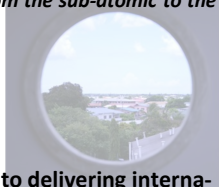


"Welcome to the Department of Physics. We hope you enjoy what the Department offers to all of our students; an insight into what everything is made and how everything works.. from the sub-atomic to the far reaches of the universe.."



Introduction

The Department of Physics is committed to delivering internationally recognized teaching and research programmes in Pure & Applied Physics. At the undergraduate level, we offer programmes leading to the Bachelor of Science (BSc) general degree with major in Physics (major) and major in Electronics, and BSc special degree in Biomedical Technology. Students can also pursue minors in Electronics, Environmental Physics, Materials Science and Medical Physics & Bio-engineering. At the postgraduate level, we offer a taught programme leading to the Master of Science (MSc) in Renewable Energy Technology, Master of Biomedical Physics and research degrees leading to the Masters of Philosophy (MPhil) & the Doctor of Philosophy (PhD).

Entry requirements

**For BSc Major in Physics and Biomedical Technology.*

Candidates must satisfy the University requirements for Matriculation (refer to the UWI General Regulations for Students) AND have passed a minimum of five (5) subjects at CSEC (CXC) General Proficiency (Grades I-III) or GCE O-Level or their equivalents, which must include: English Language and Mathematics AND obtained passes in a minimum of two (2) CAPE subjects including Physics OR Mathematics and CSEC Physics or equivalent OR have an approved Diploma or Associate Degree or equivalent certification with a minimum average of B or GPA of 2.75 in a relevant programme from a tertiary level institution, recognized by the UWI. **MSc entry requirements can be found on website (see back).*



BSc Major in Physics

Our primary degree offers candidates an extensive insight into the world of physics around us; from the smallest particles to the largest galaxies. In conjunction with core physics, several areas of specialization are offered:

- [Environmental Physics and Renewable Energy,](#)
- [Electronics,](#)
- [Medical Physics and Bioengineering, and](#)
- [Materials Science](#)

Courses are offered in conjunction with practical components to help candidates develop a holistic understanding of the courses offered and their application in the world around us.

BSc in Biomedical Technology

Students pursuing this programme will be exposed to a multidisciplinary field that incorporates Physics, Medical Physics & Electronics to operate, repair and maintain medical instrumentation and to analyse the resulting data and signals.

Candidates will be equipped with the latest technical, scientific and communication knowledge in Biomedical Technology.

The programme provides all the tools, experience and motivation to the candidates to be recognized as an important asset to the medical industry as a qualified professional, both locally & internationally.

B.Sc. Major in Electronics

The BSc with major in electronics aims to meet the demands of the expanding opportunity for the study of Electronics throughout the Caribbean. This program is offered in collaboration with the Department of Electrical and Computer Engineering. This programme can be pursued independently or with another major or minors in: Physics, Computer Science, Information Technology and Mathematics.

Graduates from this programme will have advanced technical and scientific skills specializing in Communications, Control & Integrated Electronics.

Diploma/Certificate in Medical Radiation Science

The Postgraduate Certificate and Diploma programmes in Medical Radiation Science comprise core courses in Medical Physics, which can facilitate transitioning into the field of Medical Physics. Both programmes comprise courses that are delivered over two and five semesters respectively. These courses have been packaged using the guidelines from the Commission on Accreditation of Medical Physics Education Programme (CAMPEP).

MSc Biomedical Physics

Biomedical Physics focuses on the application of concepts and methods in Physics to the solution of problems in Biology and Medicine. This master's degree is a unique interdisciplinary program which was developed in recognition of the blurring boundaries between the physical sciences, which has led to explosive advancements in diagnostic processes, medical devices and technologies as well as improvements in available treatment modalities. It is an excellent opportunity for students to enhance their education in Physics, Biology, Electronics and Bioengineering while developing their analytical and problem-solving skills. The wide spectrum of knowledge required of the Biomedical Physicist makes this profession both challenging and rewarding as they improve their understanding of the study of the human body and attempt to solve current medical problems.

