



香港中文大學理學院
FACULTY OF SCIENCE
THE CHINESE UNIVERSITY OF HONG KONG

2025-26



School of
Life Sciences
THE CHINESE UNIVERSITY OF HONG KONG

生命科學學院課程
PROGRAMMES OF THE
SCHOOL OF
LIFE SCIENCES

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MESSAGE FROM THE DIRECTOR



As Director of the School of Life Sciences, I am thrilled to mark our 15th anniversary, a milestone that reflects our journey since our founding in 2010. This occasion is celebrated with the unveiling of our new logo, inspired by the profound phrase, “*Where there is water, there is life.*” The logo features a water droplet embracing the Chinese Oracle character “生” (life), symbolizing water’s essential role in sustaining life and embodying our vibrant, innovative research culture.

Our School, akin to a thriving Tree of Life, has flourished under the guidance of our 30 distinguished professors. Together, we have educated over 3,200 undergraduate students through six dynamic programmes: Biochemistry, Biology, Cell and Molecular Biology, Environmental Science, Food and Nutritional Sciences, and Molecular Biotechnology. Our commitment to postgraduate excellence is evident in our mentorship of over 1,400 M.Sc. students across three distinguished taught Master’s programmes—M.Sc. in Biochemical and Biomedical Sciences, M.Sc. in Biodiversity, Environmental Management, Sustainability and Technology, and M.Sc. in Nutrition, Food Science and Technology—as well as supporting the academic journeys of approximately 550 M.Phil. and Ph.D. research postgraduates.

In the vast expanse of scientific exploration, our six research pillars—Plant Cell Biology & Agricultural Science, Structural Biology & Protein Science, Neurosciences & Stem Cell Biology, Food & Nutrition, Genomics & Bioinformatics, and Biodiversity, Conservation & Environmental Sciences—have positioned us as global leaders. These strengths drive groundbreaking discoveries and underscore our dedication to addressing pressing challenges in life sciences.

As we look forward to 2026, our relocation to the state-of-the-art Centralised General Research Laboratory Complex (Block 2) will elevate our capabilities. These cutting-edge facilities will empower our researchers and students to push the boundaries of scientific inquiry, training the next generation of scientists in world-class laboratories.

As we celebrate this significant milestone, we renew our pledge to advance knowledge, foster innovation, and nurture future leaders across the diverse realms of life sciences.

Professor Chan Ho Yin Edwin

Students wishing to enroll in one of the SLS major programmes should apply through JS4601 Science (Broad-based Admission).

Minimum Admission Requirements

JUPAS Admission

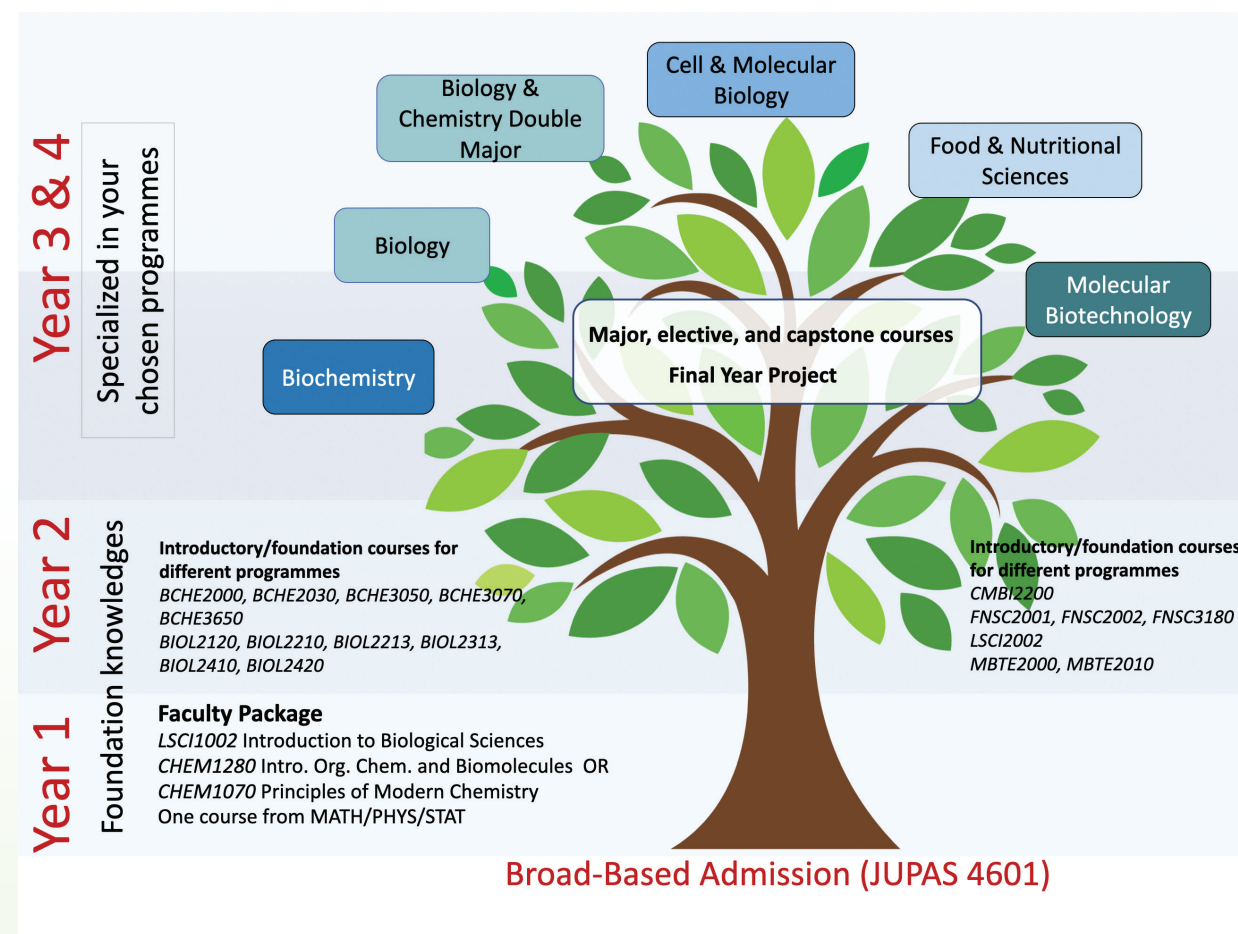
- Local students with Hong Kong Diploma of Secondary Education (HKDSE) results can apply through the Joint University Programmes Admissions System (JUPAS).
- General admission requirement for JUPAS applicants is 4 core and 2 elective subjects (4C+2X or 4C+1X+M1/M2).
- Minimum requirements and admission score calculation of various admission lines are detailed below:

