MSc Telecommunications Management

1. Introduction

There is an increasing demand for telecommunications engineers who combine a Master's level of theoretical and operational understanding with the flexibility to adapt to new developments. This course is ideal for those who have technical skills within the area of telecommunications, but who are looking to move into a management position.

The program's goal is to provide students with advanced technical knowledge of applied communications integrated with a solid grounding in business management techniques. It is designed for students and communications industry professionals seeking to advance their careers, for business professionals looking for ways to leverage their communications resources for enabling their business, and for academics preparing for the challenges of research and teaching. It establishes a fine balance between academic fundamentals and industry realities and requirements. In addition to strong practical, real-world telecommunications and management skills, graduates of the program leave with improved communication, interpersonal, and team skills.

2. Aim and Objectives

Aim

To provide the technical knowledge and management skills needed to plan, acquire, operate, and evaluate telecommunications systems.

Objectives

The programme fulfils this aim by :

a) Providing an advanced technical knowledge of applied telecommunications integrated with a solid grounding in business management techniques.

b) Developing critical management concepts such as the structure and environment of the telecommunications industry, strategic planning, financial management, and quality improvement.

c) Providing students with the skills to design networks, establish or influence policy, make technology adoption and standards decisions.

d) Imparting professional knowledge in creating cost models for new technology implementations, calculating return on investment, and in the organizational and user implications of networking systems.

e) Enabling students to acquire mathematical modeling and design tools for telecommunications networks.

3. Entry Requirements

3.1 General requirements

Successful completion of an undergraduate degree with at least a Second Class or 50%, which ever is applicable.

OR alternative qualifications acceptable to the University of Mauritius.

3.2 Programme Requirements

A Degree in Electrical, Electronics, Telecommunications, Mechatronics, Computer Science and/or Computer Engineering from a recognised University or alternative qualifications acceptable to the University of Mauritius.

Mature candidates with relevant work experience will also be considered.

4. Programme Duration

The programme will be offered on a part-time basis. The duration of the graduate programme should normally not exceed 4 years.

	Normal	**Maximum**
Master's Degree:	2 Years	4 Years
Postgraduate Diploma:	2 Years	4 Years

5. Credit System

1 credit is equivalent to 15 hours lecture. For tutorials/practicals, 2 hours is equivalent to one lecture hour.

A student has to take a minimum of 12 credits per semester and is allowed to take maximum of 24 credits per semester (subject to Regulation 4).

6. Minimum Credits Required for the Award of

Master's Degree: 36
Postgraduate Diploma: 24 (without dissertation)
Postgraduate Certificate: 15 (without dissertation)

Breakdown as follows:

	Minimum Core Taught Modules	**Project**	**Electives/ Optional Modules**
Master's Degree:	18 credits	9 credits	9 credits
Postgraduate Diploma:	18 credits	-	6 credits
Postgraduate Certificate	15 credits	-	-

8. Assessment

Each module will carry 100 marks and will be assessed as follows (unless otherwise specified):
Written examination of 3-hour duration and continuous assessment of 10% to 30% of total marks.
Continuous assessment can be based on laboratory work, assignments and/or 1 class test.
An overall of 40% for combined Continuous Assessment and Written Examination components would be required to pass the module.

Core and elective modules carry a weighting of 3 credits while the Project carries 9 credits.

Submission Deadlines for Dissertation:

First Draft: End of July of Final Year.
Final Copy: last week day of August of Final Year by 4.00 p.m at latest.

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 which 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. Programme Structure

The programme consists of taught modules and a research thesis. Each elective and core module with 3 credits extend over 15 weeks and consist of 45 hours of lecture. Examinations are held at the end of each semester for all modules. Each student is required to take at least 9 taught modules – out of which 6 would be core modules. The elective modules are aimed at covering particular areas in more depth. At least three electives are to be taken in the second year. The Research Project will involve 180 working hours including direct supervision by a member of academic staff and/or an external supervisor.

The Faculty reserves the right to change the order in which the modules are offered and the right not to offer certain of the elective modules.

11. 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.

12. List of Modules

CORE MODULES

Code	Module	Hrs/Wk L+P	Credits
ELEC 6105	Principles of Applied Telecommunications	3+0	3
ELEC 6106	Policy and Regulatory Principles in Telecommunications	3+0	3
ELEC 6107	Telecommunications Project Management	3+0	3
ELEC 6205	Telecommunications Economics	3+0	3
ELEC 6206	Network Planning	3+0	3
ELEC 6207	Financial Management	3+0	3

PROJECT

ELEC 6000(Y)	Project	-	9

ELECTIVES

ELEC 6311	Broadband Networking: Services and Technology	3+0	3
ELEC 6312	Telecommunications Auditing	3+0	3
ELEC 6313	Marketing in Telecommunications	3+0	3
ELEC 6314	Network Security and Forensics	3+0	3

ELEC 6408	E-Commerce Technologies	3+0	3
ELEC 6409	Marketing Management	3+0	3
ELEC 6410	Next Generation Networks	3+0	3
ELEC 6411	Nanotechnology	3+0	3

13. Programme Plan – MSc Telecommunications Management

Year 1			
Code	Module	Hrs/Wk L+P	Credits
CORE			
ELEC 6105	Principles of Applied Telecommunications	3+0	3
ELEC 6106	Policy and Regulatory Principles in Telecommunications	3+0	3
ELEC 6107	Telecommunications Project Management	3+0	3
ELEC 6205	Telecommunications Economics	3+0	3
ELEC 6206	Network Planning	3+0	3
ELEC 6207	Financial Management	3+0	3

Year 2			
Code	Module	Hrs/Wk L+P	Credits
CORE			
ELEC 6000	Project	-	9
ELECTIVES	Semester 1		
ELEC 6311	Broadband Networking: Services and Technology	3+0	3
ELEC 6312	Telecommunications Auditing	3+0	3
ELEC 6313	Marketing in Telecommunications	3+0	3
ELEC 6314	Network Security and Forensics	3+0	3
ELECTIVES	Semester 2		
ELEC 6408	E-Commerce Technologies	3+0	3
ELEC 6409	Marketing Management	3+0	3
ELEC 6410	Next Generation Networks	3+0	
ELEC 6411	Nanotechnology	3+0	3

Note 1 : A student will be required to choose TWO electives in semester 1 and ONE elective in semester 2

Note 2: An elective will be provided only if a sufficient number of students have opted for it and depending on availability of resource persons.