MSc Renewable Energy Technology

This master's programme is the result of an urgent need for the Caribbean region to become equipped in terms of building capacities in technologies which will support protection of the environment and also meet the challenges of escalating price and availability of fossil fuels and their use. The emphasis in this master's programme is on providing new graduates and persons already working in various sectors of the economy with professional training and education in renewable energy technologies. The programme will provide expertise in these areas which will help to build capacity in the region and open possibilities for further study and research. **MPhil and PhD degrees available.**



MPhil and PhD Research Degrees

These graduate programmes enable candidates to conduct original and independent investigation within the scientific community. Enrolled researchers can be afforded the opportunity to visit conferences and skills training workshops in their area of specialization throughout the tenure of their degree. Graduates can lead academic or independent careers benefitting from their expertise and the gained mastery in publication strategies and scientific networking. We offer MPhil/PhD degrees in Physics as well as Renewable Energy Technology.

So you have a physics degree...what now?

Physics graduates are prepared not only for a career in Physics but also for many other fields as well. Possible career paths with a degree in Physics include:

Petro physicist
Geophysicist
Medical Physicist
Optometrist
Telecommunication Specialist
Radiographer
Meteorologist
High School Teacher
University Lecturer/Researcher
Laboratory Technician
Quality Assurance Officer
Material Scientist
.....and many more!



Here are some of the industries and institutions where some of our Physics graduates have worked:

ABEL	CARIRI
Bureau of Standards	Lever Brothers
CTC Electronics	Forensic Science Centre
British Gas (BGTT)	National Quarries
Ministry of Energy	Radiotherapy Center
Ministry of Education	Meteorological Office
Coastal Dynamics	British Petroleum (bpTT)
Institute of Marine Affairs (IMA)	
Eric Williams Medical Sciences Complex	
Environmental Management Authority (EMA)	
Telecommunications Services of Trinidad and Tobago (TSTT)	
Trinidad Aggregate Products (TAP)	
Trinidad Cement Limited (TCL)	
The University of the West Indies	
University of Trinidad & Tobago	



THE UNIVERSITY OF THE WEST INDIES

Our academic staff...

Dr. Davinder Sharma, Senior Lecturer	Davinder.Sharma@sta.uwi.edu
<u>Electronics</u>	
Dr. Shirin Haque, Professor	Shirin.Haque@sta.uwi.edu
<u>Astronomy</u>	
Dr. Ricardo Clarke, Senior Lecturer	Ricardo.Clarke@sta.uwi.edu
<u>Environmental Physics</u>	
Dr. Xsitaaz Chadee, Lecturer	Xsitaaz.Chadee@sta.uwi.edu
<u>Environmental Physics/Renewable Energy</u>	
Dr. Vinod Kumar, Lecturer	Vinod.Kumar@sta.uwi.edu
<u>Renewable Energy</u>	
Dr. Nikolay Zyuzikov, Lecturer	Nikolay.Zyuzikov@sta.uwi.edu
<u>Medical Physics</u>	
Dr. Courage Mahuvava, Lecturer	Courage.Mahuvava@sta.uwi.edu
<u>Medical Physics</u>	
Dr. Andrea Joseph, Lecturer	Andrea.Joseph@sta.uwi.edu
<u>Medical Physics/ Quantum Optics</u>	
Dr. Roger Andrews, Lecturer	Roger.Andrews@sta.uwi.edu
<u>Quantum Physics</u>	
Dr. Dinesh Pathak, Lecturer	Dinesh.pathak@sta.uwi.edu
<u>Materials Science</u>	
Dr. Harjit Singh, Lecturer	Harjit.Singh@sta.uwi.edu
<u>Electronics</u>	
Administrative staff	
Dr. Zuvena Williams-Paul	Zuvena.Williams-Paul@sta.uwi.edu
<u>Senior Administrative Assistant</u>	
Mrs. Virginia Briggs	Virginia.Sadd-Nagim@sta.uwi.edu
<u>Administrative Assistant (Postgraduate)</u>	

For more information, contact:
STA-PHYSSudent.Support@sta.uwi.edu

The Department of Physics
Faculty of Science and Technology
The University of the West Indies

St. Augustine, Trinidad & Tobago, West Indies

Website: <https://sta.uwi.edu/fst/physics>

Tel: (868) 662-2002, ext. 83113, 82051



Welcome to the Department of Physics

Faculty of Science and Technology
The University of the West Indies, St. Augustine, Trinidad.