Admission Line	Core Subjects				Elective Subjects		Requirements	HKDSE Subjects with Special Weighting
	C	E	M	CS	1st	2nd		
JS4601 SCIENCE (Broad-based Admission)	3	3	2	A	3	3	1st Elective: Any one from Biology / Chemistry / Physics / M1 or M2 2nd Elective: Any one subject in Category A	2.0 Biology, Chemistry, Physics, M1 or M2 1.5 English or Mathematics, Economics, Geography, ICT, Technology and Living (FST) (A maximum of 3 subjects will be weighted heavier)

Non-JUPAS Admission

- Acquire the International Baccalaureate (IB) Diploma; OR
- Obtain good grades in GCE / International Advanced Level Examination with no less than three Advanced Level subjects; OR
- Possess a qualification which qualifies for university admission in the issuing country (e.g. SAT in USA, UEC/STPM in Malaysia, ATAR in Australia, OSSD in Canada); OR
- Completed an associate degree or higher diploma

Complete and updated information can be found in the websites of Office of Admissions and Financial Aid (admission.cuhk.edu.hk) and Faculty of Science (www.sci.cuhk.edu.hk)



Students admitted through CUHK's Science Broad-based Admission Scheme (JS4601) may declare their major in one of three phases: at entry (Phase I), end of Year 1 (Phase II), or end of Year 2 (Phase III), each with specific academic requirements outlined on the Science Faculty website.

To pursue a major in the School of Life Sciences (SLS), students must complete the Faculty Package in Year 1 to build a solid foundation in science. In Year 2, they begin exploring core subjects in their chosen major, followed by major-specific courses in Years 3 and 4.

Special Programmes

(Internship, Exchange and other opportunities)

The Berkeley Biosciences Study Abroad (BBSA) Programme was introduced in 2016 to enable upper year students of our School to spend a semester in UC Berkeley. They can take 12 units of upper level Integrative Biology and Molecular & Cell Biology courses there and the credits can be transferred back to CUHK to fulfill their graduation requirements. Selected students will be awarded subsidies for tuition fee in UC Berkeley.

Exchange Programme of University of Manchester: There is an Exchange Programme between University of Manchester (Faculty of Biology, Medicine and Health) and CUHK SLS, where selected CUHK SLS students will go on exchange to University of Manchester for studying either one or two semester(s). An interview at SLS will usually be held in the second semester of each academic year.

The Dedicated Research Exchange And Mentorship (DREAM) Programme provides precious opportunities for our students to expose to the frontiers of biological researches. Our students first participate in a coaching programme, and learn the basic techniques and background information related to the project from a local supervisor in the School. During summer, as sponsored by the School, they travel abroad and conduct research projects in foreign laboratories or corporations.

The University Student Sponsorship Programme (USSP) in Wildlife Conservation organised by Ocean Park Conservation Foundation, Hong Kong (OPCFHK). This programme sponsors university students in Hong Kong to participate in field conservation research and community education in mainland China and other parts of Asia. Students will gain valuable experiences by working alongside with conservation professionals; these would give them insight to take up careers in conservation through real-life encounters. Subsidy for each successful candidate could be up to HKD10,000.

Young Scientist Mentorship And Research Training (SMART) Programme offers a distinguished research experience to talented and outstanding first year's students. Through individual guidance from Professors in research laboratory, students are able to ignite their inquisitiveness in scientific research at the very beginning of their University Journey. Besides, they may also receive up to HKD3,840 as rewards for working in the research laboratory.

International Genetically Engineered Machine Competition (iGEM): Each year, over 400 teams from more than 50 countries and regions take part in the prestigious iGEM competition. SLS students have the opportunity to join this global event after completing synthetic biology training in the lab course LSCI3000. Qualified SLS students collaborate with peers from the Faculty of Engineering (FoE) to form a multidisciplinary team that leads and executes a student-driven iGEM project. Upon meeting all project milestones, the team receives sponsorship from the School and FoE to travel to Paris and showcase their innovative work at the iGEM Jamboree.

Further information can be found in the website of School of Life Sciences

Scholarships available under the School of Life Sciences

(information as at 2025-26)

School of Life Sciences

1. Admission Scholarship (HKD6,000 – HKD50,000)
2. 1966 Biology Alumni Scholarship (HKD10,000)

Biochemistry

1. Biochemistry Alumni Association Scholarship (HKD1,800)
2. Biochemistry Alumni (1977) Award for Distinguished Final Year Research Project (HKD2,000)
3. Prof. C.Y. Lee's Academic Award (HKD2,000)
4. Prof. K.K. Ho's Academic Award (HKD2,000)
5. Prof. Ma Lin's Academic Award (HKD2,000)

Biology

1. CUHK 1981 Biology Alumni Scholarship (1 award of HKD 5,000)
2. NA 66' Biology Alumni Scholarship (1 award of HKD4,200)
3. Biology Alumni of CUHK Prize (1 award of HKD500)

Biology and Chemistry Double Major

1. Admission Scholarship (up to 4 awards of HKD5,000 – HKD10,000)

Cell and Molecular Biology

1. Prof. Mark Kai-keung Cell and Molecular Biology Scholarship (1 award of HKD10,000)

Food and Nutritional Sciences

1. Nestle Award in Food Science (1 award of HKD1,000)
2. Nutricia Prize for FNS Student (1 award of HKD1,000)
3. Nissin Foods Scholarships (2 awards of HKD44,500 each per annum)
4. FNSC Student Development Scholarship (5-6 awards of HKD2,000 each)
5. FNSC Academic Scholarship (5-6 awards of HKD 2,000 each)

Molecular Biotechnology

1. Best Presenter Award of Introduction to Molecular Biotechnology (2 awards of HKD1,000 each)
2. Molecular Biotechnology Programme Young Scholars Award (2 awards, first prize HKD3,000, second prize HKD2,000)

BIOCHEMISTRY

Biochemistry is a branch of science that investigates **the chemical compounds and processes occurring in living organisms at molecular level**. The knowledge procured from the study in Biochemistry has found extensive applications in medicine and biotechnology that drastically revolutionize our daily life.

Established in 1971 as the Department of Biochemistry, CUHK's Biochemistry Programme continues its proud legacy by delivering a rigorous education that nurtures future scientific leaders. The curriculum focuses on contemporary topics in biochemistry and molecular biology with strong scientific, medical, and societal relevance — preparing students for impactful careers in research, healthcare, and industry.

