MSc Software Engineering Projects and Management - E562

1. Introduction
Available in both full and part-time mode, the MSc Software Engineering Projects and Management programme will provide graduates from IT and related fields with the necessary skills to lead and manage software development projects in a manner consistent with current standards. This programme is a response to the increasing need for leaders who can manage people and processes, who communicate well and who are knowledgeable about the best software development practices in industry. The course has been designed to permit a high degree of flexibility in that students may take varying combinations of modules.

2. Aims and Objectives
The programme aims at developing skills in managing the application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software. The successful graduate will be a competent manager who can communicate well and who can train and lead software developers in producing products that meet quality, schedule, and budget objectives.

3. 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.

4. Programme Requirements
Any undergraduate degree in Computer Science or other related areas.

5. Programme Duration
The normal duration of the programme will be as detailed below.

	Full time (yrs)	Part Time (yrs)
Minimum	1	2
Maximum	2	4

However students wishing to exit earlier, with a Postgraduate Diploma, can do so subject to their meeting the requirements specified in item 6.

The programme will be run on a semester system, where an academic year consists of two semesters.

A semester is of 15 weeks duration (excluding Exam Period).

6. Minimum Credits Required for Award of:

Master's Degree   : 36

Postgraduate Diploma   : 24

Breakdown as follows :

	Minimum Core Taught Modules	Dissertation	Electives Optional Modules
Master's Award	18 Credits	12 Credits	6 Credits
Postgraduate Diploma	18 Credits		6 Credits

7. Assessment

All modules are of 45 hours duration and carry equal weightage [i.e. of 3 credits] except for CSE 6000.

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

- A written examination of 3 hours and
- Continuous assessment carrying a range of 30% to 40% of total marks.
- Continuous assessment may be based on laboratory works, and/or assignments and tests but should include at least 2 assignments/tests per module.
- An overall total of 40% for combined continuous assessment and written examination components would be required to pass the module, without minimum thresholds within the individual continuous assessment and written examination.

Students are required to register for modules which they intend to follow in a given semester on date(s) specified by the Faculty.

Submission Deadlines for Project:

	Full time	Part Time
Start	January - Level I	January - Level 2
Submission	Last working day of August -Post Level 1	Last working day of August - Post Level 2

8. **List of Modules**

   CORE MODULES
   CSE 6209 - Software Project Management
   CSE 6075 - Requirements Engineering and Management
   CSE 6076 - Software Verification and Validation
   CSE 6011 - Software Quality Management
   ENGG 6101 - Principles of Project management
   MGT 5212 - Human Resources and Quality Management
   CSE 6000 – Project

   ELECTIVE MODULES
   Group A
   CSE 6078 - Software Metrics (3L)
   CSE 6080 - ERP & Change Management (2L + 2P)
   CSE 6027 - Enterprise Applications Development (2L + 2P)
   CSE 6077 - Software Engineering Tools (2L + 2P)

   Group B
   ACT 5112 - Project Economics and Finance (3L)
   ENGG 6305 - Procurement Management (3L)
   LA W 7000 - Legal Aspects of Project Management (3L)
   MGT 6011Y - Marketing management (3L)

Note: Students will take six core modules and two electives (one elective from group A, one from group B).

9. **Programme Plan - MSc Software Engineering Projects and Management**

   (**Full- time**)

	Module Code	Module	Hrs/WK L+P	Credits
Semester **I**	CSE 6075	Requirements Engineering and Management	3+0	3
	CSE 6011	Software Quality Management	3	3
	ENGG 6101	Principles of Project Management	3+0	3
	CSE 6076	Software Verification and validation	3+0	3
		Elective 1	(See section 8)	3
Semester **II**	CSE6209	Software Proiect Management	3+0	3
	MGT5212	Human Resources and Quality Management	3+0	3
	CSE 6000	Elective 2	(See section 8)	3
		Project		12

(Part time)

	Module Code	Module	Hrs/WK L+P	Credits
Semester **I**	CSE 6075	Requirements Engineering and Management	3+0	3
	CSE 6011	Software Quality Management	3	3
	ENGG 6101	Principles of Project management	3+0	3
	CSE 6209	Software Project Management	3+0	3
Semester **II**	MGT 5212	Human Resources and Quality Management	3+0	3
		Elective 1	(See section 8)	3
Semester **III**	CSE 6076	Software Verification and validation	3+0	3
		Elective 2	(See section 8)	3
Semester **IV**	CSE 6000	Project		12

Note 1 :An elective will be provided only if sufficient number of students have opted for it and depending on availability of resources.

Note 2 : Some courses may be run during/after office hours depending on availability of resources.