

FACULTY OF SCIENCE AND TECHNOLOGY Department of Physics MSc. in Medical Physics

Programme Overview

Technological advances and developments in physics and medicine, particularly in radiology, radiotherapy and nuclear medical physics have created a demand for Qualified Medical Physicists to support the current progress in the healthcare sector. Healthcare providers rely heavily on continued education and training of medical physicists in order to achieve and maintain international health standards.

The MSc in Medical Physics was developed to:

- 1. provide education and clinical training for graduate students and to prepare them for careers in areas of diagnostic imaging, nuclear medicine, radiation therapy, and health physics.
- produce Qualified Medical Physicists who are competent by virtue of their education and training to practice independently one or more of the key subfields of Medical and Health Physics: Diagnostic and Therapeutic Radiological Physics, Nuclear Medical Physics, Medical, Environmental and Industrial Health Physics.
- 3. build local capacity for sustainable education, training and research in Medical Physics.

Entry Requirements

- Bachelor of Science, Engineering or Medicine degree with a minimal cumulative GPA of 2.0 from a university of recognized standing. Students holding overseas degrees are welcome to apply.
- Candidates who do not meet these criteria, but who have sufficient professional experience in a relevant area may also be admitted under special circumstances.
- All successful applicants for the MSc in Medical Physics will be interviewed by the Selection Committee to assess their background in physics and science. The interview process may require an oral presentation or a written test to allow the Selection Committee to assess these skills.

How to Apply

Visit https://www.mona.uwi.edu/content/entry-requirements, click on apply now, create an account and follow the instructions.

Submit supporting documents to Assistant Registrar, Office of Graduate Studies and Research, The University of the West Indies, Mona Campus.

Request degree granting institutions other than The UWI to forward official transcripts directly to the Office of Graduate Studies and Research, The University of the West Indies, Mona Campus.

Duration

- Master of Science (Full-Time) 12 months
- Master of Science (Part-Time) 24 months

Programme Structure

COURSE CODE	COURSES TITLE	CREDITS
CORE COURSES (LEVEL 1)		
MDPH6110	Anatomy and physiology for medical physicists	3
MDPH6120	Physics of the human body	2
MDPH6130	Fundamentals of radiation physics and dosimetry	4
MDPH6140	Basic Medical Electronics and Instrumentation	3
MDPH6150	Biomedical statistics and informatics	2
MDPH6160	Radiation biology and protection	2
PROFESSIONAL (LEVEL 2)		
MDPH6210	Diagnostic radiology: physics and equipment	4
MDPH6220	Radiation therapy: physics and equipment	6
MDPH6230	Nuclear medicine: physics, equipment and applications	3
MDPH6240	Non-ionization radiation: physics, equipment and applications	3
MDPH6250	Environmental and industrial health physics	4
MDPH6320	Medical Physics Research Project	3
MDPH (6301 - 6316)	Elective course*	2
SPECIALTY & PRACTICAL (LEVEL 3)		
MDPH6320	Medical Physics Research Project	8
MDPH6330	Graduate Seminar	2
ELECTIVE COURSES		
MDPH6301	Digital Signal and Image Processing	2
MDPH6302	Modelling in Health Physics	2
MDPH6303 MDPH6304	Reactor Health Physics	2
MDPH6304	Special Topics in Medical Physics	2

Schedule

Courses will be offered on Evenings and Weekends: Mondays – Fridays | 5:30 pm – 9:00 pm Saturdays | 9:00 am – 5: 00 pm

Contact Information

The University of the West Indies Mona, Kingston 7, Jamaica, West Indies Faculty of Science and Technology Department of Physics

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