



UNIVERSITY
of
TECHNOLOGY,
MAURITIUS

School of Business Informatics and Software Engineering

MSc Software Engineering

PROGRAMME DOCUMENT

VERSION 4.0

MSE v4.0

August 2021

University of Technology, Mauritius

La Tour Koenig, Pointe aux Sables, Mauritius

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MSc Software Engineering

A. Programme Information

The MSc in Software Engineering is primarily intended for graduates of computing subjects who want an in-depth focused in the software engineering discipline. This programme is a basis for further study, research and acquiring skills and knowledge in areas like design patterns, big data, artificial intelligence and other specialist fields.

This programme also helps the students to be conversant with all the software challenges that exist and shows them the right path to delivering code to the highest levels of quality, reliability and maintainability at the lowest cost.

For the award of the Masters Degree, all modules taken must be passed with overall passes in the examinations, coursework and other forms of assessment.

B. Programme Aims

The MSc Software Engineering programme prepares students to act project leaders. Furthermore, the students will be ready to join any public or private institution whether national or international where software development and maintenance are the main key activities. This programme is also an important step towards research.

C. Programme Objectives

At the end of the programme, the students should be able to :

- Apply skills and knowledge acquired to solve real problems.
- Work in any software development institution.
- Carry out research in the software engineering area.

PART I - Regulations

D. General Entry Requirements

As per UTM Admission Regulations with reference to Masters Programmes.

E. Programme Entry Requirements

A honours degree in Computer Science/Software Engineering/Information Systems or any other qualifications with significant programming and analysis and design contents acceptable to the University of Technology, Mauritius.

F. Programme Mode and Duration

Full Time: 1 years
Part Time: 1½ years

G. Teaching and Learning Strategies

Lectures and tutorials form part of the curriculum. Student should be encouraged to do self learning wherever applicable and interact with professionals in the industry via seminars, workshops and existing industry project.

H. Student Support and Guidance

Guidance will be provided on all aspects of the programmes through any means of communication with Programme Director and Programme Coordinator.

I. Attendance Requirements

As per UTM's Regulations and Policy.

J. Credit System

1 module = 6 credits
Dissertation = 18 credits

K. Student Progress and Assessment

For the award of the Masters Degree, all modules must be passed overall with passes in the examinations, coursework and other forms of assessments. Each module consists of 150 hours of learning, comprising of 45 hours of delivery and 105 hours of self-study.

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 40% of total marks. A module can also be conducted as a project, that is, 100% coursework.

Continuous assessment can be based on seminars, practical labs and/or assignments or class tests.

Grading

Grade	Marks x(%)
A	$x \geq 70$
B	$60 \leq x < 70$
C	$50 \leq x < 60$
D	$40 \leq x < 50$
F	$x < 40$
A-D	Pass
F	Fail

L. Evaluation of Performance

Minimum Credits Required for Award of:

Master's Degree:	90
Postgraduate Diploma:	60
Postgraduate Certificate:	30

M. Award Classification

Overall weighted mark x (%)	Classification
$x \geq 70$	MSc with Distinction
$60 \leq x < 70$	MSc with Merit
$40 \leq x < 60$	MSc

N. Programme Organisation and Management

Programme Director and Co-ordinator: Mr. J. Narsoo

Contact Details : Tel: 2075250 Fax: 234-1767 Email: jnarsoo@umail.utm.ac.mu

PART II - Programme Structure

O. MSc Software Engineering – Full Time (Version 4.0)

Semester 1				Semester 2			
Code	Module	L+T/P+SS	Credits	Code	Module	L+T/P+SD	Credits
REM5101	Research Methodology and Ethics	2+1+7	6	MCT5103	Mobile Systems Architecture and Applications	2+1+7	6
SDT5101	Design Patterns	2+1+7	6	SCG5101	Machine Learning Techniques	2+1+7	6
SEM5201	Software Quality Assurance	2+1+7	6	DTB5101	Database Systems Integration	2+1+7	6
WAT5101	Service Oriented Architecture	2+1+7	6	ISM5104	Global IT Management	2+1+7	6
DBT5102	Big Data and Analytics	2+1+7	6	ISM5121C	Cybercrime and Law	2+1+7	6
SEM5102	Applied Software Project Management	2+1+7	6	ISM5102	Entrepreneurship	2+1+7	6
PROJ5102	Dissertation	-	-	PROJ5102	Dissertation	-	18

P. MSc Software Engineering – Part Time (Version 4.0)

Semester 1				Semester 2			
Code	Module	L+T/P+SS	Credits	Code	Module	L+T/P+SD	Credits
REM5101	Research Methodology and Ethics	2+1+7	6	DBT5102	Big Data and Analytics	2+1+7	6
SDT5101	Design Patterns	2+1+7	6	SEM5102	Applied Software Project Management	2+1+7	6
SEM5201	Software Quality Assurance	2+1+7	6	MCT5103	Mobile Systems Architecture and Applications	2+1+7	6
WAT5101	Service Oriented Architecture	2+1+7	6	SCG5101	Machine Learning Techniques	2+1+7	6
				PROJ5102	Dissertation		

Semester 3			
Code	Module	L+T/P+SS	Credits
DTB5101	Database Systems Integration	2+1+7	6
ISM5104	Global IT Management	2+1+7	6
ISM5121C	Cybercrime and Law	2+1+7	6
ISM5102	Entrepreneurship	2+1+7	6
PROJ5102	Dissertation		18

L: Leculture T/P: Tutorial/Practical SS: Self Study