

About the CEEC

The Computing and Engineering Entrepreneurial Centre (CEEC) is the entrepreneurial arm of the Faculty of Engineering and Computing at the University of Technology, Jamaica. We harness the resources of the Faculty and market them to the wider University community, local private Industries and overseas enterprises.

We operate as a Technical Solution Centre under the flagship UTech Brand, not only as a teaching body, but also to offer consultant services, form alliances, partnerships and franchises. We pride ourselves as the Institution of choice for Technical Solution.

Some projects that we have successfully worked on are:

1. NEPA endorsed programme for certification of Air Conditioning and Refrigeration Technicians for the impending mandatory licensure.
2. SMA endorsed programme for the certification of Radio Technicians.
3. Partnership with FIU for delivery of the Master of Science in Engineering Management.
4. Consultancy Services to carry out audit of all Cement Facilities within the Eastern Caribbean.
5. Consultancy services with USAID for the development of the 5 year sustainability plan for the Grants Pen Policing Centre.
6. Energy Audits.

The CEEC also offers courses in Basic Computing, Network Engineering, Microcomputer Technology, Digital Computer Technology, Programmable Logic Controllers, Computer Programming, Web Development, AutoCAD, Industrial Hydraulics, Building Services Technologies, Electronics & Electrical Licensing and for the certification of energy auditors in conjunction with the JSEE and AEE

Contact:

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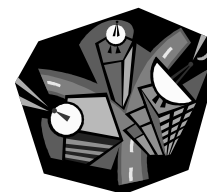
[Http://www.utechjamaica.edu.jm/CEEC/index.htm](http://www.utechjamaica.edu.jm/CEEC/index.htm)

Application & Registration

1. **Course Participants are encouraged to register in advance. The cost of registration is \$500.**
2. **Application should be made on the prescribed form, which is available at the Centre.**
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.**



**UNIVERSITY OF
TECHNOLOGY, JAMAICA**

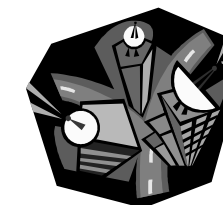
CEEC

**Computing &
Engineering
Entrepreneurial Centre**

**In collaboration with
Spectrum Management Authority
and
The Post & Telecommunications Department
A division within the Ministry of Mining &
Telecommunications**

Presents the

**Radio Technician's
Licensing Course
Class A & B**



"Technology Driven, Development Bound"

Objective:

This course is designed to enable students to:

1. Demonstrate knowledge of the principles of electricity and the theory of radio;
2. Demonstrate knowledge of the installation, repair and configuration of radio equipment while observing safety measures and eliminating harmful interference to other radio users; and
3. Operate and use test instruments.

Course Outline**Unit 1 Principles of Electricity**

- 1.1 Electricity and Magnetism
- 1.2 Electro Magnetism
- 1.3 Electrostatics
- 1.4 Alternating Current
- 1.5 Instruments

Unit 2 Theory of Radio

- 2.1 Electronics
- 2.2 Power supplies
- 2.3 I.C and Transistor circuits
- 2.4 Transmitters
- 2.5 Receivers

- 2.6 Propagation
- 2.7 Aerials
- 2.8 Direction Finders
- 2.9 Measurement
- 2.1 Radio Communication Systems

Unit 3 Cable and Fibre Optic**Unit 4 Design of Transmitters (> 1,000 watt)**

- 4.1 Tower construction & Erection
- 4.2 Transmitter Installation
- 4.3 Power Source
- 4.4 Standby Power
- 4.5 Grounding
- 4.6 Lightning Arrestor
- 4.7 Cabling
- Site Visit

INSTRUCTIONAL/LEARNING APPROACHES

Lecture, handouts, class activities, Field Trip and lab work.

ASSESSMENT PROCEDURES

1 Assignments/Lab	30 %
2 Final Test	70%
TOTAL	100 %

BREAKDOWN OF HOURS

1 Lectures/Discussion	86 Hours
2 Laboratory Activities	45 Hours
3 Field Trip	3 Hours
4 Final Assessment	3 Hours
TOTAL	137 Hours

The base course will be comprised of units 1-3 for the Class B licence.

To qualify for a Class A licence, participants will have to cover OR already have competencies in modules 1-3 AND complete module 4.

For the Class A Licence, candidates are expected to demonstrate more detailed knowledge than that required for the Class B Licence. Recipients of Class B Licences cannot operate radio frequency equipment with power exceeding one thousand watts (1000 W).

AWARD

Upon completion of the course, the CEEC will submit the results of the final examination and the recommendations for the grant of the Technicians Licence to the Spectrum Management Authority (SMA). The SMA will:

- Review the applications, results of the examination and submit same for the approval of the Postmaster General.
- Issue a Radio Technician's Licence within 15 business days from the date of receipt of the completed application.
- Keep the records of all licensed persons.
- Provide written notice to the licensee, in the event that the Postmaster General denies, suspends or withdraws a licence.