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; and

- 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

Successful completion of an undergraduate degree with

- at least a Second Class or 50%, whichever is applicable or
- a GPA not less than 2.5 out of 4 or equivalent, from a recognised higher education institution

OR alternative qualifications acceptable to the University of Mauritius

3. Programme Requirements

At least a Second Class Honours Degree in Accounting, Economics or Finance 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 Year

Minimum 6 credits subject to regulation 5.

7. Minimum Credits Required for Awards

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

8. Assessment

Each module 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 30% 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 two (2) assignments/tests per year per module.

An overall total of 40% for combined continuous assessment and written examination componentswould be required to pass the module, without minimum thresholds within the individual continuousassessment and written examination. The same criterion will apply for modules being assessedjointly. Note that all overall mark for the two modules will be considered and not the individualmarks for each of the two modules.

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

- First Draft: End of July in the Final Year
- Final Copy: Last working day of August in the Final Year

9. Choice of Electives

Students will be required to submit their choice of Electives in order of priority by the middle of Semester 1 of Year 1.

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. Additional electives may also be offered, depending on availability of resources.

10. List of Modules

Code	Module Name	Hrs/Wk L+P	Credits
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[3]	3+0	3
DFA 6118	Security and Portfolio Management[4]	3+0	3
DFA 6300	Financial Reporting, Analysis and Corporate Governance[3]	3+0	3
ECON 6018	Stock Market Theory & Practice[3]	3+0	3
ECON 6019	Financial Services Regulation[4]	3+0	3
ECON 6020	E-Banking[4]	3+0	3
ECON 6021	Financial Econometrics[4]	3+0	3
DFA 6311	Applied Financial Modelling[3]	3+0	3

11. Programme Plan - MSc Financial Economics

YEAR 1

Code	Module Name	Hrs/Wk L+P	Credits
CORE			
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

Code	Module Name	Hrs/Wk L+P	Credits
CORE			
ECON 6000	Dissertation	-	9
ELECTIVES	**CHOOSE 3 WITH 2 IN SEMESTER 3 AND 1 IN SEMESTER 4**		
ECON 6017	Actuarial Analysis[3]	3+0	3
DFA 6118	Security and Portfolio Management[4]	3+0	3
DFA 6300	Financial Reporting, Analysis and Corporate Governance[3]	3+0	3
ECON 6018	Stock Market Theory & Practice[3]	3+0	3
ECON 6019	Financial Services Regulation[4]	3+0	3
ECON 6020	E-Banking[4]	3+0	3
ECON 6021	Financial Econometrics[4]	3+0	3
DFA 6311	Applied Financial Modelling[3]	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.

12. Outline Syllabus

DFA 6118 - SECURITY AND PORTFOLIO MANAGEMENT
The local and International Fund Management Industry: types of investors and investment products; Traditional Portfolio Theory; International Diversification; Implications of Efficient Market Hypothesis in Portfolio Management; Technical and Fundamental Analysis; Active v/s Passive Portfolio Management; Asset Allocation; Market Timing v/s Tactical Asset Allocation; Performance Measurement; Portfolio Insurance; Portfolio Theory Revisited: Geometric Mean, Deriving efficient frontiers with moments of different orders, Non-stability of correlation and volatility, and its implications for portfolio managers; Implications of international market integration on portfolio management.

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.

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.

DFA 6311 - APPLIED FINANCIAL MODELLING
Corporate Finance Models, Financial Statement Models, Portfolio Models, Asset Pricing Models, Performance measurement and Attribution, Options on Equities, Binomial Trees, Black and Scholes Model, Non-normal distribution and implied volatility, Interest Rate Models, Value at Risk. Most of the applications in this module will be Excel-based.

ECON 6000 - DISSERTATION
Every student has to submit a dissertation of 12,000 – 18,000 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.

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
Private Agents Aggregate Behaviour; Role of the State and Budgetary Implications; Central Banking and Monetary Policy; Policy Effectiveness; Inflation, Unemployment and Labour Market Dynamics; Open Economy Issues: Capital Mobility, Exchange Rate Regimes and the Balance of Payments; Growth Strategies.

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 v/s liberalisation; Modelling financial markets.

ECON 6017 - ACTUARIAL ANALYSIS
Risk and Uncertainty; Risk Assessment; 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.

ECON 6018 - STOCK MARKET THEORY & PRACTICE
Random character of stock market prices; Issues in empirical finance; Empirical tests of asset pricing models; Stock market anomalies; Event studies in finance; Stock market crash and models; Market microstructure; Link between recent theory and methodological practice; Stock market microstructure.

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, contract law and securities law; Laws relating to banking, insurance and other financial services, securities; Listing rules, insider trading, anti-money-laundering.

ECON 6020 - e-BANKING
Developments in the banking industry; Use of IT and changes in the banking industry; Growth of e-banking; Impact of e-banking on monetary management; Financial infrastructure; Risks and e-banking; Financial globalisation; Impact of e-banking on Costs and productivity of banks.

ECON 6021 - FINANCIAL ECONOMETRICS
Non-stationary 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, Non-linear predictability.

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