



UNIVERSITY  
of  
TECHNOLOGY,  
MAURITIUS

**School of Business Management and Finance**  
*(in collaboration with School of Innovative Technologies &  
Engineering)*

# BSc (Hons) Digital Enterprise Management

## PROGRAMME DOCUMENT

VERSION 1.0

February 2016

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**University of Technology, Mauritius**  
La Tour Koenig, Pointe aux Sables, Mauritius  
Tel: (230) 207 5250 Fax: (230) 234 6219  
Email : [sbmf@umail.utm.ac.mu](mailto:sbmf@umail.utm.ac.mu) website: [www.utm.ac.mu](http://www.utm.ac.mu)

## **A. Programme Information**

This programme is meant for those students who wish to obtain a blend of knowledge in management and ICT. This course provides thus an opportunity to build a solid foundation in ICT and focus on its usage in solving business problems. It will allow students to combine a clear understanding of core business and management functions, good problem-solving and decision making skills with the help of ICT, the ability to think creatively and to communicate effectively. The programme has been designed for students who have a keen interest in ICT and its applications in management.

This unique combination of management, accounting, marketing and ICT skills learnt in this programme matches the need of a new breed of management professionals in the services sector.

Work placement in the final year plays a key role in allowing students to find innovative and practical themes for their dissertation and put in practice all the skills learnt in their different modules.

## **B. Programme Aims**

The aim of this programme is to empower a knowledge worker to take up positions at different levels in the services industry. It is not aimed at producing ICT professionals per se but rather a new breed of management professionals who will interact with or lead ICT professionals to embed ICT into products and services of a company.

## **C. Programme Objectives**

- enable students to acquire state of the art knowledge and understanding of the field of management and ICT;
- provide an educational experience which will facilitate and promote students' intellectual development and life-long learning skills;
- promote critical awareness of the merits and complexities of management, and to inculcate an appreciation of the association between theory and practice;
- use major software applications to solve business problems;
- embed the use of ICT in the design, development and improvement of services;
- appraise students of important new developments in the field of management and ICT;
- enable students to develop appropriate practical and transferable skills in the field of management & ICT.

## **PART I - Regulations**

### **D. General Entry Requirements**

As per UTM 'Admissions Regulations' and 'Admission to Programmes of Study at Degree Level'

### **E. Programme Entry Requirements**

Essential knowledge of ICT done at 'O' Level or 'A' Level HSC or Internet & Computing Core Certification (IC3).

*\*For those not having these entry requirements, Introduction to Computing can be taken on a self-learning mode with no credits earned.*

### **F. Programme Mode and Duration**

Full-Time: 3 Years

Part-Time: 4 Years

Each academic year includes two semesters and each semester is comprised of activities of teaching and learning strategies.

#### **Programme Exit Points**

Student may exceptionally be allowed to exit the programme as follows:

- (i). A Certificate in Digital Enterprise Management
  - End of Semester 2 Year 1 (FT)
  - End of Semester 1 Year 2 (PT)
- (ii). A Diploma in Digital Enterprise Management
  - End of Semester 2 Year 2 (FT)
  - End of Semester 1 Year 3 (PT)

### **G. Teaching and Learning Strategies**

The programme will employ a wide variety of teaching methods, including lectures, individual or group projects, presentations, workshops, case studies, field visits, work placement and talks by guest speakers. Self-learning will be the key feature of the programme, enabling students to explore, investigate and research into the various topics, interact with practitioners, and work in teams on projects.

### **H. Student Support and Guidance**

In addition to face-to-face lectures, group tutorials or individual tutorials are arranged for students.

### **I. Attendance Requirements**

As per UTM's Regulations and Policy.

## J. Credit System

Modules carry 3 or 4 credits as per the programme structure.

Modules with 4 credits must **compulsorily** involve submission of at least 2 assignments and 1 class test.

### Exit Points:

Minimum credits required for the award of a:

- Certificate 36
- Diploma 71
- Degree 106

## K. Student Progress and Assessment

For the award of the Degree a minimum of 103 credits must be earned out of a total 106 credit.

