

Nitec in Technology – Electronics, Computer Networking & Communications

Code: NTLEN

Duration: 600 Hours

Synopsis:

This course provides students with the skills and knowledge in installing, maintaining and servicing electronic devices, and communications system to support a broad range of applications.

This course consists of **5 modules** as shown below:

<p>Module 1: Electrical Principles and Measurements (EPM)</p> <p>Durations: 60 hrs (Theory); 60 hrs (Practical)</p> <p>Module Objectives:</p> <p>On completion of the module, students should be able to apply the basic principles of electrical and electronics to connect and test electrical circuits. They should also be able to construct prototype electronic project on printed board.</p>	<p>Module Code: EC2001LS</p> <p>Credits: 7</p> <p>Prerequisite: NIL</p>
<p>Module 2: Digital Electronics (DE)</p> <p>Durations: 60 hrs (Theory); 60 hrs (Practical)</p> <p>Module Objectives:</p> <p>On completion of the module, students should be able to interpret, construct, test and troubleshoot basic digital electronic circuits. They should also be able to construct prototype digital electronic projects.</p>	<p>Module Code: EC2002LS</p> <p>Credits: 7</p> <p>Prerequisite: NIL</p>
<p>Module 3: Analogue Electronics (AE)</p> <p>Durations: 60 hrs (Theory); 60 hrs (Practical)</p> <p>Module Objectives:</p> <p>On completion of the module, students should be able to interpret, construct, test and troubleshoot analogue electronic circuits. They should also be able to construct prototype analogue electronic projects.</p>	<p>Module Code: EC2003LS</p> <p>Credits: 7</p> <p>Prerequisite: NIL</p>
<p>Module 4: Computer Networking Principles (CNP)</p> <p>Durations: 60 hrs (Theory); 60 hrs (Practical)</p> <p>Module Objectives:</p> <p>On completion of the module, students should be able to set up and test wired and wireless Local Area Network for resources sharing. They should also be able to identify the various network topologies and protocol; and troubleshoot network connectivity faults.</p>	<p>Module Code: EC2004LS</p> <p>Credits: 7</p> <p>Prerequisite: NIL</p>

Module 5: Electronic Communications System (ECS)	Module Code: EC3002LS
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Durations: 48 hrs (Theory); 72 hrs (Practical)	Credits: 6
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Module Objectives:	Prerequisite: NIL
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On completion of the module, students should be able to apply the knowledge and skills on information transmission and reception in analogue, digital and optical communication for system performance testing and maintenance.

Entry Requirements:

- Applicant must be at least 18 years of age.
- 3 GCE 'N' (Grade A-D or Grade 1-5) passes in Mathematics or Science and two other subjects; or
- 2 GCE 'O' (Grade 1-8) in any 2 subjects; or
- Passed ISC/CoC in Electronics Manufacturing; or
- Passed ISC/CoC in Wafer Fabrication; or
- Workplace Literacy & Numeracy (WPLN) Level 5 in Reading, Speaking, Listening and Numeracy;
- Entrance test conducted by ITE.
- Applicant should be free from colour appreciation deficiency.

Duration:

The total minimum required Curriculum Hours for 5 Modules is 600 hrs. This programme is offered either as:

- **Full-time** over 6 months. All classes will be conducted from 9.00 am to 5.30 pm on weekdays.
- **Part-time** over 30 months. All classes will be conducted once per week (either weekday or weekend) from 9.00 am to 5.30 pm; or 2 evening sessions per week (during weekdays) from 6.30 pm to 10.30 pm.

Frequency:

Every January and July intake.

Training Medium:

This course can be conducted in English.

Training Methodology:

This course is delivered through lectures, E-learning, tutorials and hands-on practical activities.

Essential Requirement:

- Scientific Calculator: CASIO FX-570MS / CASIO FX-991MS / SHARP EL-506W / SHARP EL-520W

Examination:

A student must achieve **at least 80%** of the total possible attendance in that module in order to be eligible for the end of module examination. Medical leave and approved absence are not counted against a student when the attendance requirement is computed.

Certification:

Module Certificate(s) for *Nitec* course of study will be awarded for the module(s) that a student passed in the examination series.

To obtain the full certification and an academic transcript of *Nitec* in Technology – Electronics, Computer Networking & Communications, student needs to accumulate at least 34 credits within 3 years from the first examination.

Credits for Certification	
From Core Modules	34
Total:	34

Progression Pathway:

In general, the completion of a module is sufficient for progression to the next module of a course of study.

Nitec in Technology – Electronics, Computer Networking & Communications graduates with a Grade Point Average (GPA) of 3.5 and above may apply for provisional admission to CET diploma courses offered at the 5 polytechnics. Applicants who are granted provisional admission by the polytechnics need to complete a [bridging programme](#) conducted by ITE.

Nitec in Technology – Electronics, Computer Networking & Communications graduates with a GPA of 2.3 and above may also apply for progression to related *Higher Nitec* courses offered by ITE.

Career Prospect:

Most students of ELITC are employed in the electronics manufacturing workforce. Students who graduate and obtain the full *Nitec* Certificate in Technology – Electronics (Computer & Networking) have more opportunities to advance their career to supervisory positions. Moreover, their knowledge and skills can help to add value to their organisation.

Some of the job titles held by *Nitec* in Technology – Electronics, Computer Networking & Communications graduates include:

- Network Technician
- Computer Systems Technician
- Electronics Servicing Technician
- Electronics Production Technician
- Electronics Maintenance Technician
- Communication Equipment Technician
- Test & Measurement Technician
- Engineering Assistant
- Electronics Specialist

