About FENC

In 1998 the University of Technology, Jamaica (UTech) was reorganized into five Faculties. Emerging from the rationalization of the university's academic and administrative units, the Faculty of Engineering and Computing (FENC) became an entity. FENC comprises the following schools:

- School of Engineering
- School of Computing and Information Technology

FENC is the second largest such faculty in the Caribbean region and it is also the second largest faculty within UTech.

Vision Statement

To be the preferred partner in providing education and training for engineering and computing scholarship in Jamaica and the Caribbean.

Mission Statement

Build an education and training framework that responds to local and regional needs by:

- Promoting excellence in staff, students and graduates.
- Emphasizing quality in teaching and research.
- Developing relevant curricula based on student-centred learning concepts.
- Fostering innovative use of technology in teaching methods and laboratory exercises.

- Maintaining a strong commitment to research, service and teamwork.
- Developing applied research projects for industrial renewal.
- Building collaboration with engineering and computing training institutions locally and internationally.

ENGINEERING & COMPUTING

Application & Registration

1. Applications should be made on the prescribed form, which is available at the Student Affairs Office.

2. Course Participants are encouraged to register in advance by completing and submitting the application form

3. Final Payments should be made at least **two weeks** before commencement of the course. Payments are accepted in Cash, Debit/Credit Cards, or Manager's Cheques.

Cancellation

1. Courses may be cancelled where enrolment is insufficient, in which case, a refund of course fees will be made.

2. Student cancellation must be received one (1) week prior to the commencement of the course, failing which the individual or sponsor will be held responsible for the payment of fees.

Contact

Student Affairs Office

Faculty of Engineering & Computing

University of Technology, Jamaica

237 Old Hope Road, Kingston 6

Phone: (876) 970-5163, 970-5165

University of Technology, Jamaica

Faculty of Engineering & Computing

ELECTRICIAN'S LICENSING COURSE

"Solution Driven, Development Bound"

COURSE OVERVIEW

The course prepares the participant to understand the regulations governing the supply and distribution of Electrical Energy. The Jamaican standard JS21, is the source of regulations and is supported by the I.E.E. regulations where necessary. In addition participants will cover topics in electrical technology, magnetism and communication. The importance of solving numerical problems will be included.

The course has been improved to offer an introduction to PLC and motor controls.

Participants will also do the necessary craft practice for the installation of domestic, commercial and industrial systems.

Much of the material in this course is based on, *Installation practice as required by JS21.*

PRE-REQUISITES

Three passes at CXC General Proficiency (English, Mathematics & Science or Technology) plus 2 year's electrical experience **OR** NVQJ – level 2 plus 3 year's electrical experience **OR** Interview and 5- year's industrial electrical experience.

GENERAL COURSE OBJECTIVE

After successful completion, the student will:

* Know how to apply the relevant electrical regulations of Jamaica
* Understand the principles of associated with electrical wiring, layout and service connections
* Show competence in the correct use of electrical and electronic test equipment
* Know how to install, test and commission equipment and installation
* Know how PLC interacts with other controllers
* Be competent for the challenge NVQJ level 2 & 3, and qualify to sit the licensing examination

COURSE OUTLINE

UNITS	Hours
1. Safety	6
2. Supply systems	9
3. Earthing	3
4. Conductors and cables	12
5. Magnetic & electromagnetism	12
6. Measuring instruments	9
7. Resistors, capacitors & inductors	15
8. Related topics	15
9. Drawing and sketching	6
10. Electrical components & systems	6
11. Overhead & underground lines	9
12. Electrical installation practice	12
13. Signs, alarm and call systems	6
14. Introduction to PLC	12
15. Electrical motors	12
Projects & Workshop Exercises	15

Actual workshop practice and projects will be done in the areas of:

* Wiring for domestic, commercial and industrial installation
* Electrical and Electronic assembly and testing
* Preparation of installation diagrams and drawing
* Fault detection
* Earthing of systems

Laboratory exercises are to be completed and reports submitted. The lecturer will specify the particular project for each group consisting of 2 or 3 students.

TEACHING APPROACHES

* Lectures
* Demonstrations
* Practicals

ASSESSMENT PROCEDURES

Test in class	=	15%
Labs	=	20%
Assignment	=	15%
Final Exam	=	50%
Total	**=**	**100%**

IMPORTANT NOTES

1. Students will qualify to the do the HEART NVQJ level 2 exams by the mid-point of the course. Students must make their own arrangements with HEART to sit this exam
2. Students will qualify for the HEART NVQJ level 3 at the end of course. Students must make their own arrangements with HEART to sit this exam
3. Students will qualify for the Electrical Licensing Board exam at the end of the course. Students who wish to sit the exam must make their own arrangements with the Government Licensing Board.