All modules will carry 100 marks and will be assessed as follows (unless otherwise specified):

- Written examinations up to 3-hours' duration and continuous assessment carrying up to 30% of total marks.
- Continuous assessment can be based on individual or/and group assignments or class tests, seminars, practical labs, and except for modules pertaining to 100% coursework.

## Grading

Undergraduate / Postgraduate		
Overall Marks	Grade	Remarks
$70 \leq X \leq 100$	A	Excellent
$60 \leq X < 70$	B	Very Good
$50 \leq X < 60$	C	Good
$40 \leq X < 50$	D	Satisfactory
$X < 40$	F	Referred

## L. Evaluation of Performance

The percentage mark at Level 1 contributes a 20% weighting towards the degree classification.

The percentage mark at Level 2 contributes a 30% weighting towards the degree classification.

The percentage mark at Level 3 contributes a 50% weighting towards the degree classification.

## M. Award Classification

$y \geq 70$	1st Class Honours
$60 \leq y < 70$	2 <sup>nd</sup> Class 1st Division Honours
$50 \leq y < 60$	2 <sup>nd</sup> Class 2 <sup>nd</sup> Division Honours
$45 \leq y < 50$	3rd Class Honours
$40 \leq y < 45$	Pass Degree
$y < 40$	No Award

## **N. Programme Organisation and Management**

Programme Director/Coordinator: Dr. D. Mauree-Narrainen, Ms H.Vaghjee and Mr Ravi Foogooa

Contact Details:

- Telephone Number: 2075250
- Email: [d.mnarrainen@umail.utm.ac.mu](mailto:d.mnarrainen@umail.utm.ac.mu) , [hvaghjee@umail.utm.ac.mu](mailto:hvaghjee@umail.utm.ac.mu), [rfoogooa@umail.utm.ac.mu](mailto:rfoogooa@umail.utm.ac.mu)

## Part II - Programme Structure

### O. BSc(Hons) Digital Enterprise Management – Fulltime

#### YEAR 1

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
		L+T+DS				L+T+DS	
MGMT1101	Organisation and Management	2+1+1	4	PROG1121C	Computing Algorithms	2+2	4
ECON1101	Economics	2+1+1	4	CAN1117C	Networking Fundamentals	2+1	3
ACCF1102	Financial Accounting	2+1+1	4	ACCF1104	Cost and Management Accounting	2+1+1	4
QUAN1102	Statistics	2+1+1	4	LLAW1101	Introduction to Law and Legal Methods	2+1+1	4
PROG1120C	Programming Fundamentals	2+2	4	CLEN1000	CLEn		1
						36	

#### YEAR 2

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
		L+T+DS				L+T+DS	
MKTG1107	Marketing Management	2+1+1	4	ISM2129C	ERP Systems	2+1	3
HRMT2104	Human Resource Management	2+1+1	4	DBT2116C	Database Management Systems and Business Intelligence	2+2	4
QUAN2203	Quantitative Methods for Management	2+1+1	4	MMIS2304	e-Business	2+1+1	4
WAT2131C	Web Development Fundamentals	2+2	4	SEM2120C	IT Project and Outsourcing Management	2+1	3
SDT2118C	Analysis & Design Essentials	2+1	3				
ESDV2000	Employability Skills Development						2
						35	

**YEAR 3**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>
		L+T+DS				L+T+DS	
MMIS3212	Strategic Management and IS planning	2+2	4				
MMIS3214	IT Governance and Security	2+2	4				
QUAN 3401	Research Methods	3+1	4	PLMT2001	Work Placement		10
MMIS3213	Strategic Online Marketing	2+2	4				
<b>DISSERTATION</b>							9
						<b>35</b>	

\*\* Dissertation starts Semester 1 of level 3 and credits will be earned at the end of Semester 2 of level 3

