# Pharmacy



## **BPharm**

\*Our integrative approach and problem-based learning enable pharmacy graduates to apply their scientific and clinical knowledge efficiently when they enter the healthcare profession.



## **Programme Aims** and Objectives

The Bachelor of Pharmacy (BPharm) programme aims to nurture competent graduates with solid knowledge of pharmacy as well as abilities to apply the core knowledge and skills for effective, humane and ethical delivery of pharmaceutical care. They will contribute both to the profession of pharmacy and to the overall health of the patient body by adopting the highest standard of professional practice.

#### **Programme Structure**

The whole programme comprises 252 credit-units of courses over a period of four years which shall include the following:

Courses	Credits
Pharmacy core courses	186
Pharmacy elective	12
Common core courses	36
Language courses	18
Total	252

#### What is Pharmacy?

Pharmacy is the health profession that links the basic health sciences with the clinical application of drug treatment. It is charged with ensuring the safe and effective use of drugs. Traditionally pharmacy mainly represented the compounding and dispensing of therapeutic agents. However, modern pharmacy now emphasises on the provision of optimal pharmaceutical care to patients. This means the responsible provision of drug therapy to achieve definite outcomes that improve a patient's life expectancy and/or his/her quality of life. These outcomes are:

- (i) the treatment of diseases;
- (ii) the elimination or reduction of symptoms;
- (iii) arresting or slowing the disease process; and
- (iv) disease prevention/health promotion.

As healthcare develops towards the individualised rational use of therapeutic agents, the role and responsibilities of pharmacists are of increasing importance.



"Pharmacists can contribute to the safe and effective use of medications through clinical practice, research and teaching. We continue to learn and share what we know with students, colleagues and the community, every step along the way."



Dr Esther Chan
Associate Professor, Department of Pharmacology and Pharmacy

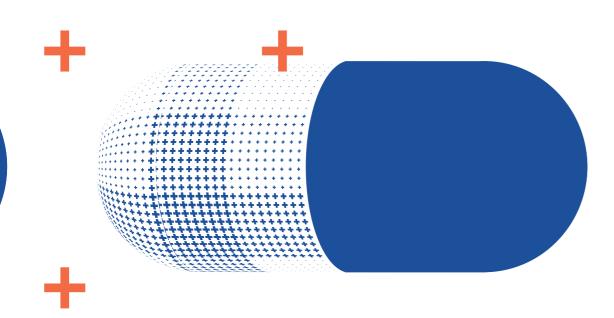
## **Role of Pharmacists**

Pharmacists are essentially the experts on drugs. They work as a part of a multidisciplinary healthcare team to provide quality pharmaceutical care to patients, i.e. providing clinical pharmacy service, recommending appropriate drug choices and monitoring outcomes of drug therapies. Pharmacists are able to practise in a wide variety of areas, including community pharmacies, hospitals, clinics, nursing homes, pharmaceutical industries and regulatory agencies. Pharmacists can specialise in various areas of practice including but not limited to: haematology/oncology, infectious diseases, drug information, critical care, paediatrics, etc.



## **Programme Features**





UNIVERSITY OF ILLINGIS AT CHICAGO

COLLEGE OF PHARMACY

#### **Clinical Pharmacy**

With the support of Queen Mary Hospital, students studying at HKU enjoy early clinical exposure and also benefit from the inter-professional collaboration of pharmacists and clinicians through teaching in wards and outpatient clinics.

#### **New Learning Approaches**

Diversified "fit-for-purpose" teaching pedagogies have been adopted to manifest the specific features of the curriculum. As an area of strength of the Medical Faculty, the problem-based learning (PBL) approach is adopted to encourage interdisciplinary inquiry and foster life-long learning skills.

#### **Training in Industrial Pharmacy**

Students of the programme have the opportunity to experience this subspecialty to realise the increasing demand of the local industry for professional pharmacy service. A wide spectrum of topics on the practical aspects related to industrial pharmacy is taught by experts with extensive work experience in the industry.

