

BSc (Hons) Finance - LM302

1. Objectives

This Programme is designed for those students seeking to work in the banking & financial services. Moreover, it will provide a stepping stone to students who are interested in enrolling on professionally recognised qualifications such as the Chartered Financial Analyst (CFA) programme. The BSc (Hons) Finance Programme will cover both the theoretical and practical approach to issues pertaining to the finance area.

2. General Entry Requirements

In accordance with General Entry Requirements for admission to the University for Undergraduate Degrees.

3. Programme Requirement

A Pass in Mathematics at Advanced Level.

4. Minimum Requirements for Awards

(i) Degree Award

| Core & Elective Structure | Credits |
|--------------------------------------|----------------|
| CORE MODULES | |
| Finance & Accounting | 54 |
| Economics and Statistics | 15 |
| Computer Science & Engineering | 6 |
| Law | 15 |
| Management | 6 |
| Social Studies & Humanities | 3 |
| GEM | 3 |
| ELECTIVES | 6 |
| Total | 108 |

(ii) Diploma Award

The diploma is provided as a possible exit point in the programme at the end of Year 2. A student may opt for a Diploma in Finance provided s/he satisfies the minimum requirements, as specified below.

| Core Structure | Credits |
|--------------------------------|----------------|
| CORE MODULES | |
| Finance & Accounting | 33 |
| Economics and Statistics | 15 |
| Computer Science & Engineering | 6 |
| Law | 6 |
| Total | 60 |

5. Programme Duration

| | Normal | Maximum |
|----------|---------------|----------------|
| Diploma: | 2 years | 3 years |
| Degree: | 3 years | 5 years |

6. Credits per Year: Maximum 48 credits, Minimum 18 credits subject to Regulation 5.

7. Minimum Credits Required for Degree Award: 108

For the award of the **BSc (Hons) Finance Degree**, the student must obtain at least 108 credits (see 4 above).

8. Assessment

Each module will be assessed over 100 marks (i.e. expressed as %) with details as follows (unless otherwise specified):

Each module will carry 100 marks and will be assessed as follows (unless otherwise specified):

Assessment will be based on a written examination of 2-hour (for a semester module) or 3-hour (for a yearly module) duration and continuous assessment carrying a range of 20% to 30% of total marks except for the following module:

| Module | Continuous Assessment | Written Examination |
|---|---|---------------------|
| DFA 2202(3) – Research Methods for Finance and Accounting | 50% (15% for class/lab test and 35% for individual assignment) | 50% |
| DFA 2012Y(3) – Portfolio Theory and Fixed Income Securities | 40% (includes 20% for a lab-based test) | 60% |
| DFA 3012Y(5) – Options and Derivatives | 40% (includes 20% for a lab-based test) | 60% |

Continuous assessment will be based on two (2) assignments/tests per module per year.

For a student to pass a module, an overall total of 40% for combined continuous assessment and written examination components would be required without minimum thresholds within the individual continuous assessment and written examination.

Most modules in the structure are **yearly modules** which are taught over a period of two semesters and examined at the end of the second semester only. There are continuous assessments over the period of two semesters and the written examination will be of a duration of 3 hours for a yearly module of 6 credits.

Some modules in the structure are run over 15 weeks and carry 3 credits. The assessment of such modules will consist of continuous assessment and an examination of a duration of 2 hrs at the end of the semester in which the module is run.

Practical Training (ACF 3000) of at least 4 months' duration must be satisfactorily completed for the award of the degree. Such requirement may be waived for part-time students currently in employment.

Submission Deadline for dissertation:

Final copy: Mid March in the final year of the programme.