Director's Message

The Biochemistry Programme is dedicated to nurturing students into well-rounded professionals, equipped with critical and analytical thinking, collaborative teamwork, self-directed learning, and ethical professionalism — qualities essential for thriving in both academic research and industry career.

We focus on four key biochemistry areas:

- 1. Chemical biology** – Designs and applies chemical tools to study and manipulate biological processes, including drug discovery.
- 2. Structural biology** – Studies 3D structures of biomacromolecules to elucidate their functions.
- 3. Synthetic biology** – Engineers novel or modified biological systems for specific applications.
- 4. Health & well-being** – Investigates reactions and cellular events to sustain life and understand disease mechanisms for prevention and treatment.

Biochemistry students gain core knowledge in biomolecules, molecular biology, metabolism, bioinformatics, and enzymes, with opportunities to specialize in areas of interest. We integrate artificial intelligence into our teaching and research — from data analysis and protein modeling to literature synthesis — ensuring students are equipped with cutting-edge tools and a responsible, critical mindset.

Our year-long, project-based laboratory course offers immersive research experiences that build skills in experimental design, scientific writing, and real-world application of biochemical concepts. Complementing this, a pre-capstone course sharpens students' abilities in scientific analysis, presentation, and career readiness. Students also benefit from experiential learning through final-year projects, research internships, and global competitions. Notably, our Programme established CUHK's first iGEM team in 2010, winning a Gold Medal in its debut. Today, Biochemistry majors enjoy exclusive financial support to join this prestigious synthetic biology competition.

Whether your goal is research or a career in biochemical sciences, our Programme offers a well-rounded, future-ready education to help you thrive.



Curriculum

Biochemistry (BCHE)

Study Focus:

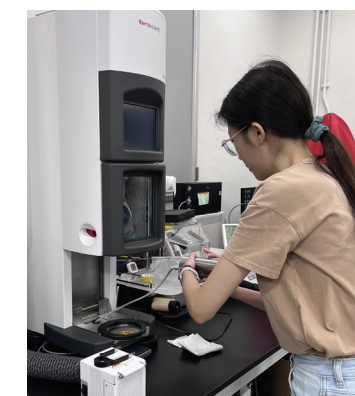
- Bioenergetics and Metabolism
- Genetics and Cell Biology
- Methods in Biochemistry and Molecular Biology
- Structural Biology
- Chemical Biology
- Synthetic Biology
- Health and Well-being

Elective Areas:

- Clinical Biochemistry
- Endocrinology
- Forensic Sciences
- Immunology
- Independent Research in Biochemistry
- Laboratory Management and Accreditation
- Neuroscience
- Sport Sciences
- Advanced topics offered by SLS programmes:
 - Biology*: Microbiology, Animal Physiology, Human Genetics
 - Cell & Molecular Biology*: Protein Trafficking and Folding, Stem Cell Biology, Cell Biology of Cancer and Neuronal System
 - Environmental Science*: Biochemical Toxicology, Environmental Health
 - Food & Nutritional Sciences*: Medical Nutrition Therapy, Nutrition and Human Development
 - Molecular Biotechnology*: Animal Biotechnology

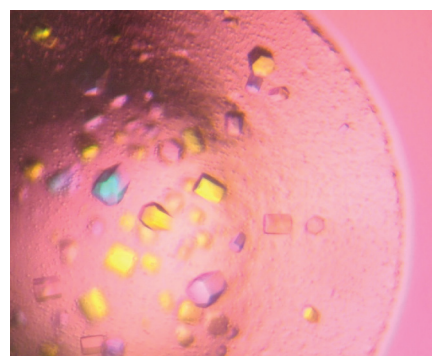
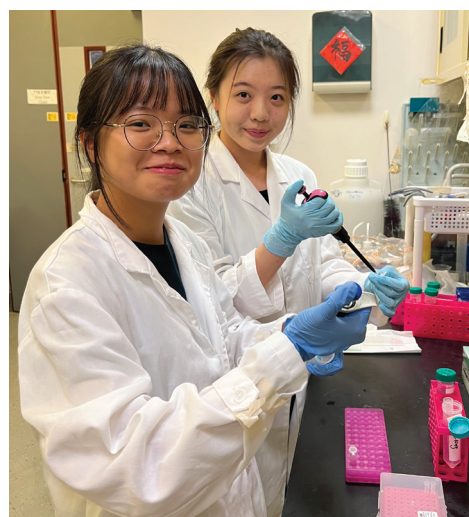
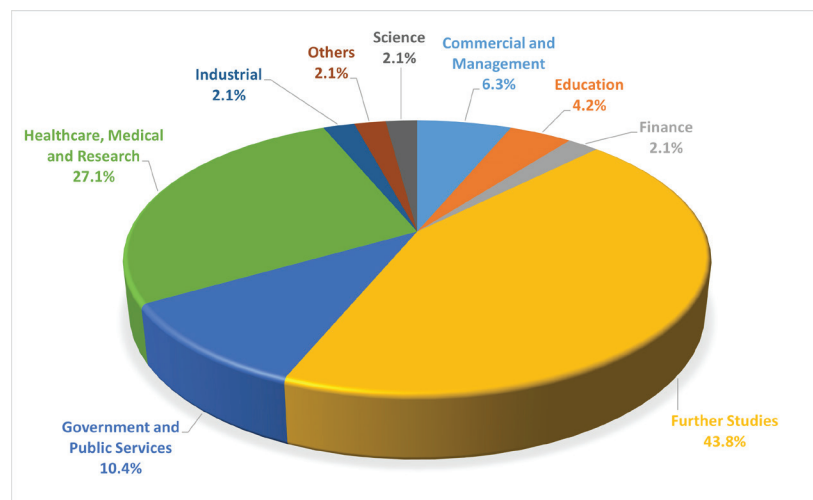
Curriculum Highlights

- Current topics in biochemistry and molecular biology that have scientific, medical, and social significance.
- Academic and experiential learning in four key areas: structural biology, chemical biology, synthetic biology, and health and well-being.
- Hands-on experience through a year-long laboratory course on cutting-edge biochemical techniques.
- Scientific literacy skills and preparations for professional career development.

