# SBCS

#### **FACT SHEET**

The **Diploma in Electrical and Mechanical Engineering Technology** allows learners to pursue the Pearson BTEC Higher National Diploma (HND) in either Electrical and Electronic Engineering, Construction and the Built Environment (Building Services 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 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, 3 months.

Graduates are excempted from the Foundation semester and can directly enter the first semester of the HND qualification.

Classes for the new semester is scheduled to commence in October 2020. 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 and Part time programme at the following campus:

• Champs Fleurs

## **Mode of Study**

This course will be assessed by a combination of practical assignments and examinations.

## **Registration Information**

In order to register, you must provide evidence of your entry qualifications by presenting:

- (a) Original certificates along with 3 copies.
- (b) Two (2) forms of identification

#### If your entry qualifications are satisfactory you are then required to complete the following form:

1. SBCS Registration Form (for registration with SBCS)

If you need an acceptance letter after registration, kindly note that such requests usually takes three (3) working days to process.

#### **Fees Schedule**

Full Payment
Registration Fee: TT \$500.00
Tuition Fee: <b>TT\$7500.00</b>

Payment Per-Semester				
Semester 1 – Registration Fee: TT \$500.00				
Tuition Fee: <b>TT\$2500.00</b>				
Semester 2 – Administrative Fee: TT\$500.00				
Tuition Fee: <b>TT\$2500.00</b>				
<b>Semester 3</b> – Administrative Fee: <b>TT\$500.00</b>				
Tuition Fee: <b>TT\$2500.00</b>				

#### **Programme Structure:**

Semester 1 (Oct 20 – Feb 21)		Semester 2 (Mar 21 – Jul 21)		Semester 3 (Aug 21 - Dec 21)
<ol> <li>Health and Safety in Engineering</li> <li>Fundamentals of Mathematics</li> <li>Study Skills</li> </ol>	4. 5.	Electrical and Electronics Fundamentals of Mechanical Systems	7.	Electronic Devices and Circuit Analysis Electrical Machines.
	6.	Entrepreneurship	0.	Licetreal Wachines.



## **UNIT OUTLINE**

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	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:

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