MSc Financial Economics – SH506

1. Objectives

The objectives of the MSc Financial Economics programme are:

- To provide advanced postgraduate training in financial economics with emphasis on financial markets and international finance, and with applications to real world situations by business firms, financial institutions, and government agencies.
- To prepare individuals to assume key positions of responsibility by upgrading their knowledge and skills to comparable international standards.
- To develop the ability to identify problems and the capacity for decision-making, leading to practical solutions.
- To enhance the individual's capacity to meet emerging challenges within an organisation with a view to increasing domestic and international competitiveness in a rapidly changing global environment.

2. General Entry Requirements

In accordance with the University General Entry Requirements for admission to Postgraduate degree Programmes.

3. Programme Requirements

At least a Second Class Honours Degree from a recognised University.

4. General and Programme Requirements - Special Cases

The following may be deemed to have satisfied the general and programme requirements for admission:

(i) Applicants who do not satisfy any of the requirements as per Regulations 2 and 3 above but who submit satisfactory evidence of having passed examinations which are deemed by the Senate to be equivalent to any of those listed.

(ii) Applicants who do not satisfy any of the requirements as per Regulations 2 and 3 above but who in the opinion of Senate submit satisfactory evidence of the capacity and attainments requisite to enable them to pursue the programme proposed.

(iii) Applicants who hold a full practising professional qualification obtained by examination.

5. Programme Duration

	Minimum Yrs	Maximum Yrs
Master's Degree:	2	4
Postgraduate Diploma	2	4

6. Credits per Semester

As per University Regulation.

7. Minimum credits required for degree award: 36 credits

	Core Modules	Dissertation	Electives	Total
Master Degree	18 credits	9 credits	9 credits	36 credits
Postgraduate Diploma	18 credits	-	9 credits	27 credits

8. Assessment

Continuous and written assessment of modules

All modules will carry 100 marks and will be taught over 1 semester and examined at the end of the academic year with details as follows (unless otherwise specified):

Written examination of 2 to 3 hour duration and continuous assessment carrying 10% to 40% of total marks.

Examinations for all modules whether taught in semester 1, 2, 3, or 4 would be held at the end of the academic year.

Continuous assessment can be based on seminars and/or assignments and should include at least 1 class test.

For a student to pass a module, a minimum of 30% should be attained in both of Continuous Assessment and Written Examination separately, with an overall total of a minimum of 40% in that module.

No resit examinations will be organised. Instead, students will be allowed to carry forward a maximum of three modules at any point in time and will be allowed to sit for the examinations with the next cohort of students.

All modules carry their own credit value.

Submission Deadlines for Dissertation

- 1st draft end of July in the final year
- Final copy: Last week day of August in the final year by 4.00 pm at latest

9. Repeat and termination of registration

If the CPA of a student is < 40% for an academic year, s/he will have to repeat the entire academic year, and retake modules as and when offered. However, s/he will not be required, if s/he wishes, to retake modules for which **Grade C** or above has been obtained.

Students will be allowed to repeat **only once** over the entire duration of the Programme of Studies.

Registration of a student will be terminated if

(i) the CPA < 40% at the end of an academic year and the student has already repeated one year of study; or

(ii) the maximum duration allowed for completion of the Programme of Studies has been exceeded.

10. Choice of Electives and Specialization Area Modules

Students will be required to submit their choice of Electives and Specialization Area Modules in order of priority by the middle of Semester I of Year I.

The University reserves the right not to offer a given Elective Module if the critical number of students is not attained and/or if there are resource constraints.

11. List of Modules

CODE	MODULE NAME	HRS/WK L + P	CREDIT
CORE MODULES			
ECON 6012	Economics of Financial Markets[1+]	3 + 0	3
ECON 6013	Quantitative Techniques[1]	3 + 0	3
ECON 6014	Macroeconomic Environment[1]	3 + 0	3
ECON 6015	Asset Pricing and Financial Derivatives[2+]	3 + 0	3
ECON 6016	International Financial Markets[2]	3 + 0	3
DFA 6202	Corporate Finance[2]	3 + 0	3
ECON 6000	Dissertation	-	9
ELECTIVES			
ECON 6017	Actuarial Analysis[4]	3 + 0	3
DFA 6300	Financial Reporting, Analysis and Corporate Governance[3]	3 + 0	3
ECON 6019	Financial Services Regulation[3]	3 + 0	3
ECON 6038	Contemporary Issues in Financial Economics[3]	3+0	3
ECON 6021	Financial Econometrics[3]	3 + 0	3
ECON 6020	E-Banking[4]	3 + 0	3
ECON 6037	Advanced Financial Modelling & Forecasting[4]	3 + 0	3