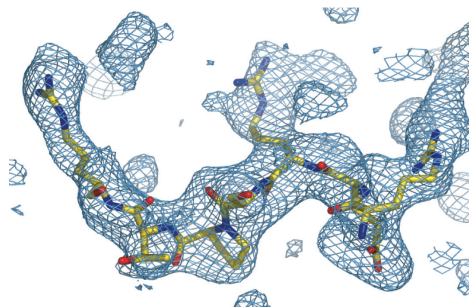


Career Prospects

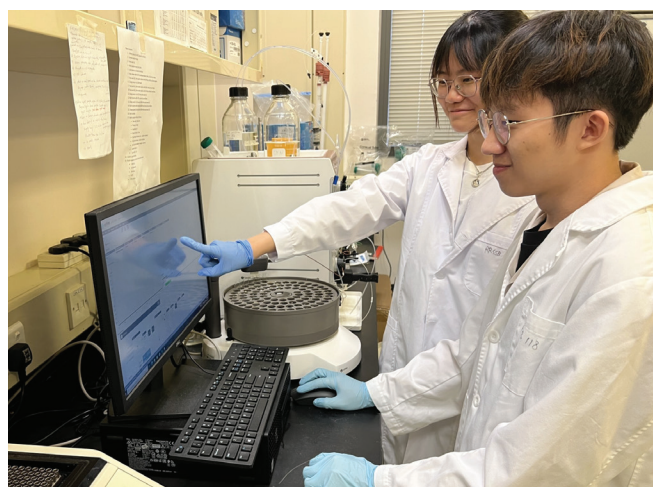
CUHK Biochemistry graduates pursue careers in research, healthcare, biotech, and beyond. They work in quality assurance, government agencies, education, pharmaceuticals, and even finance and consulting. The programme equips students with critical thinking, analytical skills, technical expertise, and communication abilities – valuable across scientific and interdisciplinary fields.



Protein crystals under a microscope



Electron density map determined by X-ray crystallography



Alumni Messages

I graduated from CUHK's Biochemistry (BCHE) programme in 2019. This programme garners many heartwarming memories for me. Some highlights include a funded scholarship supporting me to study at University of California, Berkeley for a semester, as well as a fruitful Final Year Project on colorectal cancer, equipping me with useful literature review and critical appraisal skills. In addition to the lectures and professors, I am also grateful to the office staff and laboratory coordinators who enhanced my experience as a BCHE student by making administrative processes smooth and lab sessions adventurous. Today, I continue to foster a fascination for fundamental biochemical processes that fuel our understanding of science. To this effect, CUHK's BCHE programme was both a stimulus and propagator of my innate curiosity of molecular science.

Dr. Yue Ru Bing Serena

Current doctor (intern) at Pok Oi Hospital

As an Oxford DPhil student who has also studied at UC Berkeley as an exchange student before, I would boldly claim that CUHK Biochemistry is one of the best programmes in the world. Over the years, the director of the Biochemistry programme and other teaching staff have put a lot of efforts in creating and maintaining an excellent academic environment for the students to learn and grow. I am very proud for being a CUHK BCHE graduate. If Utopia existed, CUHK biochemistry would be the place where you receive the real best education.



Biochemistry Annual Picnic

Miss Siu Yiu Ching Rice

*A current D.Phil student at the University of Oxford
Recipient of the Esther Yewpick Lee Millenium Scholarship*



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BIOLOGY

Biology is a broad scientific discipline embracing many different fields of study, including the functioning of living organisms from virus to human. Fundamental to the study of life is unfolding biological organization at its many levels, from molecular architecture to ecosystem services. During the past few decades, new discoveries in biology have brought significant impact on the way we live. Armed with exciting new research methods and information from genomics of human and other living organisms, biologists are beginning to unravel some of life's most engaging mysteries.

The Department of Biology, now the Biology Programme, was established in 1963, and is one of the oldest departments in the University. Indeed, we are the first biological sciences department in Hong Kong awarded the Area of Excellence by University Grants Committee. We offer a broad range of courses for students to choose from, including genetics, physiology, plant biology, zoology, marine biology, and ecology.

Director's message

Over the last six decades, it has always been, and continues to be, our goals in achieving excellence in teaching, carrying out breakthrough research, and performing community services. In terms of teaching, our programme continues to train and equip our students to have fundamental and advanced knowledge of modern biological sciences. With our comprehensive curriculum, our graduates develop their careers in different job sectors including secondary and tertiary institutions, government, non-government organisations and the private sector.



Chek Jawa Wetlands, Singapore



Plantation woodland at Sai Kung East Country Park



Tolo Channel and Harbour

Curriculum

Biology (BIOL)

Study Focus:

- Ecology
- Genetics
- Evolution
- Biodiversity
- Fundamentals of Biochemistry & Cell Biology

Elective Areas:

- Microbiology
- Marine Biology
- Plant & Animal Biology
- Developmental Biology
- Conservation Biology
- Field Study
- Courses from other programmes:
Bioenergetics and Metabolism, Molecular Biology, Immunology, Endocrinology, Protein Trafficking and Folding, Stem Cell Biology, Cell Biology of Cancer and Neuronal System, Pollution and Toxicology, Food Microbiology, Molecular Biotechnology, Biostatistics

Curriculum Highlights

- A broad scientific disciplinary programme focusing on academic and experiential learning in four key areas: Biodiversity and organismal biology (animals, microorganisms, plants), evolution, ecology, and ecosystems (freshwater, marine, terrestrial), Sustainability and conservation and teaching and public understanding of science.
- Three recommended packages based on the different combinations of the courses offered by the programme to fit students' career plans: Biodiversity and conservation biology, Biology for teaching career, and Environmental biology.