9. 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 module(s) 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. List of Modules - BSc (Hons) Finance

CORE MODULES

| Code | Module Name | Hrs/Wk | Credits |
|---------------|--|--------|---------|
| | | L+P | |
| DFA 1020Y(1) | Accounting and Financial Analysis | 3+0 | 6 |
| DFA 1201(1) | Financial Maths | 3+0 | 3 |
| DFA 1002Y(1) | Financial Theory and Practice | 3+0 | 6 |
| DFA 2012Y(3) | Portfolio Theory and Fixed Income Securities | 3+0 | 6 |
| DFA 2002Y(3) | Corporate Finance | 3+0 | 6 |
| DFA 2104Y(3) | Taxation | 3+0 | 6 |
| DFA 2202(3) | Research Methods for Finance and Accounting | 3+0 | 3 |
| DFA 3006Y(5) | International Finance | 3+0 | 6 |
| DFA 3012Y(5) | Options and Derivatives | 3+0 | 6 |
| STAT 1004(1) | Statistics for Finance | 3+0 | 3 |
| ECON 1111(1) | Microeconomics | D.E. | 3 |
| ECON 1211(1) | Macroeconomics | D.E. | 3 |
| ECON 2007Y(3) | Principles of Financial Econometrics | 3+0 | 6 |
| CSE 1010e(1) | Introduction to IT | O.E. | 3 |
| CSE 1021(1) | Basic Computer Applications | 3+0 | 3 |
| MGT 3905Y(5) | International Business | 3+0 | 6 |
| LAWS 1007Y(1) | Foundations of Mauritian Law | 3+0 | 6 |
| LAWS 2005Y(3) | Law of Associations | 3+0 | 6 |
| LAWS 2107(3) | Law Relating to Financial Services | 3+0 | 3 |
| COMS 1010(1) | Communication Skills | D.E. | 3 |
| DFA 3099Y(5) | Dissertation | - | 6 |
| ACF 3000 | Practical Training | - | 0 |

ELECTIVE MODULES

| | | | |
|-------------|--|-----|---|
| ACF 2001(3) | Costing Concepts and Practices | 3+0 | 3 |
| ACF 2201(3) | Management Accounting | 3+0 | 3 |
| ACF 2205(3) | Banking and Financial Services | 3+0 | 3 |
| DFA 3011(5) | Advanced Financial Econometrics | 3+0 | 3 |
| MGT 3126(5) | Management of Human Resources | 3+0 | 3 |
| MGT 4216(5) | Marketing of Financial Services and Products | 3+0 | 3 |

11. Programme Plan - BSc (Hons) Finance

Note for modules carrying asterisk(s):

*—These are 3-credit modules, which will be run during and examined at the end of the first semester.

** These are 3-credit modules, which will be run during and examined at the end of the second semester.

YEAR 1

| Code | Module Name | Hrs/Wk L+P | Credits |
|---------------|-----------------------------------|-----------------------|----------------|
| CORE | | | |
| DFA 1020Y(1) | Accounting and Financial Analysis | 3+0 | 6 |
| STAT 1004(1) | Statistics for Finance* | 3+0 | 3 |
| DFA 1201(1) | Financial Maths** | 3+0 | 3 |
| DFA 1002Y(1) | Financial Theory and Practice | 3+0 | 6 |
| CSE 1010e(1) | Introduction to IT* | O.E. | 3 |
| CSE 1021(1) | Basic Computer Applications** | 3+0 | 3 |
| ECON 1111(1) | Microeconomics* | D.E. | 3 |
| ECON 1211(1) | Macroeconomics** | D.E. | 3 |
| LAWS 1007Y(1) | Foundations of Mauritian Law | 3+0 | 6 |
| COMS 1010(1) | Communication Skills* | D.E. | 3 |

