

3. Course of Study Modules

Students will choose any three (3) modules below for a total nine (9) credits

- Advanced Chemical Reaction Design
- Advanced Transport Phenomena
- Molecular Thermodynamics
- Special Topic in Chemical & Biological Engineering

4. Thesis components-22 credits

Graduate Office

Dr. Felix O. Akinladejo
Faculty Graduate Studies Research & Entrepreneurship
Coordinator
Email: fakinladejo@utech.edu.jm
Tel: 970-5825

Ms. Duraine Bunting
Administrative Support
Faculty of Engineering & Computing
Email: duraine.bunting@utech.edu.jm
Tel: 970-5046

GENERAL QUERIES DIRECTED TO:

Faculty of Engineering & Computing
Graduate Studies Research & Entrepreneurship
(FGSRE) Unit
Room 1A25
Engineering Building
Tel: 927-1680-8 Ext 2046



**University of Technology,
Jamaica**

**Faculty of Engineering
&
Computing**

*MASTER OF
PHILOSOPHY/PhD
IN
CHEMICAL &
BIOLOGICAL
ENGINEERING*

CHEMICAL & BIOLOGICAL ENGINEERING

PREAMBLE

The Faculty requires an Mphil/PhD student to complete a total of forty (40) credits on the programme, comprising of eighteen (18) credits course work component and twenty-two (22) credits research component.

The eighteen (18) credits course work component is structured as below:

MPhil Programme Format	
Faculty Modules	6 credits (2 modules)
School Module	3 credits (1 module)
Course of Study Modules	9 Credits (3 modules)
Research Component (Thesis)	22 credits
Total	40 credits

Entry Requirements

Bachelors Degree in Computing or Engineering with minimum standard of 2nd Class Honours and GPA of 2.70. Applications will be considered based on the nature and scope of the proposed research.

Programme Duration

Minimum eighteen (18) months full-time and twenty four (24) months part-time

Programme Format

The course of study are scheduled for commencement at the beginning of each Utech academic semesters:

Semester 1 September—December

Semester 2 January—April

Semester 3 May—August

Tuition

The tuition per course of study is US\$9180.00*

*subject to change.

COURSE OF STUDY MODULES

1. Faculty Modules—Six (6) Credits

a. Graduate Research Methods (3 credits)

This course is designed to guide the graduate students on how to successfully complete a thesis or dissertation in the computing and engineering disciplines. It will describe specific requirements and expectation for the sequence, format and presentations of the thesis or dissertation, which forms the most important requirements in graduate studies, mostly especially, as required in the Faculty of Engineering and Computing graduate programmes.

b. Graduate Research Seminar (3 credits)

This module presents a great opportunity for FENC graduate students to develop stimulating dialogue among themselves and with other seasoned researchers.

Ideally, the presentations should be recorded electronically to give the student the chance to review the sessions. The presentations will be open to all research students in the faculty. The student will be required to circulate in advance a hand-out, abstract or draft of the paper. Faculty members and guest lecturers will also be engaged to present papers in order for the student to gain experience.

2. School Module—Three (3) Credits

Advanced Engineering Analysis

This course investigates mathematical solution methods applied to problems encountered in mechanical, electrical and chemical engineering applications. These applications include fluid mechanics, heat and mass transfer, stress analysis and chemical kinetics. The mathematical techniques studied include solving linear systems of simple-algebraic or differential equations using vector-matrix operations, and the application of eigenvectors, eigenvalues and singular values to engineering problems. Familiarity with computer programming is recommended. Students will be familiarized with the use of the Matlab software and programming language.