MSc Project Management - E501

1. Aim and Objectives

The aim of this Programme is to provide the private and public sectors with effective Project Leaders and Managers. Successful Project Managers will have demonstrated the ability to:

a)   write project definitions, including its requirements, risks and specifications, identify possible problems, quality requirements and decision making criteria;
b)   generate ideas in order to solve problems, seeking expert advice including information sourcing;
c)   plan and control all project activities and resources; and
d)   communicate and work effectively with people to a good professional standard.

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

Preference will be given to candidates having at least two years of relevant work experience.

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

The Programme will be offered on a part-time basis. The duration of the programme should normally not exceed 4 years (8 semesters).

	Normal	**Maximum**
Master's Degree:	4 Semesters	8 Semesters
Postgraduate Diploma:	4 Semesters	8 Semesters

6. Credits per Semester: Minimum 3 credits subject to Regulation 5.

7. **Minimum Credits Required for the Award of**

Master's Degree: 36
Postgraduate Diploma: 24

Breakdown as follows:

	Core Taught Modules (Minimum)	**Project**	**Electives/ Optional Modules**
Master's Degree:	18 credits	9 credits	9 credits
Postgraduate Diploma:	18 credits		6 credits

8. **Assessment**

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

Assessment will be based on a written examination of 3-hour duration and on continuous assessment carrying of **30% to 40%** of total marks.

Continuous assessment can be based on laboratory work, and/or assignments and **should include at least two (2) assignments/ tests per semester per module.**

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

All modules carry equal weighting.

The Research Project carries 9 credits.

Submission Deadlines for Dissertation:

First Draft: End of July of Final Year.
Final Copy: Last working day of August of Final Year.

9. **Plan of Study**

Students are required to submit at the end of Semester 1 a Plan of Study for their whole Programme of Studies, indicating the list of elective modules and in which semester each of them will be taken.

The University reserves the right not to offer a given elective module if the critical number of students is not attained and/or for reasons of resource constraints.

10. **Important Note**

The rules as stipulated in this Programme Structure and Outline Syllabus will replace all other rules and regulations found in previous Programme Structures.

11. **List of Modules**

Code	Module Name	Hrs/Wk L+P	Credits
CORE MODULES			
ENGG 6101	Principles of Project Management	3+0	3
ENGG 6102	Project Economics and Finance	3+0	3

CSE 6005	Management Information Systems	3+0	3
ENGG 6202	Research Methods	3+0	3
ENGG 6305	Procurement Management	3+0	3
MGT 5212	Human Resources & Quality Management	3+0	3

PROJECT

| ENGG 6000 | Research Project | - | 9 |

ELECTIVES

LAW 5401	Legal Aspects of Project Management	3+0	3
CIVE 6207	Construction Management	3+0	3
CIVE 6402	Integrated Infrastructure Planning and Development	3+0	3
MGT 5111	Marketing Management	3+0	3
CSE 6209	Software Project Management	3+0	3
CIVE 6102	Environmental Management I	3+0	3

12.   Programme Plan - MSc Project Management

YEAR 1							
Semester 1				**Semester 2**			
Code	Module Name	Hrs/Wk L+P	Credits	Code	Module Name	Hrs/Wk L+P	Credits
CORE				CORE			
ENGG 6102	Project Economics and Finance	3+0	3	ENGG 6101	Principles of Project Management	3+0	3
CSE 6005	Management Information Systems	3+0	3	MGT 5212	Human Resources and Quality Management	3+0	3
				ENGG 6202	Research Methods	3+0	3
YEAR 2							
Semester 1				**Semester 2**			
Code	Module Name	Hrs/Wk L+P	Credits	Code	Module Name	Hrs/Wk L+P	Credits
CORE				CORE			
ENGG 6000	Research Project	-	-	ENGG 6000	Research Project	-	9
ENGG 6305	Procurement Management	3+0	3				
	Elective	3+0	3		Elective	3+0	3
					Elective	3+0	3

NOTE:

Each module will consist of 45 contact hours (this includes lectures, tutorials, seminars, workshops, external visits, etc.). The total contact (taught) hours of the course therefore will be 405 hours. The Research Project will involve 180 working hours including direct supervision by a member of academic staff and/or an external supervisor.

A minimum of 6 contact hours is scheduled per week (3 hours on a weekday and 3 hours on Saturday). However, candidates are expected to attend on a daily basis, for a period of two weeks, normally after 4 p.m., those modules which are taught by visiting lecturers.

The Faculty reserves the right to change the order in which the modules are offered.

13.   Outline Syllabus

ENGG 6102 - PROJECT ECONOMICS AND FINANCE
Introduction to the Mauritian Economy - Major Projects in the Economy - Economics of Projects - Costing - Projects and Productivity - Estimating and Competitive Tendering - Investment Appraisal - Cash Flow and Financing Projects.

CIVE 6102 - ENVIRONMENTAL MANAGEMENT 1

Concept of sustainable development; Environmental management tools; EIA; EMS; Environmental legislation; Environmental audits; Waste audits; Risk assessment; Case studies; Environmental problems in Mauritius; Economic Tools to encourage pollution control.