YEAR 2

| Code | Module Name | Hrs/Wk L+P | Credits |
|----------------------------------|---|-----------------------|----------------|
| CORE | | | |
| ECON 2007Y(3) | Principles of Financial Econometrics | 3+0 | 6 |
| DFA 2012Y(3) | Portfolio Theory and Fixed Income Securities | 3+0 | 6 |
| DFA 2002Y(3) | Corporate Finance | 3+0 | 6 |
| DFA 2104Y(3) | Taxation | 3+0 | 6 |
| LAWS 2005Y(3) | Law of Associations | 3+0 | 6 |
| DFA 2202(3) | Research Methods for Finance and Accounting** | 3+0 | 3 |
| ELECTIVES CHOOSE ONE FROM | | | |
| ACF 2001(3) | Costing Concepts and Practices* | 3+0 | 3 |
| ACF 2205(3) | Banking and Financial Services* | 3+0 | 3 |
| MGT 3126(5) | Management of Human Resources* | 3+0 | 3 |

YEAR 3

| Code | Module Name | Hrs/Wk L+P | Credits |
|----------------------------------|--|-----------------------|----------------|
| CORE | | | |
| DFA 3006Y(5) | International Finance | 3+0 | 6 |
| DFA 3012Y(5) | Options and Derivatives | 3+0 | 6 |
| MGT 3905Y(5) | International Business | 3+0 | 6 |
| LAWS 2107(3) | Law Relating to Financial Services** | 3+0 | 3 |
| DFA 3099Y(5) | Dissertation | - | 6 |
| ELECTIVES CHOOSE ONE FROM | | | |
| DFA 3011(5) | Advanced Financial Econometrics** | 3+0 | 3 |
| ACF 2201(3) | Management Accounting** | 3+0 | 3 |
| MGT 4216(5) | Marketing of Financial Services and Products** | 3+0 | 3 |

Note 1: It is compulsory for students to complete a dissertation of 10,000 to 12,000 words. This dissertation should start in Year 3, carrying 6 credits.

Note 2: Students will have to complete a minimum of one (1) General Education Module (GEM) over the three years of Programme of Studies. List of GEMs will be posted on Faculty Notice Boards at the start of every semester.

| | |
|--|---------------------------|
| Total Number of Core Yearly Modules: | 12 (6 credits per module) |
| Total Number of Core Semester Modules: | 9 (3 credits per module) |
| Total Number of GEM: | 1(3 credits per module) |
| Total Number of Elective Semester Modules: | 2 (3 credits per module) |

As follows:

| | CORE | | ELECTIVE | | GEM |
|--------------|-----------|----------|----------|----------|----------|
| | Yearly | Semester | Yearly | Semester | |
| Year 1 | 3 | 7 | - | - | |
| Year 2 | 5 | 1 | - | 1 | |
| Year 3 | 4 | 1 | - | 1 | |
| TOTAL | 12 | 9 | - | 2 | 1 |

Note: Electives are subject to: (i) Availability of resources & (ii) minimum critical mass of students for the elective.

12. Outline Syllabus

DFA 1201(1) - FINANCIAL MATHS

Differentiation and Taylor Series; Transformations; Partial Differential Equations; Distributions; Binomial modelling; Elementary Stochastic Calculus; Elementary Computational Methods (Random numbers and monte carlo); Applications of Term Structure of Interest Rate; Applications of Market Prediction.

ACF 2001(3) - COSTING CONCEPTS AND PRACTICES

Cost Accounting System; Cost Book Keeping; Job & Batch Costing; Contract Costing; Process Costing; Joint Products & By-Products Costing; Operation & Service Costing; Marginal Costing & Contribution Analysis; Break Even & Cost Volume Profit Analysis; Budgeting & Budgetary Control; Standard Costing & Variance Analysis.

ACF 2201(3) - MANAGEMENT ACCOUNTING

Introduction to Management Accounting; Accounting for Decision Making - Short & Long Term; Decision Making with Uncertainty; DCF Techniques; Pricing Policies; Relevant Costs; Budgetary Systems; Evaluation of Fixed/Flexible Zero Based and Incremental; Periodic, Continuous and Activity Based; Budget Review; Performance Measurement; Measurement of Productivity, Activity, Profitability and Quality of Service; Financial v/s Non Financial Measures; Benchmarking; Costing Techniques; Absorption, Marginal and Opportunity Cost Approaches for Specific Orders/Operations; Activity Based Costing; Life Cycle Costing; Target Costing; Standard Costing and Variance Analysis, Significance, Interpretation & Relevance of Variances; Planning & Operational Variances.

