



BBiomedSc Curriculum Structure

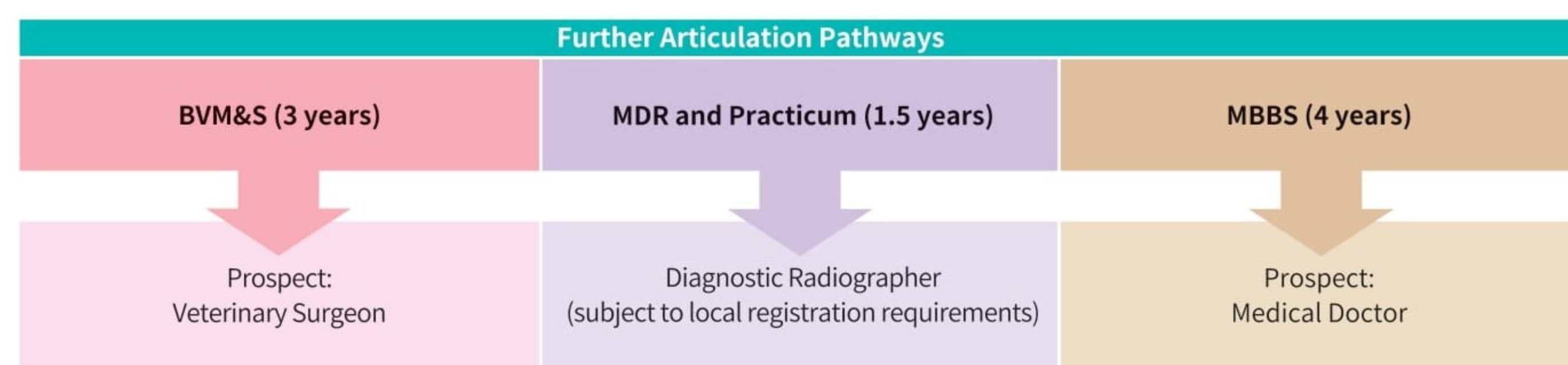
課程結構



HKU Med

LKS Faculty of Medicine
School of Biomedical Sciences
香港大學生物醫學學院

Year 1	Biomedical Core courses (24 credits)		Summer Internship (HK / Overseas / Industrial)
	Common Core courses (24 credits)		
	Language Enhancement courses (12 credits)		
Year 2	Biomedical Core courses + Electives (42 credits)		Summer Internship (HK / Overseas / Industrial)
	Common Core courses (12 credits)		
	Language Enhancement course (6 credits)		
Year 3	Biomedical Core courses + Electives (60 credits)		Summer Internship (HK / Overseas / Industrial)
	OR		
	Undertake Overseas Exchange Studies and/or Research Attachment		
	Articulation Arrangements (*Satisfying admission criteria of the respective schools)		
	OR		
	OR		
Year 3	The University of Edinburgh, UK	The University of Sydney, Australia	The University of Hong Kong
	Bachelor of Veterinary Medicine & Surgery (BVM&S)	Master of Diagnostic Radiography (MDR)	Bachelor of Medicine and Bachelor of Surgery (MBBS)
Year 4	Biomedical Core courses + Electives (48 credits)		
	Final Year Project (12 credits) or Innovation Team Project (12 credits)		



Bachelor of Biomedical Sciences Programme

生物醫學學士課程

Admission Requirements

In addition to satisfying the University entrance requirements, candidates for admission shall satisfy all of the following requirements in HKDSE:

a) achieve the level of performance in the four core subjects as below:

Subject	Level of Performance
English	4
Chinese	3
Mathematics	2
Liberal Studies	2

(b) attain at least Level 3 in two electives, one of which must be:

- (i) Biology or
- (ii) Chemistry or
- (iii) Combined Science with Biology as one of the components or
- (iv) Combined Science with Chemistry as one of the components

The best 6 subjects of HKDSE will be taken into consideration for admission.