12. Programme Plan

YEAR 1

CODE	MODULE NAME	HRS/WK L + P	CREDIT
CORE MODULES			
ECON 6012	Economics of Financial Markets[1+]	3 + 0	3
ECON 6013	Quantitative Techniques[1]	3 + 0	3
ECON 6014	Macroeconomic Environment[1]	3 + 0	3
ECON 6015	Asset Pricing and Financial Derivatives[2+]	3 + 0	3
ECON 6016	International Financial Markets[2]	3 + 0	3
DFA 6202	Corporate Finance[2]	3 + 0	3

YEAR 2

CORE MODULES	MODULE NAME	HRS/WK L + P	CREDIT
ECON 6000	Dissertation	-	9
ELECTIVES	**Choose 3 from the following with 2 in semester 3 and 1 in semester 4:**		
ECON 6017	Actuarial Analysis[4]	3 + 0	3
DFA 6300	Financial Reporting, Analysis and Corporate Governance[3]	3 + 0	3
ECON 6038	Contemporary Issues in Financial Economics[3]	3+0	3
ECON 6019	Financial Services Regulation[3]	3 + 0	3
ECON 6021	Financial Econometrics[3]	3 + 0	3
ECON 6020	E-Banking[4]	3 + 0	3
ECON 6037	Advanced Financial Modelling & Forecasting[4]	3 + 0	3

NOTE

(i) Electives will be offered subject to availability of minimum number of students and Faculty resources.

(ii) [1, 2 , 3 and 4] represent modules taught in semester 1, 2, 3 and 4 respectively but examined at the end of the academic year.

(iii) + represent modules assessed jointly.

13. Outline Syllabus

ECON 6012 - ECONOMICS OF FINANCIAL MARKETS
Asset markets and asset prices; Market efficiency; Decision-making under uncertainty; Portfolio selection; Asymmetric Information; Bond markets and fixed income securities; Term structure of interest rates; Introduction to options and futures; Hedging strategies.

ECON 6013 - QUANTITATIVE TECHNIQUES
Simple and Multiple Linear Regression Analysis; Multicollinearity, Heteroscedasticity and Autocorrelation; Dummy Variables; Model Specification and Selection; Stationary Time Series: ARMA Models, Box-Jenkins Approach, Impulse Response Function; Univariate Forecasting; Applications: CAPM, APT, Stock Market Anomalies, Forecasting stock prices and stock returns.

ECON 6014- MACROECONOMIC ENVIRONMENT
Unemployment and Inflation; Economic Growth, the Financial System, and Business Cycles; Long-Run Economic Growth: Sources and Policies; Aggregate Expenditure and Output in the Short Run; Aggregate Demand and Aggregate Supply Analysis; Money, Banks, Central Banking; Monetary Policy; Fiscal Policy; Macroeconomics in an Open Economy; The International Financial System

ECON 6015 - ASSET PRICING AND FINANCIAL DERIVATIVES
Market efficiency; Arbitrage pricing theory; Capital asset pricing model; ICAPM; Consumption-based asset pricing; Inter-temporal models; Forward and futures contracts; Options; Derivative pricing models; Swaps.

ECON 6016 - INTERNATIONAL FINANCIAL MARKETS
International financial architecture; Comparative valuation techniques, trading rules and different stakeholders; Role of uncertainty and information; Volatile and efficient markets; Contagion in financial markets; Regional stock market dynamics; Financial crises and its consequences for globalisation; Regulation vs liberalisation; Modelling financial markets.