Year-long Biodiversity Lab on plant and animal diversity

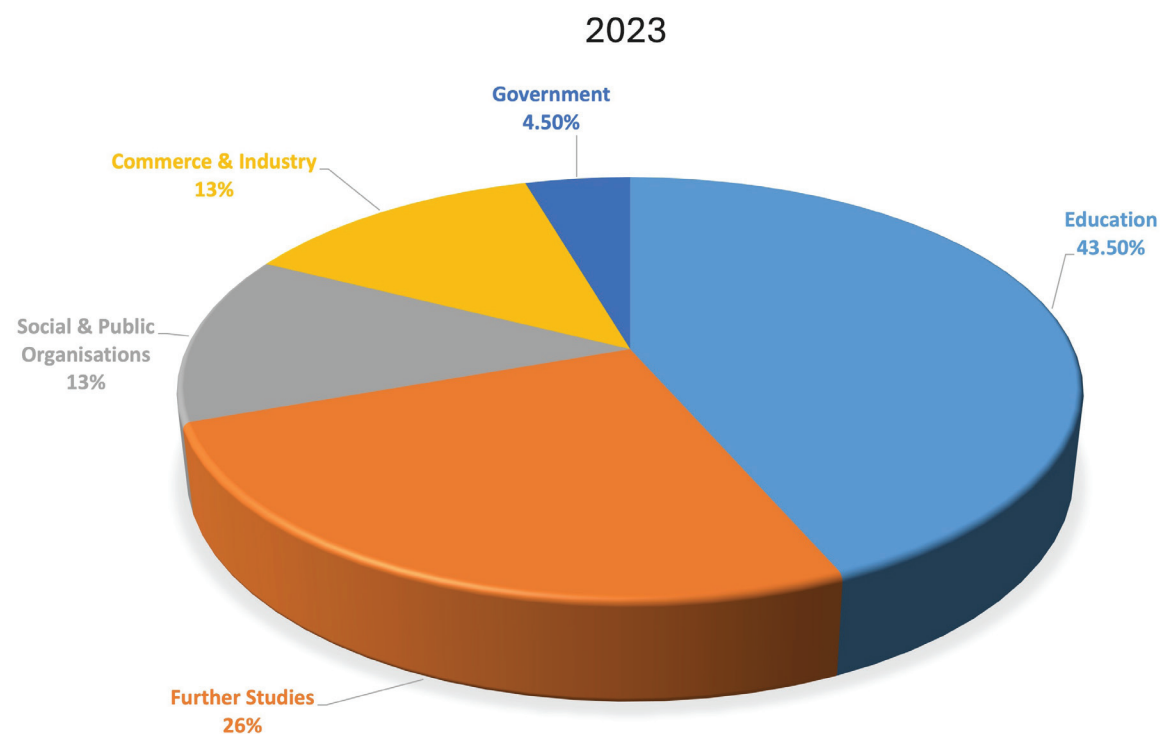


Alumni hiking gathering with students and teachers



Orientation camp, Biofire

Career Prospects

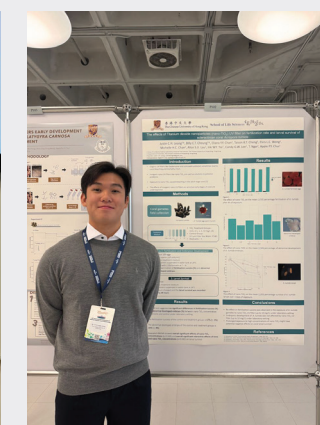


Alumnus Message

The biology programme supports students in reaching their goals across various areas. For me, the curriculum offers courses in different branches of biology, from evolution and genetics to ecology and biodiversity, complemented by field trips to different ecosystems in Hong Kong, allowing students to explore their interest in biology. The course provides a strong knowledge base for me to face future challenges. Besides classes, I have received invaluable support and mentorship from faculty members through research opportunities and an overseas exchange programme, the University Student Sponsorship Programme (USSP). The training and experience I have gained in the biology programme have sharpened my research skills and passion for scientific research, and established a solid foundation for me to pursue my goal of becoming a biologist.

Mr. Leong Chi Ho Justin

A current PhD student at the Chinese University of Hong Kong



Programme Director
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BIOLOGY AND CHEMISTRY DOUBLE MAJOR



Conscientiously devised by the Faculty of Science, School of Life Sciences and Department of Chemistry, the Bachelor of Science in Biology and Chemistry Double Major Programme is planned to equip students with enhanced broadness and diversity in both fields. In light of the prevalent trend of the transformation to a knowledge-based economy, there is a proliferating demand of highly-educated scientists who has an interdisciplinary scientific expertise.

It is believed that this programme will be capable to cope with this particular demand by nurturing a group of students with cutting edges in both workforce and academia.

Directors' Messages

The B.Sc. in Biology and Chemistry Double Major Programme aims to equip high-calibre students with knowledge in both Biology and Chemistry within four years. Graduates will be able to work in job sectors/pursue further studies in Biology, Chemistry, or fields requiring both Biology and Chemistry. We look forward to seeing you soon.

Prof. Hui Ho Lam Jerome, School of Life Sciences

The B.Sc. in Biology and Chemistry Double Major Programme provides students with a taste of multidisciplinary scientific training to anticipate the collaborative research environment.

Apart from robust scientific knowledge, students may receive the final year project supervision from Biology and Chemistry scholars to equip them with cross-disciplinary research skills.

Prof. Ngai To, Department of Chemistry

Curriculum

Faculty Package (9 units)		
Biology	Chemistry	Physics
Major Courses (76 units)		
Biology	Chemistry	
Required (32 units)	Required (29 units)	
■ Cell Biology ■ Biochemistry ■ Genetics ■ Ecology ■ Evolution ■ Biodiversity	■ Analytical Chemistry ■ Inorganic Chemistry ■ Organic Chemistry ■ Physical Chemistry ■ Materials Chemistry ■ Theoretical Chemistry	
Electives (6 units)	Electives (9 units)	
■ Advanced abd Research Related Courses	■ Advanced abd Research Related Courses	
Capstone Courses (4 units)		
Senior Experimental Project / Problem-based Learning		

University Core (39 units)

Chinese & English Languages
University General Education
Information Technology
Physical Education
Understanding China & Hong Kong

Free Electives

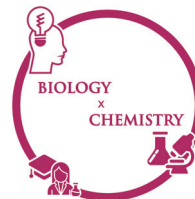


Detailed Course List

Curriculum highlights (Why Biology X Chemistry?)

Knowledge & Training

- To be equipped with a broad scientific knowledge ranging from quantum chemistry, atoms, molecules, cells, physiology, biodiversity, ecology to evolution.
- To be trained with technical and analytical skills from both biology and chemistry disciplines.



Cross-disciplinary Research

- To enjoy ample opportunities to take research method courses and final year projects supervised by professors from both units.
- To immerse in an environment that can receive the bona fide cross-disciplinary training in research.

Professional Development

- To be equipped with cross-disciplinary scientific skills.
- To develop enhanced adaptability and employability in multiple job sectors.

Career Prospects

B.Sc. in Biology and Chemistry Double Major Programme equips students with cross-disciplinary scientific skills and enhance their adaptability and employability in multiple job sectors that provide accreditation, analytical and clinical testing services, pharmaceutical and health care products marketing, patent law firm or investor consultancy, education, environmental consultancy, and research and development (R&D).



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CELL & MOLECULAR BIOLOGY

Cell and Molecular Biology (CMBI) is an interdisciplinary field that represents the frontiers of biology and medicine. Advances in multi-omics sequencing approaches and imaging techniques have signalled a shift in modern biology to focus on understanding the function of genes at the molecular, cellular and organismic levels.

