The Programme

The Bachelor of Science in Electronics Engineering is a 3 year programme that is offered through the Electronics Unit in collaboration with the Department of Physics, within the Faculty of Pure and Applied Sciences, Mona campus. This new programme is being introduced as part of a decision to expand The UWI's engineering programmes to other UWI Campuses starting with the Mona Campus in Jamaica. Students must complete the list of approve courses (back page) totaling 102 credits. During the final year (3rd-year) students must take one of two options, Telecommunications or Industrial Instrumentation, along with the required amount of electives.

Admission Requirements

In addition to fulfilling general requirements for admission into the Faculty of Pure and Applied Sciences, applicants must have passes in Mathematics and Physics at the CAPE (both parts) or GCE Advanced Level, or passes in Preliminary Physics and Mathematics, or equivalent.

Academic Quality Assurance

Quality assurance systems will be aligned with that of the Faculty of Engineering at St Augustine where they are well defined and linked to programme outcomes and individual courses learning outcomes. The Faculty of Engineering, St Augustine, will oversee the adherence to the guidelines set by the accrediting agency (mainly the IET).

Meet the Engineers

Dr. Paul Aiken (Programme Coordinator)

Dr. Leary Myers

Dr. Patrick Stephens

Mr. Leonardo Clarke

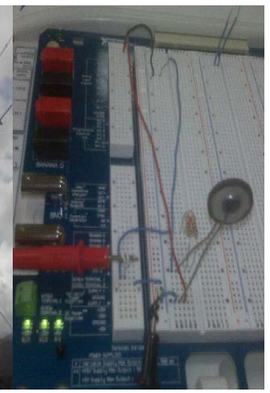
Mr. Ricardo Paharsingh

And additional Lecturers from the Faculty of Engineering , St Augustine

Programme Objectives

The overall objectives of this programme are to produce graduates:

- Who have a solid foundation in the core areas of electronics engineering.
- Who will be technically competent for immediate employment in the fields of telecommunications, or industrial instrumentations .
- Who have capabilities to design, develop, and test electronic equipment/instrument with high levels of professionalism.
- Who can use modern engineering techniques and tools to identify, formulate, and solve electronics engineering problems.
- Who can adapt to future changes in the discipline as well as to have an in-depth understanding of a specialized area where he/she can better serve his/her organization.
- Who can apply newly leant theories and skills to the technological and industrial development of Jamaica and the Caribbean region.
- Whose degrees are recognized by international industries and universities.
- Who can demonstrate an understanding of ethical, societal, and professional responsibility, and will have an appreciation of the need for life-long learning.



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The University of the West Indies
Faculty of Pure and Applied Science

Bachelor of Science In Electronics Engineering

An Expansion of UWI Engineering Programmes

The Faculty of Engineering,

St. Augustine , Trinidad

&

The Electronics Unit

in collaboration with

The Department of Physics,

Mona, Jamaica

Semester	Banner Code	Course Name	Pre-requisite	Co-requisite	No of credits
YEAR 1					
1	ELNG1101 (PHYS1410)	Mechanics, Waves and Heat	Meet requirement for entry into the programme		3
	MATH1180	Engineering Mathematics 1			3
	ELNG1120 ELNG1121 (COMP1125)	Computer Science for Engineers I Computer Science for Engineers II (Must be taken together as COMP1125)			3 3
	ECNG1000	Electrical Circuits			3
2	ELNG1102 (PHYS1420)	Electricity, Magnetism and Modern Physics			3
	ELNG1105/ COMP2160	Object Oriented Programming	COMP1125		4
	ELET1400	Introductory Electronics			3
	ELET1405	Practices in Basic Electronics Designs		ELET1400	3
	*FOUN1001 / FOUN1401	English for Academic Purposes / Writing in the Disciplines			3
YEAR 2					
1	MATH2230	Engineering Mathematics II	MATH1180		3
	ELET2470	Semiconductor Devices	ELET1400		3
	ELET2460	Signals and Systems	MATH1180		3
	ELET2430	Digital Circuits and Microprocessors	ELET1400		3
	ELET2405	Practices in Electronics Designs 1	ELET1405		3
2	ELET2450	Embedded Systems	ELET2430		3
	ELET2480	Modern Communication Systems	ELET2460		3
	ELET2410	Analysis and Design of Analog Circuits	ELET2470		3
	ECNG2009	Control Theory	MATH2230		3
	ELET2415	Practices in Electronics Designs II	ELET2405		3
Summer	**Internship/Apprenticeship in Approved Industry				0

*** Foundation Courses:** All students must pass the following Foundation courses which may be taken at anytime during the 3 years of study. (1) FOUN1001 - English for Academic Purposes / FOUN1401 - Writing in the Disciplines; (2) FOUN1101 - Caribbean Civilization; (3) FOUN1301 - Law, Governance, Economy and Society. *Students are encouraged to take FOUN1001 or FOUN1401 in the first year.*

****Summer Apprenticeship is** meant to expose students to the practical applications of the concepts learnt in classes and is expected to be a source of motivation and inspiration. It also provides an opportunity to identify potential projects.

Semester	Banner Code	Course Name	Pre-requisite	Co-requisite	No of credits
YEAR 3					
Compulsory Courses					
	ECNG3020	***Special Project (Year Long)			6
	ECNG3031	Introduction to Engineering Management and Accounting Systems			3
	MGMG3136	New Venture Creation and Entrepreneurship			3
	PHYS3385	Electromagnetism			3
Option 1 - Telecommunication					
	ELET3450	Satellite Communication & Global Navigation Satellite Systems			3
	ELET3480	Mobile Communication Systems			3
	ELET3470	Wireless Transmission & Fiber-Optics			3
	ELET3460	Digital Signal Processing			3
	ELNG3415	Practical Analysis of Telecommunications Circuits and Systems			3
Option 2 - Industrial Instrumentation					
	ELET3412	Instrumentation			3
	ELNG3430	Power Electronics and Protection Circuits			3
	ELNG3440	Control Systems Application			3
	ELET3485	Introduction to Robotics			3
	ELNG3425	Practical Analysis of Industrial Electronic Circuits and Systems			3
Electives					
	ELNG3450	Advanced ASIC/FPGA Circuit Design Techniques			3
	ECNG3004	Control Systems Application			3
	ECNG3003	Telecommunications Networks			3
	ELNG3460	Electronics Materials			3
		Any course from other 3rd year option			3

***Special Project:** These projects are industry based and students will work along with relevant industry engineers.