CIVE 6207 - CONSTRUCTION MANAGEMENT

Planning and Programming - Temporary works layout, Construction Methods and Sequence, Work breakdown structure - Estimating duration, CPA - Cost estimating, Monitoring and Control - The tender process, rate build up, system relationships - Alternative estimating models - Construction productivity measurement and improvement - Risk Management in Construction - Construction safety - Site layout, Site security.

CIVE 6402 - INTEGRATED INFRASTRUCTURE PLANNING AND DEVELOPMENT

Importance of Infrastructure Planning and Management. Systems Approach to Infrastructure Planning. Primary and Secondary Effects of Infrastructure Development. Demand Analysis and Economic Activity. Spatial Organisation and Multipurpose Infrastructure Planning. Regional Infrastructure Development. Energy Implications. Objectives, Economics and Multiobjective Evaluation Criteria. Environmental Planning in Infrastructure Development. Project Funding Schemes/Alternatives. Issues in Infrastructure Management. Social Aspects. Economic Impact of Infrastructure. Orienting Infrastructure towards Demand. Case Study.

CSE 6005 - MANAGEMENT INFORMATION SYSTEMS

Introduction to Information Systems and their requirements. Early development in IS, conventional systems analysis, comparisons and problems. IS Methodologies. Systems approaches, planning approaches, participation, phototyping, structural methodologies, data analysis. Tools. Databases management systems, Query language, project management tools, expert systems. Methodologies - SSADM, SSM, etc. Selection and use of systems. Decision support systems, distributed computing and autonomous agent technology. Databases.

CSE 6209 - SOFTWARE PROJECT MANAGEMENT

Introduction to Software Project Management. Nature of Software Production. Software Measurement. Effective Management. Role of Software Project manager. Planning the Software Project. Business Planning. Technical Planning. Managing the Software Project. Project Control. Quality Control & Quality Assurance. Risk Management. Team Management. Maintenance Management. Evaluating the Project.

ENGG 6000 – RESEARCH PROJECT

The objectives of the research project are:
1. to develop an ability to undertake research, analysis or design given an appropriate level of supervision;
2. to develop objectives and program of work;
3. to collect information, assess it and present it in an orderly and coherent form; and
4. to be able to work a document which presents clearly findings related to the study.

ENGG 6101 - PRINCIPLES OF PROJECT MANAGEMENT

Introduction to Principles of Project Management. Planning and Programming. Procurement Budgeting and Estimating. Project Control. Quality Management. Risk Management. Strategic Management. Project Appraisal. Project Completion Report. Case Studies.

ENGG 6202 - RESEARCH METHODS

The Research Concept. The Research Process. Surveys and Sampling Design. The Choice of Analysis, review of basic statistics, regression analysis, analysis of variance, multiple regression, hypothesis testing, dummy variable in regression, one way ANOVA, theory and application of maximum likelihood methods.

ENGG 6305 - PROCUREMENT MANAGEMENT

Basic steps in procurement, purchase planning, partners in a supply chain. Supplier audit and ethics in procurement. Public Procurement, Transparency and Equity. Risks and Relationships in Procurement

Management. Cost reduction techniques including tendering procedures and negotiation. Supply contracts and common supply chain problems. Market information and sourcing for goods and services. Quality control and relevant regulations for ensuring safety in procurement. Environmentalism and green-purchasing. Product cycles and extended product responsibility.

LAW 5401 - LEGAL ASPECTS OF PROJECT MANAGEMENT

Introduction to Law. Brief Overview of Sources of Law and the Mauritian Legal System. Environmental and Safety Law. Contract. Formation and Conditions of Validity of a Contract. Effects of a Contract. Inexecution of a Contract. Alternative Dispute Resolution. Arbitration.

Le Contrat d'Entreprise. Les Obligations de l'Entrepreneur. La Sous-Traitance. La Co-Traitance. Les Obligations du Maître de l'Ouvrage.

Terms and Conditions of a Few Standard Contracts.

Brief Overview of Labour Law. Types of Contract. Rights and Duties of Employers and Employees. Disciplinary Measures including Dismissal.

MGT 5111 - MARKETING MANAGEMENT

The module introduces the foundation of marketing management and its key concepts: the Marketing Concept, Customer Satisfaction and Customer Value. Topics covered will include: evolution in Marketing Management philosophy; the marketing environment (Internal and External environment); the marketing research process; Consumer and Business buying behaviour; Market segmentation, positioning and targeting; The Marketing mix: product, price, promotion and distribution strategy of firms; Social Responsibility and green marketing.

MGT 5212 - HUMAN RESOURCES AND QUALITY MANAGEMENT

Managing and the Environment: the Management Challenge, the Evolution of Management Environment, Social Responsibility, and Ethics, the Global Management Environment. Planning: Decision Making, Planning, Strategy. Organising: Organisational Structure and Design, Job Analysis, Design, and Redesign Human Resource Management. Leading: Group Dynamics and Team Building, Motivation, Leadership, Interpersonal and Organisational Communication. Controlling: Control Systems, Managing Production and Operations, Managing Services, Managing Organisational Change. Growth, Technology and Innovation: Entrepreneurship and Growth, Technology and Innovation. Behavioural Issues in Quality Management: The role of management in sustaining continuous quality improvement, Culture Change & Quality, Building Commitment for Quality, Teamwork & Total Quality, Employee Involvement & Empowerment for Quality, Communication for Total Quality, Quality Training.