DFA 6202 - CORPORATE FINANCE
Time value of money; Appraisal of Investment Decisions using DCF (including the APV Technique) and non-DCF Techniques inclusive of the Effects of Risk, Taxation, Inflation, Different Project Lives, Capital Rationing; Option pricing and real options; Deriving the Cost of Capital and Adjusting it to reflect the Business and Financial Risks of the Project; Identifying Relevant FCFs of the Project; The Economics of Leasing; Risk, Return and Diversification; Market Models: CAPM, APT; Treasury Management and Hedging; Capital Structure of a Firm: does it matter? Dividend policy: does it matter? Acquisition and Mergers; The Overseas Investment Decision and its Implications.

ECON 6017 - ACTUARIAL ANALYSIS
Risk and Uncertainty; Risk Assessment; and Quantitative Methods in Risk Assessment; Risk Control; Introduction to Insurance Industry; Life and Non-Life Insurance; Pricing of Insurance; Legal Aspects of Insurance Contracts; Risk Financing Techniques; Employee Benefit Plans. Pension Fund Management.

DFA 6300 - FINANCIAL REPORTING, ANALYSIS AND CORPORATE GOVERNANCE
The Regulatory Framework, Companies Act, Listing Rules, Accounting Standards; Accounting Issues in Financial Reports; Recognition and measurement; Role and responsibilities of Board of Directors; Role and responsibilities of Management, Internal Auditor and External Auditor; Users of Financial reports and their expectation; Ethics in Finance and Accounting; A Framework for Financial Analysis: (a) Business Dynamics, (b) Preliminary Analysis (i.e. Vertical, Horizontal, Change and Trend), (c) Ratio Computations and Inferring, (d) Forecasting Financial Data and (e) Valuation; Content Structure and Format of Financial Statements; Preliminary Analysis, Adjustments (if applicable), Ratio Analysis and Interpretation of Accounts; Issues in Transnational Financial Analysis.

ECON 6019 - FINANCIAL SERVICES REGULATION

Code of ethics for directors, Objectives of financial regulation; Reforming financial regulation; Market discipline; Incentive v/s rule-based financial regulation; Domestic and international financial regulation; Technological change and regulation; Rating agencies; Harmonisation and international standards; Relevant aspects of company law and contract law and securities law; Laws relating to banking, insurance and other financial services, securities; Listing rules, insider trading, anti-money-laundering.

ECON 6038- CONTEMPORARY ISSUES IN FINANCIAL ECONOMICS

This module will be taught mainly with reference to latest journal articles in the area. Financial Crises; Contagion; Chaos Theory; Financial stability; International Asset Pricing Models; Risk Management: micro and macro aspects; Value at Risk; Issues in Performance Reporting; Credit Risk; Are Markets Really Efficient?; Indicators of Financial Soundness; Advanced topics in information asymmetry; Regulations.

ECON 6021 - FINANCIAL ECONOMETRICS

Nonstationary Time Series: Unit root, Cointegration, Error-Correction, VAR, VECM, Granger Causality, Weak Exogeneity; Conditional Volatility Models: ARCH, GARCH, IGARCH; Forecasting: Multivariate Forecasts, Forecast Evaluation, Forecast Combination; Regime-switching Models: TAR, SETAR; Applications: International stock market linkages, Stock market volatility, Forecasting stock returns, Trading Strategies, Predictability of stock returns, Nonlinear predictability.

ECON 6037- ADVANCED FINANCIAL MODELLING & FORECASTING

The aim of this module is to introduce students to modeling using excel in different aspects of finance-fund management, risk management for hedgers and credit analysis. As fund manager, the aim is to end up with the best portfolio weights that would generate returns subject to minimizing risk. Similarly, excel will be used for computation of betas. Students will also be introduced to the concept of derivatives means of hedging under the optimal hedge ratios in excel. The module also covers credit risk assessment/ratings in excel and Value-at-Risk. To assess the performance in-sample, out-of-sample metrics will be used under forecasting. Random walk Model. Portfolio optimization. Capital Asset Pricing Model. Optimal Hedge Ratio. ARIMA modeling, Vanilla GARCH. Credit Risk analysis. Value-at-Risk. In-sample versus out of sample performance.

ECON 6000 - DISSERTATION

Every student has to submit a dissertation of 12,000 – 15,000 words by the end of the fourth semester. The dissertation topic should preferably be selected from within the area of specialisation pursued by the student.

8 February 2011