Department of Physics
香港城市大學
City University of Hong Kong

City University of Hong Kong
Master of Science in Applied Physics

Introduction

This programme provides post-graduate level training in applied physics with highly marketable professional skills in the sub-fields of **Bio-medical Physics, Energy Materials Physics** and **General Advanced Physics**.
In addition to an advanced physics education, graduates will have solid trainings on applying physical principles to practical problems in specific related professions.

The training and knowledge provided are suitable for employment as medical technical specialists as well as engineers/researchers in electronic and renewable energy industries in Hong Kong, China and other Asian countries. Graduates of this programme will have the flexibility to seek employment in the industry as well as pursuing PhD studies in a broad range of related fields (e.g. Physics, Materials Science, Electrical Engineering, and Mechanical Engineering).

Aims

The programme aims to enable students to:

- Acquire an extensive and in-depth physical knowledge of and analytical skills in the various applied physics and engineering fields.
- Develop the ability to apply the knowledge of applied and engineering physics to generate creative and ethical solutions in the working environment.
- Communicate effectively with applied and engineering physics related professionals.
- Apply textbook theories to applied and engineering physics problems.
- Design and conduct experiments, as well as to critically analyze and interpret data.
- Identify, formulate, solve engineering or scientific problems and generate new ideas in the relevant subfields of applied and engineering physics.
- Develop necessary skills to present research findings in a logical manner to the scientific community.
- Recognize the need for, and an ability to engage in life-long learning.

Programme Requirement

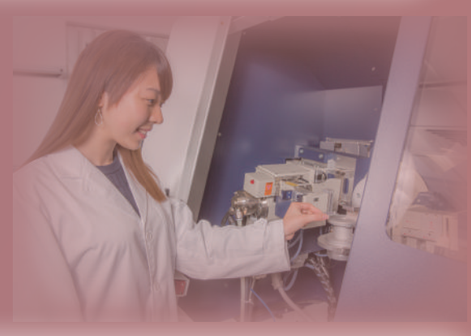
Core Courses (18 credit units) + Elective Courses (12 credit units)

Programme Structure

Core Courses (18 credit units)
- Graduate Level Applied Physics

Elective Courses (12 credit units)
- General Advanced Physics
- Energy Materials Physics
- Biomedical Physics

Research Opportunity



Highly motivated students may be eligible to enroll in a 9 credit course "**Advanced Research in Applied Physics**" to acquire necessary skills for carrying out independent research in applied physics. Students will have the valuable opportunity to work with faculties on cutting edge research in condensed matters, quantum information, energy materials and biomedical physics.

Programme Duration

	Full-time mode	Part-time / Combined mode
Normal study period	1 year	2 years
Maximum study period	2.5 years	5 years

Professional Career Prospects

- Medical Technical Specialists
- Renewable Energy Engineers
- Mechanical and Electronic Engineers
- Process and Project Engineers in the Semiconductor Industry
- Researchers in Materials Research Institutions
- Further Studies

Further Details of Programme and Application Procedures

Enquiry:
General Office, Department of Physics, CityU
Tel: (852)3442-7831
Fax: (852)3442-0538
Email: phy.go@cityu.edu.hk

Website:
https://www.cityu.edu.hk/phy/taught-postgraduate/msc-applied-physics