

# BSc (Hons) in MEDICAL LABORATORY SCIENCE

JUPAS Code: JS3478

## Introduction



Medical laboratory scientists provide important services in hospitals, government and private laboratories. They perform diagnostic and health screening investigations to the public. The laboratory services are important in disease diagnosis, treatment evaluation and research into the causes and therapy of disease.

Our programme is the first full-time Government-funded programme in medical laboratory science (MLS) in Hong Kong. Our graduates can register **directly** as Part II Medical Laboratory Technologists (MLT) of MLT Board of Hong Kong.

Medical laboratory scientists perform diagnostic tests in clinical laboratories in the following major disciplines:

### 1. Cellular Pathology (細胞病理學)

Scientists process tissue or cell samples and prepare for microscopic examination. They help to investigate the cause of disease due to cellular alterations.

### 2. Clinical Chemistry (臨床化學)

Scientists measure biomarkers in biological fluids and study clinical toxicology. Results will give a clear biochemical picture for diagnosis.

### 3. Haematology and Transfusion Science (血液及輸血科學)

Scientists examine blood cells and coagulation factors for diagnosis of blood disorders. In transfusion science, scientists perform blood typing, compatibility tests for patient and donor.

### 4. Medical Microbiology and Virology (醫療微生物及病毒學)

Scientists study the cause of infectious disease. They investigate bacteria, viruses, fungi and parasites from various clinical samples.

## Professional Recognition

Graduates are eligible to :

1. Register under Part II of the register of the Medical Laboratory Technologists Board Hong Kong
2. Licentiate Membership of the Institute of Biomedical Science (IBMS), UK
3. Take certification examination of the American Society for Clinical Pathology International (ASCP<sup>i</sup>)



## Career Prospects

### Career options:

- Medical laboratory science (Public and private sectors)
- Medical biotechnology
- Pharmaceutical industry
- Environmental science
- Agricultural and food testing industry
- Research and further study at postgraduate level



## Curriculum Overview

The BSc (Hons) in MLS programme requires a student to complete 125 academic credits and 10 clinical credits for work integrated education attachment for graduation. The academic credits include General University Requirement (GUR) subjects, Discipline Specific Requirement (DSR) subjects and electives.

	Semester 1	Semester 2	Semester 3 (Summer)
<b>Year 1</b>	<ul style="list-style-type: none"><li>• Exploring Medical Laboratory Science</li><li>• Human Anatomy</li><li>• Human Physiology</li></ul>	<ul style="list-style-type: none"><li>• Clinical Laboratory Instrumentation</li><li>• General Chemistry</li><li>• Introduction to Clinical Chemistry</li><li>• Laboratory Techniques &amp; Safety</li></ul>	
<b>Year 2</b>	<ul style="list-style-type: none"><li>• Cells in Health &amp; Disease</li><li>• Human Biochemistry</li><li>• Immunology</li><li>• Introduction to Medical Microbiology</li><li>• Interpretative &amp; Practical Clinical Chemistry</li><li>• Clinical Chemistry: Concepts &amp; Principles</li></ul>	<ul style="list-style-type: none"><li>• Biostatistics</li><li>• Medical Microbiology: Concepts &amp; Principles</li><li>• Interpretative &amp; Practical Medical Microbiology</li><li>• Introduction to Haematology</li><li>• Molecular Biology in Medicine</li></ul>	<ul style="list-style-type: none"><li>• Clinical Attachment</li></ul>
<b>Year 3</b>	<ul style="list-style-type: none"><li>• Haematology: Concepts &amp; Principles</li><li>• Interpretative &amp; Practical Haematology</li><li>• Introduction to Cellular Pathology</li><li>• Introduction to Clinical Research</li><li>• Pathophysiology</li></ul>	<ul style="list-style-type: none"><li>• Cellular Pathology: Concepts &amp; Principles</li><li>• Interpretative &amp; Practical Cellular Pathology</li><li>• Medical Virology</li></ul>	<ul style="list-style-type: none"><li>• Clinical Attachment</li></ul>
<b>Year 4</b>	<ul style="list-style-type: none"><li>• Human Genetics</li><li>• Molecular Diagnosis of Human Disease</li><li>• Bioinformatics for Molecular Diagnostics</li><li>• Cellular Technology for Biomedical Research (elective)</li></ul>	<ul style="list-style-type: none"><li>• Honours Project</li><li>• Legal and Ethical Issues in Healthcare</li><li>• Current topics in Laboratory Medicine (elective)</li></ul>	

## Entrance Requirements

### JUPAS - General entrance requirements

HKDSE		Level requirement
Core subjects	Chinese language	3
	English language	3
	Mathematics	2
	Citizenship and Social Development	Attained
Electives (including M1/M2)	Elective 1	3
	Elective 2	3

Normal colour vision is not one of the admission criteria, but applicants should note that normal colour vision may be required for employment in medical laboratory profession.

### Preferred subjects with highest weighting in admission scores calculation

- English Language
- Chinese Language
- Mathematics
- Mathematics (M1/M2)
- Biology
- Chemistry
- Combined Science (Biology and Chemistry)



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## Contact Information

Department of Health Technology and Informatics  
The Hong Kong Polytechnic University

Website : [www.polyu.edu.hk/hti](http://www.polyu.edu.hk/hti)  
Tel : (852) 3400 8578  
Fax : (852) 2362 4365  
Email : [hti.dept@polyu.edu.hk](mailto:hti.dept@polyu.edu.hk)



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