## Patient Counselling and Communication Skills

A key characteristic of the programme is to enhance students' proficiency in providing primary healthcare services, including patient education. Students have various opportunities to acquire patient counselling and communication skills step-by-step with a gradual increase in the degree of mastery and in the complexity of the situations encountered.

## Exposure to Chinese Medicine as well as Complementary and Alternative Medicine

The programme equips future pharmacists who practise in Hong Kong with the knowledge of Chinese Medicine as well as Complementary and Alternative Medicines (CAM). These include herbal medicines, nutraceuticals, healthcare products, cosmetics, etc., which are commonly used by many patients in conjunction with Western medicines.

#### **Local and Overseas Exposure**

The new enrichment module will enable students to be involved in a local community service project of their own choices. The module provides them with the chance to engage in activities which benefit different groups in need as future healthcare professionals while enhancing their exposure at the same time.

In addition to local experiences, all our pharmacy students will have the opportunity to participate in an international exchange programme. A strong link has been established with the pharmacy department of different universities and hospitals around the world, including University College London (UK), King's College London (UK), University of Rouen (France), University of Sydney (Australia), Sojo University (Japan), University of Illinois at Chicago (USA) and many others.

The exchange programme offers a unique educational and cultural experience in addition to further pharmaceutical knowledge. It also helps to broaden the students' understanding of pharmaceutical and social conditions in different countries. Through the student exchange programme, there will be increased opportunities for improvement in pharmacy education through facilitating students to undertake international

professional experiences in research, hospital or community pharmacy, giving them the ability to compare and contrast healthcare provisions between the visited country and Hong Kong. This experience will enable students to come up with ideas on the future development of the pharmacy profession in Hong Kong.



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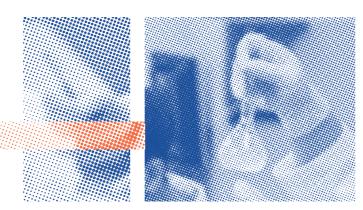
## Placement, Clerkship and Research Project

The programme ensures that students are adequately prepared to provide expert service at the community level through placement openings provided by the largest community pharmacy chain stores in Hong Kong.

As part of the curriculum, each pharmacy student will have the chance to gain work experience in different settings of pharmacy during term time. Students will rotate among hospital pharmacy, community pharmacy and pharmaceutical industry for at least one week in each setting during the final year of study. In addition, students will have the opportunity to carry out a research project in a specialised area of their choices, including pharmaceutics, pharmacology, pharmacy practice and clinical pharmacy, under the supervision of our academic staff. The research experience will be critical for the future career of pharmacy students in both academic and pharmacy workplace.

#### Opportunities for Interprofessional Learning

The programme offers students with invaluable opportunities of interprofessional learning throughout the four-year curriculum, including health research project, patient care project and interprofessional team-based learning with students from Medicine, Nursing and Chinese Medicine programmes. These interprofessional learning activities will utilise the expertise of students from different backgrounds and foster cooperation between different healthcare professionals in the future.





## **BPharm Curriculum Structure**

#### YEAR 1

- + General Chemistry
- + Basic Sciences in Anatomy, Physiology and Biochemistry
- + Epidemiology & Research Methods
- + Drug Discovery
- + Drug Information
- + Critical Appraisal
- + Dispensing and Compounding Skills
- + Pharmaceutical Calculation
- + Core University English
- + Common Core Courses

#### YEAR 2

- + Pharmaceutical Chemistry
- + Dosage Form Design
- + Pharmacodynamic & Pharmacokinetics
- + Pharmacy in Body System Series:
- · Cardiovascular & Renal
- Gastrointestinal
- Respiratory
- + Pharmacy Practice: Responding to Symptoms
- + English for Clinical Pharmacy
- + Practical Chinese for Pharmacy Students
- + Common Core Courses

#### YEAR 3

- + Advanced Drug Delivery
- + Pharmaceutical Analysis
- + Pharmacy Practice: Responding to Symptoms
- + Pharmacy in Body System Series:
- Endocrinology
- Neurology & Psychiatric
- Musculoskeletal and Connective Tissue
- · Microbiology and Infectious Diseases
- Oncology and Special Populations

