial problems. The focus is on an understanding of the concepts and tools in computational techniques with R software. In addition, the course introduces numerical techniques for valuation, pricing and hedging of financial investment instruments such as fixed income securities and options.

## **FE-A-109: BASIC ECONOMETRICS**

The objective of this paper is to introduce some of the statistical and econometric techniques that are widely used in empirical work in economics and other related disciplines to students. It covers the problems faced in estimation and inference in the context of the single-equation linear regression model. The main objective of the paper is to teach students how to apply relevant econometric methods to analyse data and interpret the results from such analyses.

The focus is on conceptual understanding and ‘hands on’ applications using economic data drawn from real-world examples, rather than on formal theoretical proofs. By the end of the paper, students should be able to appreciate and interpret the econometric and statistical analysis reported in many studies in economics and be able to carry out and interpret their own econometric analysis.

## **FE-A-110: FINANCIAL ECONOMETRICS**

The course intends to familiarize students with the principal techniques in Financial Econometrics. The basic econometric techniques for finance like regression analysis, time series analysis, Co integration & error correction methods are covered. It should provide an understanding of the use of these techniques in financial economics.

## **FE-A-111: INTERNATIONAL FINANCE - I**

The objective of the course is to provide an understanding of both the key features of foreign exchange markets and the actual problems of financial decision making within an environment of free flows of foreign capital and floating exchange rates. The course focuses on the nature of foreign exchange exposure and risk and its management arbitrage, speculation,

hedging, the types of foreign exchange operations spot, forward, foreign exchange swaps, currency swaps, futures and options.

#### **FE-A-113: FINANCIAL DERIVATIVES**

This course provides an in depth understanding of various derivative securities and markets. It covers options, futures, forwards, swaps, interest rate forwards and options, commodity derivatives. It aims at giving the conceptual understanding as well as practical knowledge about derivative markets in India.

#### **FE-A-114: FINANCIAL MODELLING AND ENGINEERING**

The course combines applications of various financial corporate and valuation models with excel. It also provides an in depth understanding of various types of derivative structured financial products. The focus is on using Excel and VBA for pricing and valuation of derivatives, equity linked products and understanding of the latest developments.

#### **FE-A-115: FINANCIAL RISK MANAGEMENT**

The objective of this course is to introduce financial risk management concepts and techniques that are widely used. The focus is on market risk and credit risk. The course covers the conceptual understanding and practical methods of risk identification, assessment and measurement. It also covers the risk management and control applications with real world examples. By the end of the course, students should be able to use risk measurement techniques and interpret risk profile of a firm.

#### **FE-A-116: PROJECT APPRAISAL AND FINANCE**

The objective of this course is to familiarise the students with the project appraisal types, risk analysis, project financing costing and valuing; it also provides an overview of global project appraisal issues. The course aims at providing an understanding of practical aspects like, project administration, negotiation and preparation of project report.

#### **FE-A-117: STATISTICS AND OPERATIONS RESEARCH**

The objective of this course is to familiarize students with statistical theory and its application as the foundations for data analysis, as well as to acquaint them with basic and intermediate techniques from the field of operations research. Students at the end of the course should be familiar with the analysis and interpretation of data, along with hands on training in both of these fields.

#### **FE-A-118: BUSINESS ANALYTICS**

This Learning path enables participants to gain three critical skills: data analysis and problem solving framework, the ability to perform descriptive analytics and visualization, and the expertise to build and implement the most widely used data science and machine learning algorithms in use today, with R

### **FE-B-101: INTERNATIONAL FINANCE - II**

This course offers a comprehensive discussion of principles of financial economics to explain how international corporate finance decisions are made in the real world. It particularly tries to address the issues and problems of the international investment management & financing by the firms and multinational corporations in the global financial markets. This course also covers firm level decision making problems like valuation techniques and financing decisions in a cross-border setting, the cost of capital around the world, evaluation of investments in emerging markets, capitalizing on market imperfections while making financial and investment decisions.

### **FE-B-102: BEHAVIOURAL FINANCE**

This course examines the behavioural strategies that investors rely upon to make decisions, the structure and speculative dynamics of returns in world equity markets (from a psychological perspective), and the practical implications of behavioural finance.

### **FE-B-103: COMMERCIAL BANKING**

Introduction of financial sector reforms have drastically changed the structure of Indian banking and induced competition which not only improved profitability and efficiency of banks but also led to innovation in products and services that the banks offer. The objective of this course is to acquaint the students with the whole gamut of banking operations and also help them become a very successful bank manager, in case they choose banking as a career.

### **FE-B-104: DEVELOPMENTAL FINANCE**

This course aims at providing an in depth discussion of various aspects and issues related to development finance. It provides an understanding of project appraisal and social cost benefit analysis. The focus is on the latest sources of developmental finance including microfinance and sovereign wealth funds.