ACF 2205(3) - BANKING & FINANCIAL SERVICES

Financial Intermediation: Types and different activities of Banks; Payment services; Bank Modelling; Asset Allocation Model; Credit Rationing; Retail Banking: Mauritius - U.K; Wholesale Banking; An Introduction to Banking Regulations; Financial Innovation; Portfolio Theory; An introduction to International Banking and Eurocurrency Markets.

COMS 1010(1) - COMMUNICATION SKILLS

Writing skills; Non-verbal communication; Modes of speech delivery and presentation aids; Speeches, perception and listening skills; Business and technical writing.

CSE 1010e(1) - INTRODUCTION TO INFORMATION TECHNOLOGY

IT and Computers; Stepping in the Computer; Input and Output Devices; Secondary Storage; Programming; Systems Software; Applications Software; Systems Development; Computer Networks; The Internet; Computer Security; Software Utilities; Issues and Trends in IT.

CSE 1021(1) - BASIC COMPUTER APPLICATIONS

Introduction to Database Management Systems and User Interfaces; Electronic mail; Practical uses of Local and Wide Area Networks; Software packages.

DFA 1002Y(1) - FINANCIAL THEORY AND PRACTICE

The financial system; Capital markets; An Analysis of the Mechanisms of the Financial System in the economy: Theory and Current Statistics; Time value of money; Capital Budgeting: an introduction; Valuation of Financial Assets; Bond analysis: an introduction; Risk, Return and Diversification; Efficient Market Hypothesis; Multinational Finance: an introduction; Consumption, Investment and the Capital Markets; Theory of choice: utility theory given uncertainty; State Preference Theory; Objects of choice: Mean variance uncertainty; Asset Pricing Theory, Agency Theory, Portfolio Theory.

DFA 1020Y(1) - ACCOUNTING AND FINANCIAL ANALYSIS

The Role of Accounting Information; Recording and Summarising Transactions; Accounting Concepts & Preparing Final Accounts; Adjustments to Final Accounts; Capital v/s Revenue Expenditure; Bank Reconciliation Statement; Accounting Ratios & interpretation Techniques; Introduction to Group Accounting & related issues; Accounting for Internal Decision Making Techniques; Elements of Cost; Costing Methods & Techniques; Decision Making Techniques; Accounting for Manufacturers; Budgets; Regulatory Framework for Company financial Reporting; Understanding Published Annual Reports; Corporate Failures Prediction; Forecasting & Valuing Businesses; Earnings Management.

DFA 2002Y(3) - CORPORATE FINANCE

Present values and wealth; Risk and return; Capital budgeting and risk; Market Equilibrium: CAPM and APT: Theory and empirical test; Correlation structure of Security Returns; EMH and its implications in Corporate Financing; Capital Structure and Cost of Capital: Theory, Empirical Evidence and Applications; Leasing; The Dividend Policy: Theory, Empirical Evidence and Applications; Gilt-edged securities: Interest rate theory and pricing of bonds; Introduction to Options; Introduction to Financial Futures; Multinational Finance; Hedging Strategies; Mergers, Acquisition and Restructuring: Theory and empirical evidence; Treasury Management.

DFA 2104Y (3) - TAXATION

Mauritian Tax

Principles of Taxation; Power of Commissioners; Administration of Mauritian Tax; Taxation of Individuals from various sources; Capital allowances; Partnership and company Taxation; Taxation of Trusts and deceased persons; Value Added Tax; Anti Avoidance Taxation Relief.

INTRODUCTION TO UK TAXATION

Principles of Schedular Systems; Powers of commissioners; Administration of Tax; Income Tax Individuals from various sources; Business Taxes; Capital Allowances; Loss Reliefs for individuals; Partnership Taxation; Introduction of capital Gains Tax.