入學要求

除了符合大學基本入學要求外，擁有香港中學文憑之申請人須達到本課程的最低入學資格，詳見下表：

(甲) 於以下四個核心科目考取相對應或以上的成績水平：

學科	等級
英國語文	4
中國語文	3
數學	2
通識教育	2

(乙) 於兩科選修科目中獲取第三級或以上的成績水平，

其中一科必須為：

- (i) 生物；或
- (ii) 化學；或
- (iii) 組合科學（包括生物）；或
- (iv) 組合科學（包括化學）

香港中學文憑課程之六科最佳成績將被考慮作入學用途。

Biomedical sciences cover a wide range of scientific and allied disciplines, including: molecular and cell biology, genetics and genome science, bioinformatics, anatomy, physiology, pharmacology, biological and medicinal chemistry, immunology and microbiology, and public and environmental health. The study of biomedical sciences focuses on the relationships between humans, health, and disease, translating biomedical applications of basic sciences to the clinical practices of health services and healthcare industry.

The 21st century is widely regarded as an age of 'biomedicine'. With the backup of its excellent track record in biomedical research and a strong team of biomedical scientists in the basic science and clinical departments, the Faculty offers the Bachelor of Biomedical Sciences (BBiomedSc) programme with the aim of nurturing graduates with broad but core knowledge in key biomedical disciplines. They will be well-trained to develop careers in areas such as research in universities, government and medical laboratories; research and development for the pharmaceutical, diagnostics, medical devices and laboratory instrumentation industries, and management and business development of related industries; clinical trials management; media and communication; and health promotion, hospital administration and healthcare planning. They will also have acquired an excellent foundation for proceeding to medical, veterinary sciences or other health-related professional programmes through graduate entry, and for MPhil/PhD studies.

生物醫學科學包含廣泛的生命科學及相關的學科，例如分子與細胞生物學、遺傳學和基因組科學、生物資訊學、解剖學、生理學、藥理學、生物與藥物化學、免疫學、微生物學、公共與環境衛生等。生物醫學科學着重人類與健康和疾病之間的關係，及將基礎科學理論應用至健康服務和醫療保健行業等方面的臨床實踐。廿一世紀被認為是生物醫學的世紀。香港大學李嘉誠醫學院以其卓越的生物醫學研究背景，加上優秀的教學及科研團隊，開辦香港第一個生物醫學的學士課程。課程旨在培育具備生物醫學知識與技能的專才。他們畢業後可投身多項工作發展，包括從事大學、政府、醫療設備公司及生物技術機構等實驗室研究工作；藥物、醫療用品及儀器研發及相關產業的管理和業務發展；臨床實驗管理；傳媒、公關；公營醫療機構政策及行政，等等。他們亦具有穩固基礎繼續深造和進修獸醫、醫療專業課程或其他碩士、博士課程。



Enquiries 查詢

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Programme Overview 課程概覽

The BBiomedSc curriculum is designed with a good balance of structure and flexibility, allowing students to plan their study straddling sciences and humanities. The focus of the Biomedical Sciences core courses is to cover:

- the structures and functions of the human body and the processes that are essential to life
- the basic principles of the processes, mechanisms, patterns of diseases and concepts of therapeutic strategies
- the essential analytical methodologies and the state of the art of contemporary information technology in the field of biomedical sciences

Students are required to complete a total of 240 credits of courses in the four year curriculum, of which 96 credits are Biomedical Sciences major courses, 36 credits are Common Core courses, and 18 credits are Language Enhancement courses. The remaining 90 credits are for minor and electives.

生物醫學學士課程為四年制課程，學生共須修畢二百四十個學分，當中九十六個學分為生物醫學主修課程，三十六個學分為大學核心課程，十八個學分為語文課程，餘下的為副修或選修學分。課程設計富彈性，學生於研習生物醫學課程之餘，也能發展其他興趣，涉獵人文學科。生物醫學主修課程包括以下的內容：

- 人體結構和生理功能
- 疾病病源、發病機制與模式
- 生物醫學範疇中的最新科技



Core Courses for Biomedical Sciences Major 生物醫學主修核心課程

The core courses are divided into introductory and advanced levels. 主修核心課程按個別課題的深淺程度分為導引及高級兩級。

