

The **Diploma in Electrical and Mechanical Engineering Technology** allows learners to pursue the Pearson BTEC Higher National Diploma (HND) in Electrical and Electronic Engineering, Civil Engineering or Mechanical Engineering.

After successful completion of an HND, learners will be provided with the opportunity to progress to a higher level qualification in an engineering discipline which will create graduates who are able to find employment in the following areas: Oil and Gas Industry, Manufacturing industries, Telecommunications, Media, Utilities, Electrical and Electronic workshops, Machine workshops, Renewable energy industries, Automotive sector.

The main aims of this Diploma programme are:

- To provide a pathway for progression to the Pearson BTEC HND Electrical and Electronic Engineering, Civil Engineering or Mechanical Engineering programme by equipping learners with the relevant knowledge, understanding and skills required to succeed in the Higher National Diploma programmes
- To expose students to a work based experience via a blend of vocational and academic learning experience
- To produce a graduate with the requisite skills, knowledge, understanding and personal attributes so as to continue their professional development and further their study in an engineering discipline
- To produce a graduate that can communicate effectively in the work place
- To ensure that graduates understand the structures and objectives of their discipline
- Establish a foundation for career development in Engineering for all graduates of this programme

This qualification can be earned in **1 year**.

Graduates are exempted from the Foundation semester and can directly enter the first semester of the HND qualification which will begin in September.

Classes for the new semester is scheduled to commence in **September 2026**. The exact date will be confirmed.

Entry Requirements

To be eligible for entry into this Diploma programme, applicants must satisfy one of the following requirements:

- A minimum of four (4) CSEC passes inclusive of Mathematics, English and a Science subject or any equivalent qualification to that stated above such as from GCE O'Level **OR**
- City & Guilds International Technician Certificate in Electrical and Electronic Engineering or any other recognised qualifications

NOTE:

Persons interested in this programme and who do not hold any of the above qualifications may be interviewed and accepted, even if they are not currently employed in the field.

Mode of Study

The Diploma in Electrical and Mechanical Engineering Technology will be offered as a **Full Time** or **Part time** programme at the **Champs Fleurs** campus:

Classes are delivered in a **blended format**, comprising **face-to-face and online sessions**. This course will also be assessed by a combination of practical assignments and examinations.

Registration Information

Online Registration is facilitated via the following steps:

1. **Send qualifications:** Send soft copies of your qualifications and a form of Identification (National ID, Passport, Driver's Permit) to DiplomaComputing@sbc.edu.tt. The fact sheet attached lists the direct entry qualifications.
2. **Complete application form:** Once it has been confirmed that you have the necessary qualifications, complete this form: <http://www.sbc.edu.tt/apply/>
3. **Pay Fees:** Pay fees as outlined in the Programme Fees section below.
Payment methods can be found on our website: <http://www.sbc.edu.tt/covid-19/online-payments/>. Note that we also accept credit card payments through E-Pay. Please email us if you prefer this payment method and an invoice will be sent to you.

Payment Plan: If you wish to apply for a payment plan, the following documents are required:

- Job letter
- Recent payslip
- Utility bill
- Guarantor for minors or persons who are not employed

Please note that your payment plan must be approved before any payment is made.

4. **Send Payment Confirmation:** After making payment send payment confirmation using the form on the website: <http://www.sbc.edu.tt/online-payment-update-notification/>

Fees Schedule (Subject to Change)

Full Payment
Registration Fee: TT \$650.00
Tuition Fee: TT\$8,500.00

Payment Per-Semester
Semester 1 – Registration Fee: TT \$650.00
Tuition Fee: TT\$3,000.00
Semester 2 – Administrative Fee: TT\$500.00
Tuition Fee: TT\$3,000.00
Semester 3 - Administrative Fee: TT\$500.00
Tuition Fee: TT\$3,000.00

Programme Structure:

This programme will be offered **full time** or **part time** and consists of six (6) courses and three (3) life skills courses.

Note:

- All courses are compulsory
- A minimum of 80% attendance for classes is required to be eligible for the final exam

This qualification can be earned in **12 months** or three (3) semesters as follows:

Semester 1: September-December	Semester 2: January - April	Semester 3: May-August
1. Health and Safety in Engineering	4. Fundamentals of Mathematics	7. Electrical Machines
2. Electrical and Electronic	5. Fundamentals of Mechanical Systems	8. Electronic Devices and Circuit Analysis
3. Study Skills in Research	6. Entrepreneurial Skills	9. Career Builder: Essential Skills for Academic and Professional Success / Building and Working with High Performance Teams

UNIT OUTLINE

UNITS		
	Course unit	Description
1	Fundamentals of Mathematics	This unit aims to give learners a strong foundation in mathematical skills which will allow them to successfully complete many of the other units within the qualification. Some of the topics learners will be introduced to include indices, algebraic formulas, quadratic equations, radian measure, trigonometry, areas and volumes, statistics and calculus.
2	Electrical and Electronic Principles	This unit will develop learners understanding of fundamental Electrical and Electronic Principles through analysis of simple direct current (DC) circuits. Learners are then taken through the various properties and parameters associated with capacitance and inductance, before finally considering the application of single-phase alternating current (AC) theory. The unit will encourage an investigative approach through practical construction, measurement and testing of circuits and, where applicable, the use of computer-based circuit analysis and simulation.
3	Electrical Machines	This unit provides learners with knowledge and an understanding of the features and applications of a range of electrical machines and the hazards, legislation and regulations related to working with electrical apparatus.
4	Electronic Devices and Circuit Analysis	This unit provides a practical introduction to basic electronic devices and analogue and digital electronic principles. It provides learners with an opportunity to investigate the operation of diodes and transistors, two of the most important building blocks in electronic circuits. Learners will then go on to build and test circuits that make use of these devices and will consider the operation of integrated circuits such as the operational amplifier. Logic gates and flip-flops are also investigated both in practice and by using simple electronic principles, such as voltage gain or truth tables.
5	Fundamentals of Mechanical Systems	This unit aims to give learners knowledge of the components and systems commonly used in lubrication systems, transmissions and plant equipment.
6	Health and Safety in Engineering	This unit will give learners an understanding of the key features of health and safety legislation and regulations and how these are applied in engineering to ensure safe working conditions.

Contact Information

Course administrators can be contacted as follows:

<u>Course Administrators</u>	<u>Telephone: 663-SBCS (7227)</u>	<u>Email</u>
Kamaria De Freitas	Extension 1251	DiplomaComputing@sbc.edu.tt
Jody Manorath	Extension 1096	