

## **BSc (Hons) Finance (Minor: Law) - LM303**

### **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. A minor in Law is offered to deepen students' knowledge in business law with an added emphasis on investment & financial services legislation.

### **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 is required.

### **4. Programme Duration**

	<b>Normal</b>	<b>Maximum</b>
Diploma:	2 years	3 years
Degree:	3 years	5 years

### **5. Credits per Year: Maximum 48 credits, Minimum 18 credits subject to Regulation 4.**

### **6. Minimum Requirements for Awards**

#### **(i) Degree Award**

<b>Structure</b>	<b>Credits</b>
<b>CORE MODULES</b>	
Finance and Accounting	54
Economics and Statistics	15
Computer Science & Engineering	6
Law	30
Management	6
<b>GEM</b>	3
<b>Total</b>	<b>114</b>

#### **(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.

<b>Structure</b>	<b>Credits</b>
<b>CORE MODULES</b>	
Finance and Accounting	33
Economics and Statistics	15
Computer Science & Engineering	6
Law	6
<b>Total</b>	<b>60</b>

## 7. Minimum Credits Required for Degree Award: 114

For the award of the **BSc (Hons) Finance (Minor: Law) Degree**, the student must obtain at least 114 credits (see 6 above).

## 8. Assessment

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

Assessment will be based on written examination (of 2 to 3-hour duration, as specified) and continuous assessment carrying a range of 10% to 40% of total marks except for the following modules:

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 may be based on laboratory work and/or assignments and should include **at least one class test**. For all modules taught in semester 1, there will be a compulsory class test at the end of semester 1 of the given academic year unless stated otherwise in the Programme Structure. This is applicable to modules examined at the end of the academic year.

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.

Written examinations for all modules, whether taught in semester 1 or in semester 2 or both, will be carried out at the end of the academic year (unless otherwise stated).

Most modules in the structure are **yearly modules** which are taught over a period of two semesters but 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 (Minor: Law)

Code	Module Name	Hrs/Wk	Credits
		<b>L+P</b>	
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 3006Y(5)	International Finance	3+0	6
DFA 3012Y(5)	Options and Derivatives	3+0	6
DFA 2202(3)	Research Methods for Finance and Accounting	3+0	3
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 Business 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 2004Y(3)	Law of Trusts and Revenue Law	3+0	6
LAWS 3003Y(5)	Legal Aspects of Finance	3+0	6
LAWS 3001Y(5)	International Economic Law	3+0	6
DFA 3099Y(5)	Dissertation	-	6
ACF 3000	Practical Training	-	0

**Note:** All 3-credit modules are run over 15 weeks and exams are scheduled at the **end** of the semester in which the module is run.

## 11. Programme Plan - BSc (Hons) Finance (Minor: Law)

### 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	Credits
		L+P	
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

### YEAR 2

Code	Module Name	Hrs/Wk	Credits
		L+P	
ECON 2007Y(3)	Principles of Business 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
LAWS 2004Y(3)	Law of Trusts and Revenue Law	3+0	6
DFA 2202(3)	Research Methods for Finance and Accounting**	3+0	3

### YEAR 3

Code	Module	Hrs/Wk	Credits
		L+P	
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 3003Y(5)	Legal Aspects of Finance	3+0	6
LAWS 3001Y(5)	International Economic Law	3+0	6
DFA 3099Y(5)	Dissertation	-	6

Total Number of Core Yearly Modules: 15 (6 credits per module)

Total Number of Semester Modules (7 core + 1 GEM): 8 (3 credits per module)

As follows:

	CORE		GEM
	Yearly	Semester	
Year 1	3	6	
Year 2	6	1	
Year 3	6	-	
<b>TOTAL</b>	<b>15</b>	<b>7</b>	<b>1</b>

**Note 1:** Electives are subject to: (i) Availability of resources & (ii) minimum critical mass of students for the elective.

**Note 2:** 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 3:** Students will have to complete a minimum of one (1) General Education Module (GEM) over the full 3 years of Programme of Studies. List of GEMs will be posted on Faculty Notice Boards at the start of every semester.

## **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.

### **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 Scheduler 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 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 2004Y(3) - LAW OF TRUSTS AND REVENUE LAW**

Creation and Nature of Trusts; Appointment of Trustees; Charitable Trusts; Duties of Trustees; Powers of Investment and General Powers; Breach of Trust; Liabilities, Indemnities and Remuneration of Trustees; Rights and Liabilities of Beneficiaries; Maintenance, Advancement and Protective Trusts; Jurisdiction of Court to make Orders; Termination of Trusteeship.

Definition of Tax and Revenue; 'Economic Theories' underlying revenue and taxation; Basis of Mauritian taxation-concept and procedure; Powers of the Commissioner of Income Tax; Offences; Filing of Documents; The PAYE, CPS; Taxation of Employment Income; Taxation of Business Income; Taxation of Companies and Trusts; Tax avoidance; Elements of International Taxation.

### **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 3001Y(5) - INTERNATIONAL ECONOMIC LAW**

Relations; GATT; WTO; Regulation of Imports and Exports; International Economic Organisation; BIRD; World Bank; IMF; International Contracts; Financing of International Trade; Letters of Credit and other mode of payment; Transport; Insurance and Bill of Lading; Resolution of Disputes; LOME/COTONOU Convention; Regionalisation European Union/NAFTA; COMESA/SADC.

### **LAWS 3003Y(5) - LEGAL ASPECTS OF FINANCE**

Law relating to Banking, Insurance and Trade Finance; The Regulatory Framework: Financial Services Development Act. Bank-Client relationship. The Bills of Exchange Act. Negotiable Instruments. Legal Aspects of e-Banking. Contracts of Insurance. Hire Purchase Contracts. Offshore Business Activities: Legal Regulation. Offshore companies and Trusts. Protected Cell Companies. Double Taxation Treaties Securities, Prospectus Requirements, The Listing Rules, The Stock Exchange Act 1988; Insider Dealing; Offences. Financial Aspects of Corporate Governance. Legislative Control of 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.

**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.