### **FE-B-105: STRATEGIC FINANCE & INVESTMENT BANKING**

The objectives of this course are to provide a comprehensive background of financial restructuring and mergers and acquisitions. The course aims at imparting a strong conceptual foundation in investment banking with focus of various modelling techniques like cash-flow, LBO modelling and mergers and acquisitions modelling, it also provides an understanding of

investment banking processes and best practises. The focus is on strategic perspectives, valuation methods and financing structures.

### **FE-B-106: MARKETING OF FINANCIAL SERVICES**

The objective of this course is to introduce students to the concepts and techniques of service marketing. The course is designed to cover all-important aspects of marketing of services, increase students understanding of marketing practices and strategies as applied in the service sector.

### **FE-B-107: TAXATION**

This course offers an understanding of tax implications for the managerial decisions. The focus is on various direct and indirect taxes in India and their relevance in corporate decision making.

### **FE-B-108: INSURANCE ECONOMICS**

This course aims at providing a comprehensive understanding of economics of life assurance including the concept of risk, legal aspects of life insurance, life insurance mathematics, construction of life tables, asset management by life insurance firms, underwriting and reinsurance. This course also aims at providing a comprehensive understanding of various aspects of general assurance .The focus is on the concept of risk, legal aspects of general insurance, various classes of general insurance, pricing and financing, general insurance underwriting and reinsurance

### **FE-B-109: LAW AND ECONOMICS - I**

The hallmark of the new interdisciplinary field of law and economics is the application of the theories and empirical methods of economics to the legal system across the board, for example, the common law fields such as torts, contracts, property, etc. In fact, Ronald Coase's paper on "The Problem of Social Cost" (1960), Guido Calabresi's article on "Some Thoughts on Risk Distribution and the New Law" (1961), and the work of Alchian on "Some Economics of Property Rights" (1961) had applied the methods of economics to some of the areas of law. One endeavor, which is gaining momentum and respectability, is the application of economic analysis to legal problems. The works of Richard Posner's book on *Economic Analysis of Law* (1972) widely contributed to the introduction of the Law and Economics course. In addition, the economic analysis of law has extended to non -market behaviour, particularly influenced by the theoretical framework of Gary Becker on the economic analysis of crime, racial discrimination, and marriage and divorce.

Economics provides a scientific theory to predict the effects of legal sanctions on behavior. In addition to a scientific theory of behaviour, economics provides a useful normative standard for evaluating law and policy. Laws are not just arcane technical arguments. They are

instruments for achieving important social goals. In order to know the effects of laws on those goals, judges and other law-makers must have a method of evaluating effects of laws on important social values. Economics predicts the effects of policies on efficiency and distribution. Economic analysis often takes for granted such legal institutions as property and contract, which dramatically affect the economy. For instance, the absence of secure property and reliable contracts paralyses the economies of some nations in third world. Economist, besides substance, can learn techniques from lawyers. For example, economists frequently support the merits of voluntary exchange, but they do not have a detailed account of what it means for exchange to be voluntary. In case of contract law, it has a complex and well-articulated theory of violation. So the economists, to find their models closer to reality, will have to listen to what the law has to teach them.

The benefits of interdisciplinary study can be had only when lawyers learn economics and economists learn something about law. Module 1 is an introduction to the concepts of economics as well as law. Modules 2 to 6 will focus on economic analysis of property law, contract law, tort law, and criminal law. Finally, Module 7 will put emphasis on competition law. Overall the course deals with the explanation of established links between the subjects of Economics and Law, and development of efficient rules and regulations.

#### **FE-B-110: LAW AND ECONOMICS - II**

The primary aim of this enlargement is to develop greater applied research of legal system from economic view point and also build up the Indian experience based slant to the discipline of “Law and Economics”. This course will provide not only deeper and more complex view of the subject, but also afford to take up meaningful researches in specific type of law that has immense economic bearing and implications. In particular, this course will be dealing with Indian Environmental Laws, land related legislations (including land acquisition, town- planning, SEZ) and corporate laws. This will enable more all-round perspective of the subject with rich empirical analysis. It also deals with vital areas of concern, namely economics of litigation, economic costs of “administering or not administering justice”, question of back-log of cases, alternative procedures of administering justice. Similarly, the economic analysis of law making process, machinery and its efficiency will be a distinguishing feature of this course.

#### **FE-B-111: COMPANY LAW**

This course provides detailed exposition to legal aspects of the firm in Indian environment. The focus is on the characteristics of company as a legal entity, legal financial powers of various parties like shareholders, directors and provisions regarding multinational companies.