It is in this background that the University launched the Cell and Molecular Biology programme in 2008. As the first in the region to focus on the study of molecular and cellular biology, the programme offers an integrated curriculum that provides students a solid knowledge base in areas such as stem cell biology, cancer cell biology, organelle dynamics, genomics and more. CMBI students receive intensive trainings in laboratory techniques, data analysis, literature search, as well as scientific writing and communication, all with the goal of preparing students for undertaking future research-related work in CMBI and beyond.

Director's Message

Our mission at the Cell and Molecular Biology (CMBI) program is to deliver outstanding education that prepares students for successful careers in biological and biomedical research. We aim for students to build a strong foundation in biology while experiencing the excitement of discovery through hands-on research. Just as importantly, we nurture skills like critical thinking, teamwork, and clear communication—essential qualities for any scientist.

We make sure our courses and opportunities keep pace with the constantly evolving world of science, providing students access to the latest advances in cell and molecular biology. We also offer chances for international experiences and interdisciplinary learning to encourage our CMBI students to broaden their perspectives and to think outside the box.

Looking ahead, we are excited to expand our research opportunities and partnerships for our students to connect with cutting-edge science. At CMBI, we see our program as not just a place to learn, but as a launchpad for those who want to make a real difference as leaders in life sciences.

Curriculum

Cell and Molecular Biology (CMBI)

Study Focus:

- Research methods and scientific communication
- Cancer, Neuronal and Stem Cell Biology
- Genomics, Transcriptomics & Metabolomics
- Contemporary topics in Cell Biology and Molecular Biology
- Fundamentals in Biochemistry and Genetics

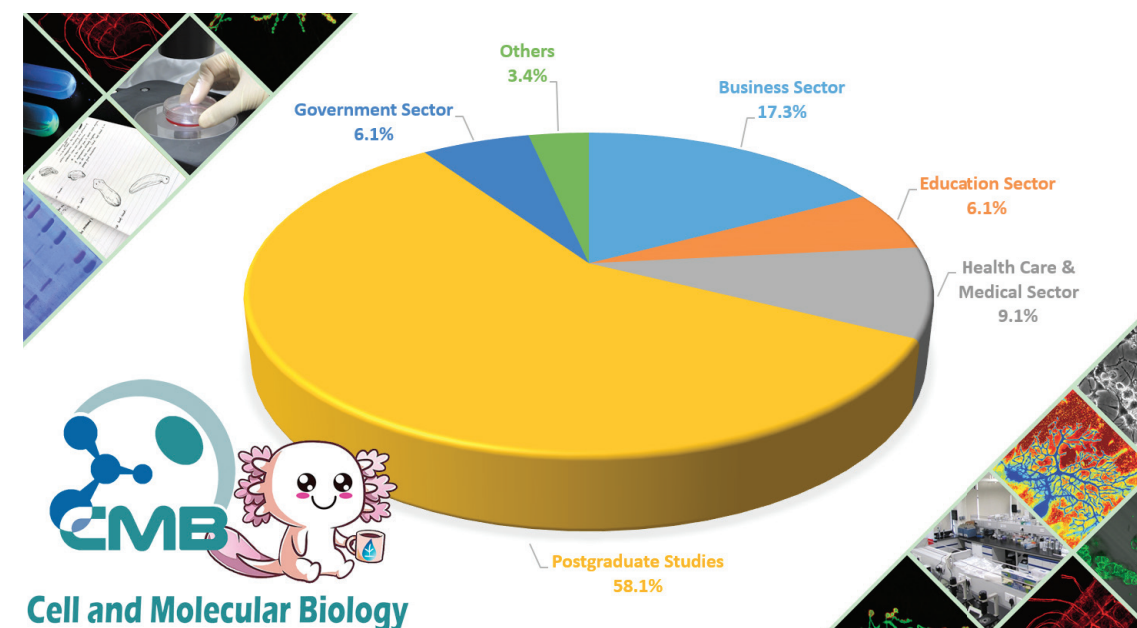
Elective Areas:

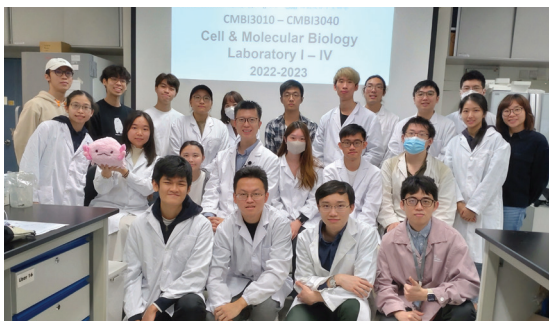
- Independent research in Cell & Molecular Biology
- Advanced topics offered by other SLS programmes:
 - Biology: Physiology, Developmental Biology
 - Biochemistry: Clinical biochemistry, Neuroscience, Immunology
 - Molecular Biotechnology: Animal, Plant and Microbial Biotechnology, Genetic Engineering
- Biomedical Engineering offered by the Faculty of Engineering
- Statistics: Biostatistics

Curriculum Highlights

- Student-oriented capstone courses using an one-to-one mentoring approach
- Intensive project-based laboratory training
- An integrated programme covering cutting-edge research topics in cell and molecular biology on top of a solid knowledge base in life sciences
- Communication skills and problem-solving skills essential for further studies, career development and lifelong learning

Career Prospects





Alumni Messages

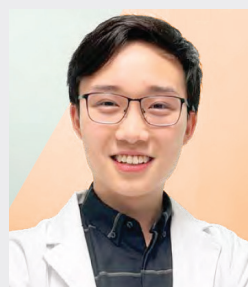
Cell and molecular biology are at the core of major scientific discoveries in life sciences in the 21st century. The CMBI Programme at CUHK was specially designed to train the next generation life science researchers through its diverse STOT courses and year-long laboratory practical courses. Besides, thanks to CMBI's teachers, a lot of local and overseas research opportunities are made available to CMBI students. These unique features of the CMBI Programme were indispensable for the success of my career - leading an independent research group in just 6 years after graduation from the CMBI programme.



Dr. So Chun Nick

*Assistant Investigator, National Institute of Biological Sciences, Beijing
Recipient of the Croucher Fellowships for Postdoctoral Research 2022
Recipient of the Croucher Scholarship for Doctoral Study 2019*

The CMBI programme is especially suited for students pursuing a career in research or the industry. The three writing courses were excellent - we learnt to write research articles, literature reviews and grant proposals, all of which are critical to our future career. The project-based lab courses were also fascinating. It was rewarding to do coherent experiments to reach a conclusion. It was also unforgettable to have fun interactions with the teachers and all other classmates.