**O. BSc (Hons) Digital Enterprise Management– Part time**

**YEAR 1**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>
		L+T+DS				L+T+DS	
MGMT1101	Organisation and Management	2+1+1	4	ACCF1102	Financial Accounting	2+1+1	4
ECON1101	Economics	2+1+1	4	CAN1117C	Networking Fundamentals	2+1	3
QUAN1102	Statistics	2+1+1	4	PROG1120C	Programming Fundamentals	2+2	4

**YEAR 2**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>
		L+T+DS				L+T+DS	
ACCF 1104	Cost and Management Accounting	2+1+1	4	WAT2131C	Web Development Fundamentals	2+2	4
PROG1121C	Computing Algorithms	2+2	4	MKTG1107	Marketing Management	2+1+1	4
LLAW 1101	Introduction to Law and Legal Methods	2+1+1	4	HRMT2104	Human Resource Management	2+1+1	4
CLEN1000	CLEn		1				

**YEAR 3**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>
		L+T+DS				L+T+DS	
SDT2118C	Analysis and Design Essentials	2+1	3	DBT2116C	Database Management Systems and Business Intelligence	2+2	4
ISM2129C	ERP Systems	2+1	3	SEM2120C	IT Project and Outsourcing Management	2+1	3
QUAN2203	Quantitative Methods for Management	2+1+1	4	MMIS2304	e-Business	2+1+1	4
ESDV2000	Employability Skills Development						2



**YEAR 4**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>
		L+T+DS				L+T+DS	
MMIS3212	Strategic Management and IS planning	2+2	4	MMIS3213	Strategic Online Marketing	2+2	4
MMIS3214	IT Governance and Security	2+2	4				
QUAN3401	Research Methods	3+1	4	PORT2003	Portfolio		10
<b>DISSERTATION</b>							9

\*\* Dissertation starts Semester 1 of level 3 and credits will be earned at the end of Semester 2 of level 3

## **Q. SYLLABUS OUTLINE** *(This syllabus is non-prescriptive)*

### **Year 1 Semester 1**

#### **MGMT1101: ORGANISATION AND MANAGEMENT**

Introduction to the different perspectives on management, understanding organizations, the evolution of the concepts of organizations and management; models and types of organizations: the classical and neo-classical organizations and modern approaches to the concepts. Management development; organization development; understanding people: roles, perceptions, norms, values, and attitudes; Human needs; theories of motivation; group dynamics and team building; issues in organization and management theories.

#### **ECON1101: ECONOMICS**

Microeconomics: consumer choice theory, theory of cost and supply, price mechanism, government intervention and the price system, market structure, competition policy. Macroeconomics: national income and economic growth, inflation and unemployment, monetary policy, fiscal policy, international trade. Seminar presentation on contemporary Mauritius from a microeconomic of macroeconomic perspective.

#### **ACCF1102: FINANCIAL ACCOUNTING**

Roles and Principles of Financial Accounting, Double Entry Book Keeping, Capital and Revenue Expenditure, Trial Balance, Preparation of Final Accounts for Sole Traders, Non-Profit Organisations and Companies, Cash Flow Statements, Control Accounts and Accounting for VAT, Accounting for Depreciation, Bad Debts and Provisions for Bad Debts, Fundamental Accounting Concepts and International Accounting Standards, Accounting Ratios and Interpretation, Financial Reporting and Users of Accounts

#### **QUAN1102: STATISTICS**

Descriptive Statistics; Probability Concepts; Random Variables; Probability Distributions: Binomial, Poisson and Normal; Estimation with Confidence Intervals; Hypothesis Testing; Chi-Square Tests; Analysis of Variance; Simple Regression and Correlation Analysis; Time Series Analysis.