#### YEAR 4

- + Research Methodology and Research Project #
- + Pharmacy Law and Ethics
- + Industrial Drug Development
- + Biopharmaceutical Technology and Future Medicines
- + Electives
- · Chinese Medicine\*
- Cosmetic Science\*
- Epidemiology & Precision Medicine\*
- Molecular Medicine\*
- Molecular Pharmacology\*
- + Outreach Elderly Care Project
- + Professional Placement
- + Enrichment Module



<sup>#</sup> All year 4 students have to complete a research project

<sup>\*</sup> Elective Courses



"Using our specialised drug knowledge to help patients optimise their medical treatment is what makes our job as pharmacists so meaningful."

Ms Jody Chu Lecturer, Department of Pharmacology and Pharmacy

## Articulation to HKU MBBS and completion of two professional degrees in eight years

Starting from 2019/2020, HKU BPharm Programme starts to offer an articulation arrangement with HKU MBBS Programme. Students with outstanding performance by Semester 1 of Year 3 can choose to attach to the MBBS curriculum for one semester. Upon completion of the BPharm Programme and having satisfied the admission criteria of MBBS curriculum, students can then be admitted directly to Year 2 and exempted from the Year 3 enrichment year requirement. Students can, as a result, obtain dual professional degrees in BPharm and MBBS from HKU in eight years.

### Articulation to HKU MBBS programme

Completion of two professional degrees in eight years

# Year 1 Year 2 Year 3 Year 4 Year 1 Year 2 Year 3 Year 4 Year 1 Year 2 Year 3 Year 4 Year 5 Year 6

**MBBS** 

## **Career Prospects for Pharmacy Graduates**

#### **Academics / Research**

Universities, Higher Education Institutes

- + Pharmacy Education (training pharmacist and pharmacy technicians)
- + Scientific Research
- + Health Promotion
- + Knowledge Transfer



#### **Pharmaceutical Industry**

Local Manufacturers, Multinational Corporation

- + Manufacture and Supply
- + Quality Assurance (QA)
- + Drug Research and Development (R&D)
- + Regulatory Affairs
- + Business Development
- + Medical Information
- + Sales and Marketing
- + Pharmacovigilance
- + Clinical Trial



#### Hospital

Hospital Authority, Private Hospitals

- + Dispensing
- + Phamacy Intravenous Admixture Service (PIVAS)
- + Clinical / Specialist Pharmacist (e.g. Paediatrics, Oncology)
- + Radiopharmacy
- + Medical Information
- + Information Technology
- + Clinical Trial
- + Drug Procurement



#### **Department Of Health / Drug Office**

- + Policy Planning
- + Pharmacovigilance
- + Inspection
- + Drug Registration
- + Clinical Service
- + Public Health



#### **Community Pharmacy**

Chain and Independent Pharmacies

- + Community Pharmacist
- + Primary Care
- + Business Management
- + Locum



#### **Others**

- + Medical Writer / Editor
- + Veterinary Pharmacist
- Non-Profit Organisation

   (e.g. visiting pharmacist in elderly homes,
   healthcare project coordination)
- + Further Study (e.g. PhD, Medical Degree)



## **Professional Recognition**

The programme has been granted accreditation by the Pharmacy and Poisons Board of Hong Kong. Students who have completed a full-time pharmacy degree and one additional year of internship are qualified as registered pharmacists in Hong Kong.



For more information on admissions

#### **Future Studies**

Graduates can consider a taught Master of Clinical Pharmacy programme or pursue academic pharmacy through research postgraduate study.



#### **Enquiries**

- bpharm@hku.hk
- **(**852) 3917 9460 / (852) 3917 9463
- ⊕ www.pharma.hku.hk
- ♦ L02-56, 2/F, Laboratory Block, LKS Faculty of Medicine, The University of Hong Kong, 21 Sassoon Road, Pokfulam, Hong Kong



