



香港浸會大學

HONG KONG BAPTIST UNIVERSITY

Department of Chemistry

## Short Courses in MSc (Analytical Chemistry)

(2019 - 2020)

To meet with the demand of chemical analysis in a number of important value-added areas, such as environmental analysis, forensic science, biotechnology/bioanalysis, materials and foods, in Hong Kong as well as in the Greater China region, increasingly sophisticated analytical techniques are employed both in quality control and in research and development. Analytical chemists need to constantly upgrade their knowledge to meet this challenge.

Six courses selected from our popular MSc in Analytical Chemistry programme will be offered to professionals in the field who need to enhance their knowledge and yet are too busy to commit two-year of their time to engage in the complete MSc programme. A certificate will be issued to those who have completed the lecture course(s) and perform satisfactorily in the course assessment.

### COURSES OFFERED

#### Semester One

Course	Duration	Assessment	Contents
<b>CHEM 7240</b> Analytical Spectroscopy (2 units)	24 lecture hours (12 weeks) Starting on 4 Sept 2019 19:00 – 20:50 (Wed)	Continuous assessment and 3 hours examination in Dec 2019	Principles and instrumentation for atomic and molecular spectroscopy and their applications in chemical analysis
<b>CHEM 7420</b> Mass Spectrometric Analysis (1 unit)	12 lecture hours (6 weeks) Starting on: 9 Sept 2019 19:00 – 20:50 (Mon)	2 hours examination in Dec 2019	Principles of mass spectrometry and design of mass spectrometers including methods of ionization, tandem mass spectrometry and hyphenated mass spectrometric techniques
<b>CHEM 7500</b> Food Analysis (2 units)	24 lecture hours (12 weeks) Starting on 3 Sept 2019 19:00 – 20:50 (Tue)	Continuous assessment and 3 hours examination in Dec 2019	Principles and applications of various analytical tools for food analysis, most up-to-date analytical methodology for food monitoring of food quality

#### Semester Two

Course	Duration	Assessment	Contents
<b>CHEM 7250</b> Laboratory Management (2 units)	24 lecture hours (12 weeks) Starting on 16 Jan 2020 19:00 – 20:50 (Thur)	Term paper and presentation at the end of the course	Introduction to Laboratory Management, Quality Assurance, Computer-Assisted Laboratory Information Management System
<b>CHEM 7390</b> Separation Science (3 units)	36 lecture hours (12 weeks) Starting on 15 Jan 2020 19:00 – 21:50 (Wed)	Continuous assessment and 3 hours examination in May 2020	Basic principles of separation by chromatographic techniques, Gas Chromatography, High Performance Liquid Chromatography, Capillary Electrophoresis
<b>CHEM 7460</b> Forensic Analysis (1 unit)	12 lecture hours (6 weeks) Starting on: 2 Mar 2020 19:00 – 20:50 (Mon)	2 hours examination in May 2020	Application of analytical chemistry techniques on forensic science

#### APPLICATION DEADLINE

**15 August 2019**

[for enrollment of the course(s) in Semester 1 **OR** Semesters 1 & 2]

**16 December 2019**

[for enrollment of the course(s) in **Semester 2 ONLY**]

#### APPLICATION

Hard copy of the application form can be obtained by **e-mail to: [analchem@hkbu.edu.hk](mailto:analchem@hkbu.edu.hk)**

*No soft copy of the application form is provided.*

#### COURSE FEE

HK\$4,100 each course (CHEM 7420, CHEM 7460)

HK\$8,200 each course (CHEM 7240, CHEM 7250, CHEM 7500)

HK\$12,300 each course (CHEM7390)