▶ Introductory Courses 導引課程

The introductory courses consolidate students' knowledge of anatomy, human biology, human physiology, biochemistry, and pharmacology which are all necessary to understand the basis of human biology and processes that are essential to life. 導引課程的內容包括解剖學、人類生物學、人體生理學、生物化學及藥理學等範疇。

Students are required to complete the following introductory courses (6 credits each) 學生須完成以下導引科目（各六個學分）：

- Introduction to Human Anatomy and Physiology
- Perspectives in Biochemistry
- Biostatistics
- General Chemistry I/ Foundations of Chemistry
- Basic Biomedical Laboratory Techniques

Plus any four of the following (6 credits each) 以及下列其中四個學科（各六個學分）：

- Human Anatomy
- Physiological Basis of Health and Disease
- Fundamentals of Clinical Trial Management
- Physical and Health Benefits of Exercise
- Biomedical Pharmacology
- Introduction to Clinical Research
- Exercise Physiology
- Human Genetics
- Research methods in Medicine and Health Sciences

▶ Advanced Courses 高級課程

The advanced courses provide students with a foundation in the cellular, molecular and genetic basis of human diseases, as well as strategies for diagnosis. In the last year of their study, students are required to undertake a final year project or the Innovation Team Project. The Final Year Project constitutes a capstone experience for students, allowing them to integrate their knowledge and apply experimental and informatics skills to solve defined problems by research. The Innovation Team Project provides a capstone experience for students, allowing them to integrate their knowledge in biomedical sciences previously acquired, and knowledge in business and marketing introduced in this course to translate biomedical research to viable products.

高級課程則主要是透過細胞、分子和遺傳基礎等分析人類疾病的課題。在最後一個學年，學生必須選擇一個專門題材深入研究。

Students are required to complete the following advanced courses 學生須完成以下高級科目：

- Molecular Diagnostics Laboratory (6 credits)
- Final Year Project (12 credits) or Innovation Team Project (12 credits)

Plus any four of the following (6 credits each) 以及下列其中四個學科（各六個學分）：

- Medical Microbiology
- Mechanisms and Pathology of Diseases
- Biomechanics and Biomedical Technologies
- Biopharmaceutical Research and Development
- Molecular Neuroscience
- Exercise and Chronic Disease
- Molecular Biology of the Cell
- Infection and Immunity
- Sequence Bioinformatics
- Emerging Infectious
- Biological Basis of Exercise and Health



Minor Options and Electives 副修及選修課程

Students can plan their study with the remaining 90 credits in various manners. They may opt to take a minor and/or electives offered within the BBiomedSc curriculum or offered in other curricula.

學生可以按興趣計劃修讀不同學科，以完成餘下九十個學分。學生可選擇副修或選修生物醫學課程學科，或選擇生物醫學以外副修及選修課程。

The minor options offered in the BBiomedSc curriculum include 生物醫學課程有以下副修選項：

Minor in Biotechnology & Clinical Research

Example courses:

- Contemporary Topics in Biomedical Technology
- Stem Cell Biotechnologies in Regenerative Medicine
- Business Aspects of Biotechnology

Minor in Genetics & Genomics

Example courses:

- Cancer Biology
- Genome Science
- Public Health Genetics

Minor in Kinesiology

Example courses:

- Exercise Physiology
- Biological Basis of Exercise and Health
- Physical and Health Benefits of Exercise



Research Training and Exchange Opportunities 科研及交流機會

BBiomedSc students are provided with ample opportunities to experience laboratory-based research and be trained for a career in research and development. They can join the research teams of professoriate members of the Faculty, and/or participate in overseas exchange and attach to the research laboratories of top class universities abroad. The Undergraduate Research Fellowship Programme (URFP) of the University supports students in their pursuit of research and development with the provision of scholarships.

生物醫學學生有機會體驗實驗為本的研究，在研究和職業發展方面得以培訓。他們亦可參加大學的研究項目，或參與海外頂級大學的研究交流。大學的本科生研究獎學計劃（URFP）獎學金資助優秀的學生進行研究。一些海外交流有助於學生在畢業後以畢業生進修專業課程，取得額外專業資格。