DFA 2012Y(3) - PORTFOLIO THEORY AND FIXED INCOME SECURITIES

Types of securities; The Mauritian Fund Management Industry; The Global Fund Management industry; Price volatility characteristics of Fixed Income Securities; bond rating; bond strategy; immunization strategies; Global bond portfolio management; Portfolio Theory, Portfolio Selection; Fundamental analysis; Technical Analysis; Implications of the EMH; Active v/s Passive strategy, Asset Allocation (Strategic Asset Allocation; Tactical Asset Allocation); Managed Portfolio, Performance measurement; Ethics in Finance; Applied Portfolio Models using Excel.

DFA 2202(3) - RESEARCH METHODS FOR FINANCE AND ACCOUNTING

Analysis of the science of research; Key Elements of Research; Research Designs; Data Issues; Hypothesis Development; Data Collection Methods; Causal Methods; The Use of Software in Research; The use of Parametric and Non-parametric Statistical tests; General Research Methodology; Plagiarism; Referencing; Case Study analysis of key Accounting or Finance Literature.

DFA 3006Y(5) - INTERNATIONAL FINANCE

The International Monetary System; Using Balance of Payments Data; The Foreign Exchange Market; International Parity Conditions; Foreign Currency Options; Measuring and managing foreign exchange exposure; Internal and external techniques of exposure management; Interest rate exposure; Capital and Ownership structure; Global cost of capital; Capital markets and other sources of funding for the global firm; Corporate strategy and Foreign Investment Decisions; Taxation issues; Political Risk Management; Managing Multinational Operations; Working Capital Management; Import and export Financing; issues in International Finance.

DFA 3011(5) - ADVANCED FINANCIAL ECONOMETRICS

Multivariate Time Series Models: VAR; Unit Root Tests; Persistence; Integration and Cointegration; VECM; Granger Causality; Impulse Response Functions; Forecasting; Introduction to Nonlinear Time Series Models; Computer Applications.

DFA 3012Y(5) - OPTIONS AND DERIVATIVES

Option markets; Properties of option pricing; The option pricing models (the binomial model, B-S model; alternative models for option pricing); options on stocks, stock indices and currencies; option based trading strategies; exotic option; Management of risks using options (delta, theta, gamma, vega, rho); portfolio insurance; Financial Futures; Swaps (Currency, interest rate, asset); Value-at-Risk; Applied options models using Excel.

DFA 3099Y(5) - DISSERTATION

The assessment of final year project will be based on the implementation of a computerised solution to a real-life or research-oriented problem and the submission of a report. The length of the report should be in the range of 10,000–15,000 words.

ECON 1111(1) - MICROECONOMICS

The economic framework; Nature and scope of economics; Economic goals and problems; The market and allocation of resources; Role of the market; Market mechanisms; Economic systems cost and utility.

ECON 1211(1) - MACROECONOMICS

Macro-economic policy; Measurement and determination of national income; Fiscal policy; Theory of money; International economics.

ECON 2007Y(3) - PRINCIPLES OF BUSINESS ECONOMETRICS

Simple and Multiple Regression Models: Assumptions, Estimation and Inference; Alternative Functional Forms; Breakdown of Classical Assumptions: Multicollinearity, Autocorrelation, Heteroscedasticity; Dummy Variables; Introduction to Time Series Models and Business Forecasting; Applications include: Business Projections, Seasonality in Business, CAPM

LAWS 1007Y(1) - FOUNDATIONS OF MAURITIAN LAW

The Historical Background of Mauritian Law – Impact of English Law and French Law and other Legal Systems – Features of a mixed law system. Various branches of law – Public law and Private Law and sub division thereof; Civil Process and Criminal Process; Organisation of Courts; The legal profession and Judiciary; Meaning of Law; Nature of law; Law and Social Sciences; Law and Morality and other Normative System; Sources of Law; Constitution, Legislation, Subsidiary legislation, Customs, Books of Authority, Common Law and Equity; Case-law – Interpretation of cases; Statutory interpretation; Legal Thoughts and Legal Reasoning; Les droits subjectifs – les droits patrimoniaux et les droits extrapatrimoniaux, les sources de droits; Les personnes physiques et les personnes morales; Introduction au droit des contrats et à la responsabilité délictuelle.