Mr. Wong Chi Ngai Genper

*A current PhD student at Stanford University, USA
Recipient of the Sir Edward Youde Memorial Fellowships for Overseas Studies 2024-25
Recipient of the Joseph Needham Merit Scholarship 2024*



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FOOD & NUTRITIONAL SCIENCES

Since 1994, the Chinese University of Hong Kong has proudly offered the Food and Nutritional Sciences Programme (FNSC), a unique and interdisciplinary degree that bridges the gap between food science and nutritional science. While these two fields are distinct, they are deeply interconnected. Students admitted to this programme will explore topics on food science and nutritional science, such as food chemistry, processing technology, product development and safety to human metabolism, diet planning and nutrition promotion.

In 2021, FNSC launched the Nutritionist Stream (FNSC-NS). It has obtained accreditation from the United Kingdom Association for Nutrition (AfN). This exciting stream is designed for students who are passionate about nutrition and eager to gain practical, hands-on experience before graduation. It is the first programme in Hong Kong accredited by the UK's AfN. [registration number: AC311]

Director's Message

FNSC has been committed to delivering comprehensive education that integrates food science and nutritional science. Our mission is to prepare students for diverse career pathways in the food industry, nutrition education, and health promotion by equipping them with essential knowledge and practical skills. We also support students in pursuing advanced studies in dietetics and other health professions. For those in the FNSC Nutritionist Stream (FNSC-NS), the programme provides a strong foundation for becoming an Associate Nutritionist (ANutr), with emphasis on professional and ethical standards. Through our curriculum, students will gain a deep understanding of core concepts and emerging issues in food and nutritional sciences, enhancing their competitiveness in the job market. They will develop the ability to critically evaluate information, apply their knowledge to real-life situations, and acquire hands-on experience through laboratory work, practicum (FNSC-NS only), and internships. Our graduates demonstrate strong critical thinking, data literacy, and problem-solving skills, and are well-prepared for lifelong learning and further academic or professional advancement. Students in FNSC-NS can also obtain direct entry qualification as an AfN Registered Associate Nutritionist.



Curriculum

Food and Nutritional Sciences (FNSC)

Study Focus:

- Nutrition & Human Development
- Nutrition Biochemistry
- Food Chemistry & Analysis
- Food Microbiology
- Fundamentals of Biochemistry & Cell Biology
- Fundamentals in Organic Chemistry, Mathematics, and Physics

Elective Areas:

- Ethics and Professionalism for Nutritionists
- Human Physiology for Nutritional Studies
- Food Technology
- Community Nutrition and Medical Nutritional Therapy
- Nutrition Planning and Food Policy
- Food Product Development and Quality Control
- Food Toxicology and Safety
- Independent Research / Internship in Food and Nutritional Sciences
- Advanced topics offered by other SLS programmes:
 - Biology:* Genetics
 - Biochemistry:* Immunology, Endocrinology
 - Molecular Biotechnology:* Genetic Engineering

To fulfill the accreditation requirements of the UK Association for Nutrition, students in the Nutritionist Stream are required to follow a rigorous curriculum.

Curriculum Highlights

- FNSC Nutritionist Stream is **the first programme in Hong Kong accredited by the UK Association for Nutrition (AfN)**, ensuring international recognition and professional credibility.
- Our curriculum is designed to **support students who wish to pursue further studies in dietetics**, providing a solid academic foundation and smooth transition into professional training programmes.
- Students benefit from extensive exposure to real-world work settings through internships and practicum opportunities in industry, clinical, and academic environments—**enhancing employability and practical skills**.
- **Over 70% of the FNSC students would have internship opportunities** in the industry, clinical or academic settings, allowing them to have outside classroom experiences.
- The programme **offers a variety of experiential learning activities**, including overseas study trips, providing students with broader perspectives and hands-on experiences beyond the classroom.

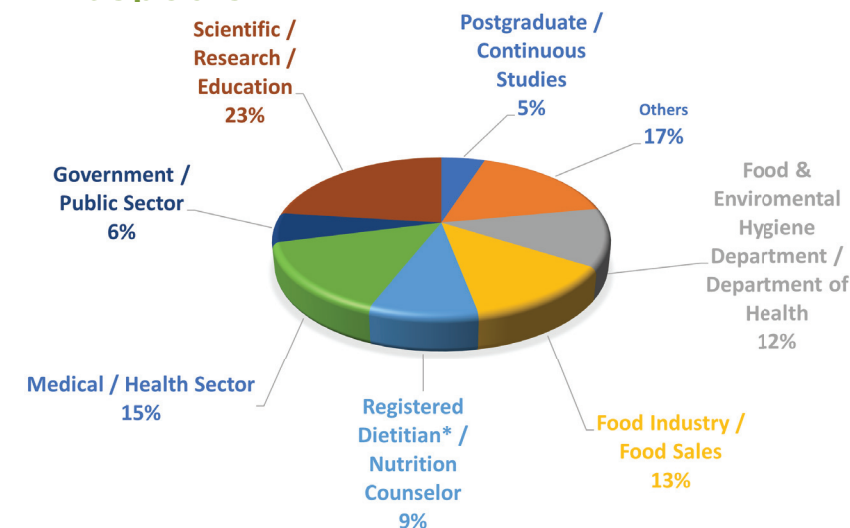


Baking Workshop, 2025



FNS Oversea Trip to Korea, 2019

Career Prospects



*Required further training in dietetic
Data obtained in 2025

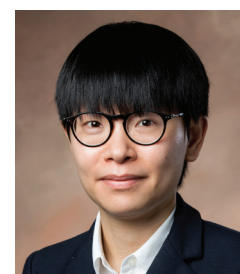
Alumna Message

One of the most memorable experiences was the practicum course, which brought together a group of over ten of us. It was through this experience that we truly got to know one another, collaborate closely, and even meet some of our closest friends in the major.

During the practicum, we gained insights from real-world experiences. I had the opportunity to work with individuals in mental health issues, our team conducted talks and activities to raise awareness about food and nutrition. Additionally, we organized an event at CUHK Cultural Square focused on "fluid consumption," using games to help students and staff understand its role and the sugar content in various beverages. One participant, from a different background, persistently challenged our recommended daily water intake, and we had to seek help from the course teachers to clarify. That moment made me realize how vast and complex nutrition knowledge is—and that continuous learning is part of being a professional.

