MSc Geomatics (P/T and FT) – OS501

Aim and Objectives

The aim of this programme is to support the Information System sector associated with the environmental, agricultural, utilities, marine and services sectors. The programme provides training on the use of remote sensing and geographical system tools as support to effective spatial database management and for sound technical decision making. The Republic of Mauritius, with its maritime zone of 2.3 million sq. kilometres, is one of the largest economic zones in the world. If well managed and developed, this can become a huge source of prosperity for Mauritius and its citizens. It is with this vision in mind that this programme has been developed. Graduates of this programme will acquire life-long skills which will enable them to contribute to information systems in a number of fields; marine science, water resources, wastewater engineering, environment, agriculture and any other fields dealing with spatial data. In particular, graduates will acquire in depth knowledge in the field of Geomatics and will have the opportunity of developing entrepreneurship and business skills.

The flexible MSc Geomatics programme adopts a blended learning approach comprising core and elective modules that can be studied full-time or part time. Course modules are delivered with a mix of traditional face- to- face lectures and online study options to allow maximum flexibility to learners especially those already in service.

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.

Programme Requirements

Applicants should be conversant in IT.

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 practicing professional qualification obtained by examination.

Programme Duration

The Programme is offered either on a full-time (F/T) or a part-time (P/T) basis. The duration of the Postgraduate Programme should normally not exceed 2 years (4 semesters) for F/T and 4 years (8 semesters) for P/T.

	Normal	Maximum
Master's Degree (F/T):	1 Year	2 Years
Postgraduate Diploma (F/T):	1 Year	2 Years
Master's Degree (P/T):	2 Years	4 Years
Postgraduate Diploma (P/T):	2 Years	4 Years

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

Minimum Credits Required for the Award of

Master's Degree:	36
Postgraduate Diploma:	24
Postgraduate Certificate:	12

Breakdown as follows:

Modules	Core Taught
Master's Degree:	18 credits
Postgraduate Diploma:	18 credits
Postgraduate Certificate:	12 credits

Assessment

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

• Written Exams

All 3- credit Modules will be assessed by a 2 hr written exam paper All 6-credit Modules will be assessed by a 3 hr written exam paper

Continuous assessment of **30% to 40%** of total marks. Continuous assessment can be based on laboratory work, and/or assignments and <u>should include at least one (1) assignment/test per module</u>.

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 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.

Pre-Requisite Modules (PR)

A student will be allowed to follow module y of which module x is a pre-requisite (PR) provided s/he has

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11 List of Modules

NOTE:

Each module will consist of 45 contact hours (this includes lectures (L) and practicals (P) in the form of lab practicals, tutorials, seminars, etc.). The total contact (taught) hours of the course therefore will be 405 hours. The Research Project will involve 135 working hours including direct supervision by a member of academic staff and/or an external supervisor.

When the programme is offered on a part time basis, 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.

CORE MOD	CORE MODULES		
OET 6105	Geographical Information Systems I	2+2	
OET 6106	Cartographic Design & Map Projections	2+2	
OET 6107	Data Analytics	2+2	
OET 6108	Remote Sensing & Photogrammetry I	2+2	,
OET 6005	Research Methods	2+2	,
OET 6203	Geographical Information Systems II (PR: OET 6105)	2+2	,
OET 6204	Remote Sensing & Photogrammetry II (PR: OET 6108)	2+2	
OET 6000	Research Project	-	
ELECTIVE	MODULES		
OET 6001	Entrepreneurship and SME Management	3+0	
OET 6003	Creativity, Innovation and Entrepreneurship	3+0	,
OET 6004	Digital Image Processing Techniques	2+2	,
ENGG 6101	Principles of Project Management	3+0	-
LAWS 6000	Cyber Laws	3+0	,

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(Full Time)

YEAR 1							
	Semester 1				Semester 2		
Code	Module Name	Hrs/Wk L+P	Credits	Code	Module Name	Hrs/Wk L+P	Credits
OET 6105	Geographical Information Systems I	2+2	3	OET6203	Geographical Information Systems II (PR: OET 6105)	2+2	3
OET 6106	Cartographic Design & Map Projections	2+2	3	OET6204	Remote Sensing & Photogrammetry II (PR: OET6108)	2+2	3
OET 6107	Data Analytics	2+2	3	OET 6000	Research Project		9
OET 6108	Remote Sensing & Photogrammetry I	2+2	3				
OET 6005	Research Methods	2+2	3				
OET 6000	Research Project	-	-				
One Elective			3	One Electiv	e		3

			(Part Ti	me)			
YEAR 1							
	Semester 1				Semester 2		
Code	Module Name	Hrs/Wk L+P	Credits	Code	Module Name	Hrs/Wk L+P	Credits
OET 6105	Geographical Information Systems I	2+2	3	OET 6108	Remote Sensing & Photogrammetry I	2+2	3
OET 6106	Cartographic Design & Map Projections	2+2	3	OET6203	Geographical Information Systems II (PR: OET 6105)	2+2	3
OET 6107	Data Analytics	2+2	3	OET 6005	Research Methods	2+2	3
YEAR 2							
	Semester 1				Semester 2		
Code	Module Name	Hrs/Wk L+P	Credits	Code	Module Name	Hrs/Wk L+P	Credits
OET 6000	Research Project	-	-	OET 6000	Research Project	-	9
OET 6204	Remote Sensing & Photogrammetry II (PR: OET6108)	2+2	3				
One Elective		3+0	3	One Electiv	/e	3+0	3

For the MSc Award, students have to complete ALL core modules, research project and ANY two (2) electives offered by the Department.