LAWS 2005Y(3) - LAW OF ASSOCIATIONS

The Company as a medium to conduct business; Different types of companies; Registration of Companies; Constitution of Companies. Consequences of Incorporation: Corporate Personality and lifting the veil. Share Capital and Methods of Public Offering; The Management and Control of Companies; Directors' Duties, Majority Rule and Minority Shareholders' Protection; Shareholder Remedies, Company Meetings, Insider Dealing.

Sources and Objectives of Insolvency Law; Causes of Corporate Failure; General Principles of Winding Up. The Appointment, Control, Powers, Duties and Release of the Liquidator; Powers of the Court, Voluntary Winding Up; Members' and Creditors' Winding Up; Declaration of Solvency; Meetings of Members and Creditors; Dissolution; Defunct Companies; Outstanding Assets; The Official Receiver; Receivers and Managers. Appointment, Powers, Duties and Liability of Receiver; Classification of "Sociétés" - Definition; General Principles: The Contract of "Société". The "Société" as a legal person; Formation, Conversion, Merger, Scission and Dissolution of "Société". Gerants. Partners. Specific "Société": "Société" en nom collectif.

LAWS 2107(3) - LAW RELATING TO FINANCIAL SERVICES

The regulatory framework (Financial Services Development Act and other legislation); Law relating to e-Business and e-banking; The legal dimensions of insurance relationships; The legal framework of banking transactions (banking services, the bank-client relationship, securities in banking transactions); The legal aspects of the financing of international transactions; Securities Regulation; Money laundering.

MGT 3059Y(5) - INTERNATIONAL BUSINESS AND MANAGEMENT

The International Business Environment - Introduction to International Business, The Emerging Global Economy, The Role of Technological Forces in the Globalisation Process, Differences in Political Economies The Concept of National Competitiveness, Emerging Markets in the Global Economy. Cross-Border Management - The International Marketing environment as influenced by Political, Legal and Cultural dimensions. Foreign Market Analysis, Selecting and Managing Entry Modes to Foreign Markets, Assessing the Impact of Exporting, Importing and Counter-Trade. International Market Research and Multinational Marketing Information Systems. International Marketing Mix decisions Managing Diversity and Cross Cultural Differences. Current Issues in International Business and Management.

MGT 3126(5) - MANAGEMENT OF HUMAN RESOURCES

Evolution of Personnel Management/Human Resource management; Differentiate Personnel Management and HRM; Goals of HRM/Approaches to HRM; HRM in Context; Strategic HRM; Culture in HRM; Employee Resourcing (HRP, Job Analysis, Job Description; Job Specification; Recruitment and Selection, etc.); Human Resource Development (Performance Management, Training, Management Development, Career Development, etc.); International HRM (Cross Cultural Management, Managing Expatriates, etc.); Public Sector HR; Criticisms of HR; Case Study.

MGT 4216(5) - MARKETING OF FINANCIAL SERVICES AND PRODUCTS

Understanding Marketing Management. Analysing Marketing Opportunities and Consumer Behaviour. Marketing decisions in Product, Pricing, Distribution and Communication. Financial Services and Service Quality Issues. Marketing Planning and Control. Marketing of Specific Financial Products such as Credit Card, Funds Marketing, etc.

STAT 1004(1) - STATISTICS FOR FINANCE

Frequency distribution – Summary measures. Probability & probability distributions. Introduction to Statistical inference: Sampling distributions. Interval estimation. Correlation and regression. Non-parametric tests.

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