#### **PROG1120C: PROGRAMMING FUNDAMENTALS**

Introduction to problem solving and programming Overview of major programming languages and their applications Data Types Program building Input/Output processing Operators Selection structures Repetition structures Simple data structures - arrays String processing Functions

### **Year 1 Semester 2**

#### **PROG1121C: COMPUTING ALGORITHMS**

Design of algorithms, Code structure & professional conventions, Design and implementation of abstract data structures – files, Implementation of searching algorithms (linear, binary), sorting algorithms (bubble, shuttle, insertion) Complexity of algorithms, Error handling, Testing processes and techniques, Introduction to GUI, Code reuse & object oriented approach

#### **CAN117C: NETWORKING FUNDAMENTALS**

Physical/logical LAN topologies, Communication devices and technologies used in LAN, LAN extension: repeaters and bridges, Switched LAN, Communication devices and technologies used in LAN, TCP/IP and LAN/WAN interconnection, The Internet as the single global network of networks, Wireless networking, LAN/WAN standards, Virtual Private Networks, Services convergence

#### **ACCF1104: COST AND MANAGEMENT ACCOUNTING**

Role of Cost Accounting and its Link to Financial Accounting, Costing Concepts: Costs Classification and

Behaviour, Accounting for Overheads, Introduction to Activity Based Costing, Costing Methods and Principles, Contract Costing, Relevant Costing and Contribution Analysis, Budgeting, Standard Costing Variance Analysis.

### **LLAW1101: INTRODUCTION TO LAW AND LEGAL METHODS**

Introduction to Law; Ideas and functions of Law; Nature of constitutional and administrative law; Constitutional foundations of the powers of the court, statutory interpretation, arbitration and the hearing tribunal, the law of contract, the law of agency; Distinction between Public and Private Law; Criminal and Civil Law; Common Law and Civil Law Systems; Case Law Techniques; Statutory Interpretation.

### **CLEn1000 COMMUNITY LEARNING & ENGAGEMENT (CLEn)**

Students should seek involvement with NGOs. Student participation involves for example, contribution in publication of reports, newsletters, active collaboration on an unexhaustive choice of community development or social enterprise projects. Successfully completed placements shall be testified by NGOs at which the engagement occurs. Successful completion will lead to the award of one credit. More information is available in the CLEn Guidelines.

### **Year 2 Semester 1**

#### **MKTG1107: MARKETING MANAGEMENT**

Nature and scope of Marketing, the Marketing Environment, Marketing Research and Marketing Information Systems, Buyer Behavior - the buying behaviour of consumers and organisations, Segmentation, Targeting and positioning Framework, Marketing Mix - the 4P's, Product and Services, Place, Price, Promotion, The extended marketing mix, Services Marketing, Broadening the scope of marketing, Social Responsibility, Green Marketing, Ethics, Customer Relationship Management, Marketing Plan, Marketing Audit, Analysing Industry Attractiveness, BCG Model, Review of Marketing Mix Strategies.

#### **HRMT2104: HUMAN RESOURCE MANAGEMENT**

Human Resource Management, Evolution of Personnel Management to Human Resource Management, Role of HR in modern organizations; Differentiating between job & tasks, Job creation, Job Description, Job Analysis, Job Evaluation, Recruitment & Selection, Training & Development, Reward & Performance Management, Contemporary issues in HR, Learning Organisations, HRIS

#### **QUAN2203: QUANTITATIVE METHODS FOR MANAGEMENT**

Introduction to Quantitative Methods; Operations management, Decision Analysis: Decision-Making Environments and Decision Trees; Linear Programming: Graphical and Simplex Method, Sensitivity Analysis; Transportation Models; Assignment Models: minimization and maximization cases; Network Analysis; Inventory Models.

#### **WAT2131C: WEB DEVELOPMENT FUNDAMENTALS**

Introduction to Internet and the World Wide Web, Markup Languages, Client-side scripting, Improving user experience with CSS, Securing data input on web forms, Introducing Content Management Systems, Introducing responsive web applications development

#### **SDT2118C: ANALYSIS AND DESIGN FUNDAMENTALS**

Intro to Large Scale Systems development, Software Life Cycles, Structured techniques for Analysis & Design OO methodology – the RUP, Object Oriented Analysis & Design with UML – Use Case diagrams, Class Diagrams, Sequence Diagrams, State Chart Diagrams.