Community service isn't just about having good intentions—it requires learning through trial and error. I'm grateful for the hands-on experience gained through the Nutritionist Stream, which helped me understand that "running an event" don't always go as planned, and for us as an university student, that was a truly eye-opening lesson.

Miss Chan Hoi Yi



Programme Director
Professor Tsang Suk Ying Faye
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Contact

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MOLECULAR BIOTECHNOLOGY

Molecular Biotechnology is a transformative field focused on gene and protein technologies, with applications across agriculture, healthcare, environmental science, bioenergy, and other bio-industries. In response to growing demand, the University launched its Molecular Biotechnology programme in 1998. The programme provides a solid foundation in life sciences and introduces students to diverse biotechnology fields—including microbial, plant, animal, health and environment biotechnology—alongside genetic engineering, molecular biology, and biochemistry. Students gain hands-on experience in molecular techniques and explore the business and societal dimensions of biotechnology, such as policy, management, intellectual property, and ethics.

Director's Message

The Molecular Biotechnology (MBTE) Programme offers a unique blend of scientific training and real-world experience. Students build a solid foundation in molecular biology, genetics, and biotechnology, while benefiting from extensive internship opportunities — from cutting-edge research placements in overseas institutions to industry attachments and even legal internships related to biotechnology innovation. This diverse exposure, combined with rigorous academic and laboratory training, equips our graduates with the knowledge, skills, and perspective to drive innovation in science, education, and the bio-based economy.



Curriculum

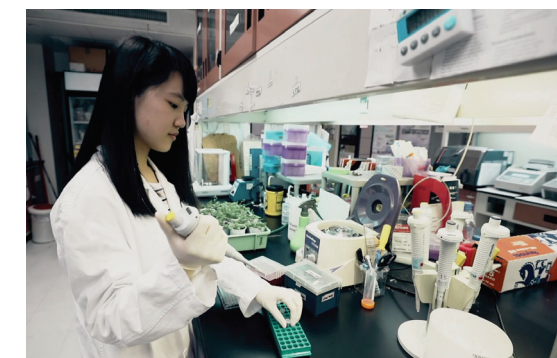
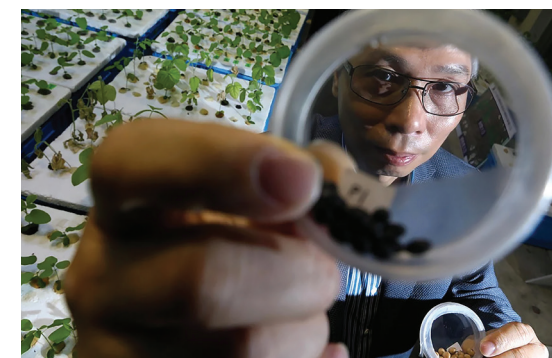
Molecular Biotechnology (MBTE)

Study Focus:

- Molecular Biotechnology in Animals, Plants, Medicine, Microbes and Environment
- Business & Social Aspects of Biotechnology
- Methods in Molecular Biotechnology
- Methods in Biochemistry
- Genetics & Genetic Engineering
- Cell Biology & Diversity of Life
- Microbiology
- Fundamentals in Organic Chemistry, Mathematics, and Physics

Elective Areas:

- Independent research in Molecular Biotechnology
- Advanced topics offered by other programmes:
 - Biochemistry:** Protein and Enzymes, Bioenergetics, Metabolism, Immunology, Clinical Biochemistry
 - Biology:** Physiology, Developmental Biology
 - Cell & Molecular Biology:** Stem Cell Biology, Cell Biology of Cancer and Neuronal System
 - Statistics:** Biostatistics
 - Biomedical Engineering**



Curriculum Highlights

- Fundamental knowledge in life science with emphasis on biotechnology applications.
- Hands-on skills through specially designed laboratory courses on methods in molecular biotechnology.
- In-depth knowledge in selected areas of your choice. Topics cover various aspects of challenges in life sciences.
- Comprehensive understanding of the business and social implications of biotechnology, such as government policy, management, intellectual property, and ethical and public concerns.

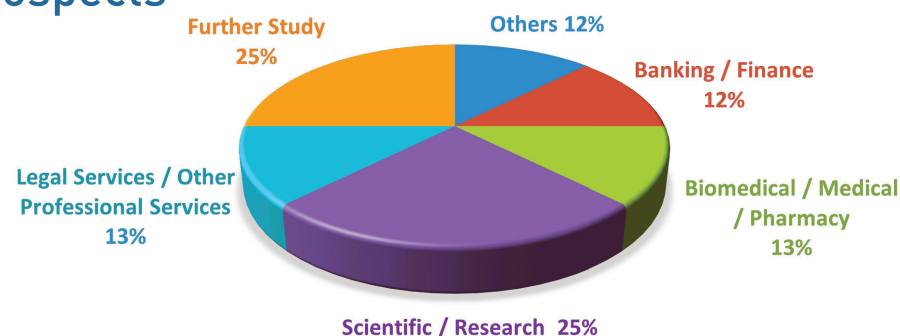


Visit biotechnology companies



Career talk given by alumni

Career Prospects



Alumni Messages

"I've always been drawn to biological research but lacked a clear focus. The MBT Programme's multidisciplinary approach and strong local and international connections gave me valuable lab and industry experience — including a study abroad at UC Berkeley and an R&D internship at a local start-up company. The diverse curriculum highlighted the role of molecular biology in biotech, inspiring me to pursue it further."

Mr. Ng Tin Long Chris

*A current PhD student at the University of Cambridge, UK
Recipient of the Gates Cambridge scholarship*



"Driven by a passion for solving biotechnological challenges, I found the MBT Programme's rigorous training in both basic and applied sciences invaluable. It equipped me with essential research skills and scientific knowledge, paving the way for my PhD at CUHK and M.Sc. at Oxford. The programme's industry exposure and networking opportunities revealed diverse career paths, ultimately inspiring me to co-found Codex Genetics—transforming genomics research into clinical insights through AI and Big Data, with support from ITC, HKSTP, and CUHK."

Dr. Yu Chi Shing

Chief Technology Officer, Codex Genetics Limited



Programme Director
Professor Chan Ting Fung
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Contact

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Welcoming Science freshmen at Orientation Reception Sep 2025



Team Members of International Genetically Engineered Machine Competition (iGEM)



Student engaging in University Student Sponsorship Programme (USSP)



One campus, many cultures –
celebrating our international student family

Open in 2026

Centralised General Research
Laboratory Complex
(Block 2) in Area 39



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SLS IG



Website

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