

Credit Required for Graduation

Tuition Fee

HK\$6,300 per credit (x 30 credits) for local and non-local students (Note: There is no tuition charge for the 1-credit AIE subject.)

Mode of Attendance Mixed Mode (full-time or part-time)

Normal Duration

1.5 years for full-time study3 years for part-time study

Entrance Requirements

Bachelor's degree in Physics, Applied Physics/Engineering Physics, Natural Sciences, Mathematics, Engineering, Radiography or Health Technology

Scholarships

HTI Entry Scholarships for Taught Postgraduate Programmes are available.

Contact Information

Department of Health Technology and InformaticsThe Hong Kong Polytechnic UniversityWeb site:www.polyu.edu.hk/htiTel :(852) 3400 8578Email:hti.tpg@polyu.edu.hk



MSc in Medical Physics

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學

Postgraduate Scheme in Health Technology

醫學物理 理學碩士學位

SEPT 2025 Entry



Subject Offerings*

MSc in Medical Physics

Compulsory Subject

Research Methods & Biostatistics

Core Subjects

- Radiation Physics
- Radiation Protection and Radiation Safety
- Human Anatomy and Physiology
- Radiation Therapy Physics
- Medical Imaging Physics
- Radiation Biology
- Ethical Issues in Medicine and Research

Elective Subjects

- Dissertation
- Clinical Practicum of Medical Physics
- Practical Radiotherapy Treatment Planning
- Advanced Radiotherapy Planning and Dosimetry
- Advanced Medical Image Analysis with Deep Learning
- Advanced Technology and Clinical Application in Computed Tomography
- Advanced Technology and Clinical Application in Magnetic Resonance Imaging
- Advanced Technology and Clinical Application in Nuclear Medicine Imaging
- Advanced Ultrasonography
- Digital Imaging and PACS
- Multiplanar Anatomy
- Advanced Radiation Protection
- Bioinformatics in Health Sciences
- Advanced Topics in Health Technology (guided study)
- Big Data Computing
- Artificial Intelligence & Big Data Computing Programming
- Machine Learning and Data Analytics
- Molecular and Functional Imaging: From Body System to Molecules
- Knowledge Management for Clinical Applications
- Virtual Reality in Healthcare



Learning Outcomes Upon successful completion of the programme, students will be able to 1. acquire and apply knowledge and skills in the students' respective profession of medical physics.

 apply critical analysis and problem-solving skills for situations relating to the students' professional development and practice.

Programme Intended

- demonstrate a high level of the students' competence to cope with the rapid changes in practice.
- 4. develop skills that will help students assume a leadership role in their professional area.
- develop analytical and research skills to help students incorporate evidence-based practice in the delivery of healthcare services and industry.
- 6. demonstrate students' abilities to develop themselves in their professional practice.

Professional Recognition

The programme is granted accreditation by the International Organization for Medical Physics (IOMP) for three years, from 1 June 2024 to 31 May 2027.

Programme Aims

This programme is offered within the Postgraduate Scheme in Health Technology, which aims to provide students with a background in physics, engineering and/or health technology, as well as those interested in medical physics, with the opportunity to develop knowledge of and skills in medical physics.

Characteristics

Medical physics is an interdisciplinary field in which the concepts and methods of physics are applied to the diagnosis and treatment of human diseases. There is currently an indication of shortage of medical physicists due to the booming healthcare sector, and a high demand for medical physicists in Hong Kong and the nearby region. With this demand, our programme was launched in 2020 as Hong Kong's first postgraduate programme dedicated to medical physics and received accreditation from the International Organization for Medical Physics in 2024. The scope of the programme includes radiation therapy, diagnostic imaging, nuclear medicine and medical health physics, which fulfils the educational requirements of a medical physicist. The curriculum is designed to align with the international standards of medical physics graduate education. The teaching faculty includes a large number of experienced clinical professionals, including clinical medical physicists, oncologists, radiologists, etc. The programme prepares students for careers in clinical medical physics, medical technology research and development, academia, government, healthcare industry, entrepreneurship, etc.

Other Requirements

- Complete the 1-credit Academic Integrity and Ethics (AIE) subject
- Complete the e-learning module on "Understanding China and the Hong Kong Special Administrative Region, P.R.C."
- *Subject to change and for reference only. For details of the curriculum, please refer to Programme Requirement Document.