## **Year 2 Semester 2**

### **ISM2129C: ERP SYSTEMS**

Overview: from production/manufacturing management to Enterprise Resource Planning, Production and operations management, Materials requirements planning (MRP), Manufacturing resources planning MRP II, Supply-chain management, ERP, Pre-requisites of ERP: three-tier business applications, business process re-engineering, data warehousing, groupware applications, Components of ERP, Case-studies on best-practices in ERP.

### **DBT2116C: DATABASE MANAGEMENT SYSTEMS and BUSINESS INTELLIGENCE**

Database Concepts, Different types of Database Models, Entity-Relationship Diagrams, Normalization of Database Tables, Database implementation & manipulation using SQL, Database Security, Data Warehouse Concepts, Design and Data integration, Data Warehouse maturity and business architecture alignment.

### **MMIS2304: E-BUSINESS**

Essentials of IS for Organisations, Concepts and terminologies for Electronic Business, Electronic Data Interchange (EDI), Trends Analysis of E-business, E-Business Environment and Strategy, E-Business Technologies and Infrastructure, E-Business Applications and Management, Impact of E-business on Society, E-Business Security Concerns, Implementation strategy of an E-Business Solution, M-business applications and services, e-commerce and M-commerce, Case Studies of E-Business

### **SEM2120C: IT PROJECT AND OUTSOURCING MANAGEMENT**

Specification of IT Projects, Outsourcing – motivations, challenges, models, vendors, Feasibility study, IT Project planning – scope, schedule, risk management, Project Implementation & Control, Contract management, IT Project Closure

### **ESDV2000 EMPLOYABILITY SKILLS DEVELOPMENT (ESD)**

ESD aims at equipping undergraduate students with core employability and job readiness skills (including communication, simulated interviews, career choice, etc.), as well as imparting professional practice expectation and knowledge (including work environment, professionalism and ethics, job mobility locally and internationally, etc.) related to the programme of study. Successful completion will lead to the award of two credits. Detailed information is as per ESD guidelines.

## **Year 3 Semester 1**

### **MMIS3212: STRATEGIC MANAGEMENT AND IS PLANNING**

Strategy development process; Analysis of the environment; Analysis of strategic capability; Developing strategic purpose; Culture & Strategy; Business level strategy; Corporate level strategy; International business strategy; Strategy implementation & Control; The IT Value proposition; IT Infrastructure Planning; Delivering IT Functions; Application Portfolio Management; Enabling Collaboration; Strategic Experimentation, Cloud Computing

### **MMIS3214: IT GOVERNANCE & SECURITY**

IT Management, IT Governance and IT Strategy, Governance of Enterprise IT, Domains of IT Governance, Drivers, Enablers and Challenges of IT Governance, Theories, Models and Maturity levels of IT Governance, Frameworks and Standards of IT governance, IT Security, IT Risks, IT Law and Compliance, Business Continuity and Change Management, Security audits, Systems Documentation

**QUAN3401: RESEARCH METHODS**

Introduction to Research Methods; Research Ethics and Values; Research problems; Components of a Research Proposal; Planning the Research Process: Qualitative and Quantitative Research, Research Design; Handling of data and Analysis of data; Reporting of Research.

**MMIS3213: STRATEGIC ONLINE MARKETING**

To provide the student with e-Marketing techniques and strategies that can help any forward-thinking organization be competitive in today's business environment. Study of the key areas that promise to leverage the power of Internet like: – customer relationship management (CRM) – 1:1 marketing; permission-based e-mail marketing – viral marketing – attributes of a good Website and Website marketing goals – website promotion/search engine positioning/ranking – Key Internet technologies/terminologies/acronyms

**Year 3 Semester 2****DISS 3000 DISSERTATION**

A 10,000-12,000 words dissertation will have to be submitted at the end of the semester. The work submitted should conform to the Undergraduate Dissertation Guidelines available on the UTM website.

**PLMT2001 WORK PLACEMENT**

Work placement is monitored by a placement unit and is detailed in the University Work Placement guidelines.

**PORT2003 PORTFOLIO**

Portfolio will apply for part time students in lieu of placement and is detailed in the Portfolio guidelines.