

Outlined Programme Proposal (OPP)

for

M. Sc Information Technology

in the

Faculty of Computing

Senate Approved

1.0 Name of the Programme: M.Sc Information Technology **Programme Code:** 5401

2.0 Entry Requirements

To be admitted for the M.Sc Information Technology programme, a candidate is expected to:

- i) Have at least credit level passes in five (5) subjects at the Senior Secondary Certificate or its equivalent NECO, GCE 'O' level, NABTEB or TC II 'O' level examinations. The credit level passes must include English language, Mathematics and Physics to form the core subjects and any other two (2) credit level passes from Chemistry, Biology/Agric, Further Mathematics and Computer Studies taken from a maximum of two (2) sittings.
- i) A minimum of Second-Class Lower (2.4/5.0 points) CGPA at the First-Degree level in Computing-related fields from recognised institutions in addition to (i) above.
- ii) A Minimum of 3.0/5.0 points CGPA at the PGD level, in Computing-related fields from recognised institutions in addition to (i) above.

Note:

Computing-related fields

Computing-related fields from recognized institutions include: Computer Science, Data Management, Information Technology, Mathematics, Maths and Statistics, Statistics, Computer Engineering, Electrical/Electronic Engineering, Electrical Engineering, Cybersecurity, Artificial Intelligence, Data Science, Software Engineering, Communication Technology, Physics Electronics, Physics with Mathematics, System Engineering, Computer with Mathematics

3.0 Aims and Objectives

The M.Sc Information Technology programme focuses on the latest technological trends in Information and Communication Technology with major emphasis on Internet technologies.

3.1 **Aims**

The M.Sc Information Technology programme aims at admitting research-oriented graduates of Computer Science and Information Technology into the high echelon of IT professionalism. The programme is expected to exploit all the web-based resources at NOUN to guide students into ground breaking research areas towards concluding their periods of study with an internationally comparable thesis by each student

3.2 **Objectives**

The M.Sc Information Technology programme is designed mainly to make the students be up-to-date with emerging developments in IT profession. Thus, at the end of the programme, graduates should be able to:

- design a one-stop website model for high class conglomerate establishments;
- demonstrate advanced programming skills in various modern programming tools;

- manage very large web-based information systems; and
- confidently administer large networks and manage large database systems.

4.0 Programme Structure and Degree Rules Duration of the Programme

Students pursuing M.Sc programme in Information Technology must complete at least 35 credits to satisfy the University's regulations.

15 Credits from table 1 (first semester course)

20 Credits from table 2 (second semester courses)

The core courses listed in Table 1 are designed to provide students with an in-depth knowledge of Information Technology.

The courses listed in Table 2 allow students to broaden their knowledge and skills, hence assisting them to operate more effectively.

4.1 Outline of Course Structure

Course Code	Course Titles	Unit(s)	Status	
1 st Semester				
GST807	A Study Guide for the Distance Learner	2	С	
CIT843	Introduction to Database Management Systems	2	С	
CIT831	Software Engineering Methodologies	3	С	
CIT841	Advanced Information Storage and Retrieval	2	Е	
CIT811	User Interface Design and Ergonomics	3	Е	
CIT853	Internet concepts and Web Design	2	С	
CIT855	Advanced Cyber Security	2	Е	
CIT891	Advanced Multimedia Technology	3	Е	
CIT851	Advanced Systems Analysis and Design	3	С	
	Total Credit Units	20		
2 nd Semester				
CIT802	Technical Report Writing	3	С	
CIT832	Operating Systems Concepts and Networking	2	Е	
	Management			
CIT854	Network Design and Programming	3	С	
CIT844	Advanced Database Management Systems	2	Е	
CIT852	Data Communication and Networks	3	С	
CIT834	Object-oriented Programming using C#	3	С	
CIT803	Seminar on emerging technologies	3	С	

The M. Sc Information Technology programme is structured into 3 semesters as shown below

CIT882	Internet of things	2	E
	Total Credit Units	15	

Course Code	Course Titles	Unit(s)	Status
3 st Semester			
CIT899	Research Project	6	С

Overall Compulsory Courses = 33 Overall Electives = 16 Total = 49 N/B: MSc Students must pass ALL compulsory courses and minimum of 6 credits from elective courses.