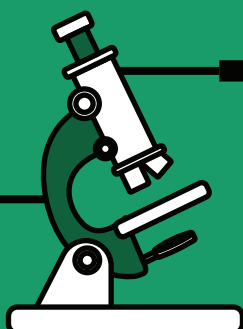
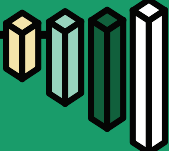
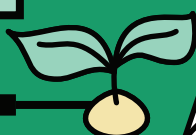
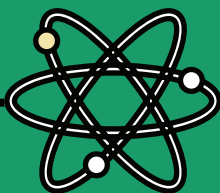


# SCIENCE UNDERGRADUATE PROGRAMMES

2025-26 (September 2025 intake)

H K U S C I



*Ignite Your Bright Future  
with Science*



**SHKU**  
**Science**

FACULTY OF SCIENCE  
THE UNIVERSITY OF HONG KONG  
香港大學理學院

# Programmes We Offer

Key programmes

6901

## Bachelor of Science

Empowers scientific intellectuals to formulate solutions to society’s challenges

- Simple and flexible
- One entry in the application, with a free choice of 11 Science Majors and 7 Intensive Majors
- Options of 1 Major / 2 Majors / Major-Minor / Major-2 Minors
- No quota nor GPA requirement for any Science Major
- Academic Advising System

6688

## Bachelor of Science & Master of Research

(Science Master Class) (Double degree programme)

Incubates the next generation of scientists

- Fast-track for completing 2 degrees
- Learning from Science Masters
- Catering the needs of elite students
- Research-oriented

6858

## Bachelor of Science and Bachelor of Laws

(5-year double degree programme jointly offered with the Faculty of Law)

Nurtures professionals with scientific and legal knowledge in a STEM-driven society

- First of its kind in Hong Kong
- Fast-track for completing 2 degrees in science and law
- Interdisciplinary training in scientific and legal skills
- Free choice of 11 Science Majors
- Articulation to Postgraduate Certificate in Laws (PCLL) as a step towards professional legal qualification

Co-hosted with other Faculty

6119

## Bachelor of Education and Bachelor of Science

(5-year double degree programme) (co-hosted with the Faculty of Education)

Consolidates scientific knowledge through practical experience and teaching in science

- Covers both academic and professional studies
- Incorporates a graduate teaching qualification
- Development opportunities not just in education, but also in commercial and government sectors

Offered by School of Computing and Data Science

(affiliated with the Faculty of Science and the Faculty of Engineering)

6224

## Bachelor of Arts and Sciences in Applied Artificial Intelligence

Impacts the world with the limitless power of AI

- Interdisciplinary programme for elite students
- Highlights diverse AI applications with featured concentrations
- Problem-based learning with a wide range of courses
- Broad career prospects

6248

## Bachelor of Arts and Sciences in Financial Technology

6729

## Bachelor of Science in Actuarial Science

A gateway to the actuarial profession with internationally recognised qualifications

- The only programme in Hong Kong accredited by the Institute and Faculty of Actuaries of UK
- Designated as a Center of Actuarial Excellence with University-Earned Credit programme by the Society of Actuaries of North America
- Provides specialist academic and professional training
- Internship opportunities and career prospects in major insurance companies, actuarial consulting firms, investment banks, etc.

6779 \*

Bachelor of Science in Decision Analytics  
Bachelor of Science in Risk Management  
Bachelor of Science in Statistics

6999 \*

Bachelor of Engineering in Computer Science

Bachelor of Engineering in Artificial Intelligence and Data Science

\*Subject to approval

# Why HKU Science

## Global Experiences

Committed to nurturing students as global citizens with overseas experiences such as:

- Worldwide exchange studies
- Overseas Research Fellowship
- Overseas summer courses
- Field trips
- International scientific conferences
- Internships

## International Environment

About **40%** academic staff in the Faculty are from overseas

## High University Rankings



QS Asia University Rankings 2024 **#2**

QS World University Rankings 2025 **#17**

QS Graduate Employability Rankings 2022 **#10**



THE Asia University Rankings 2024 **#6**

THE World University Rankings 2025 **#35**

THE Most International Universities in the World 2024 **#6**

## Top-ranked Scientists

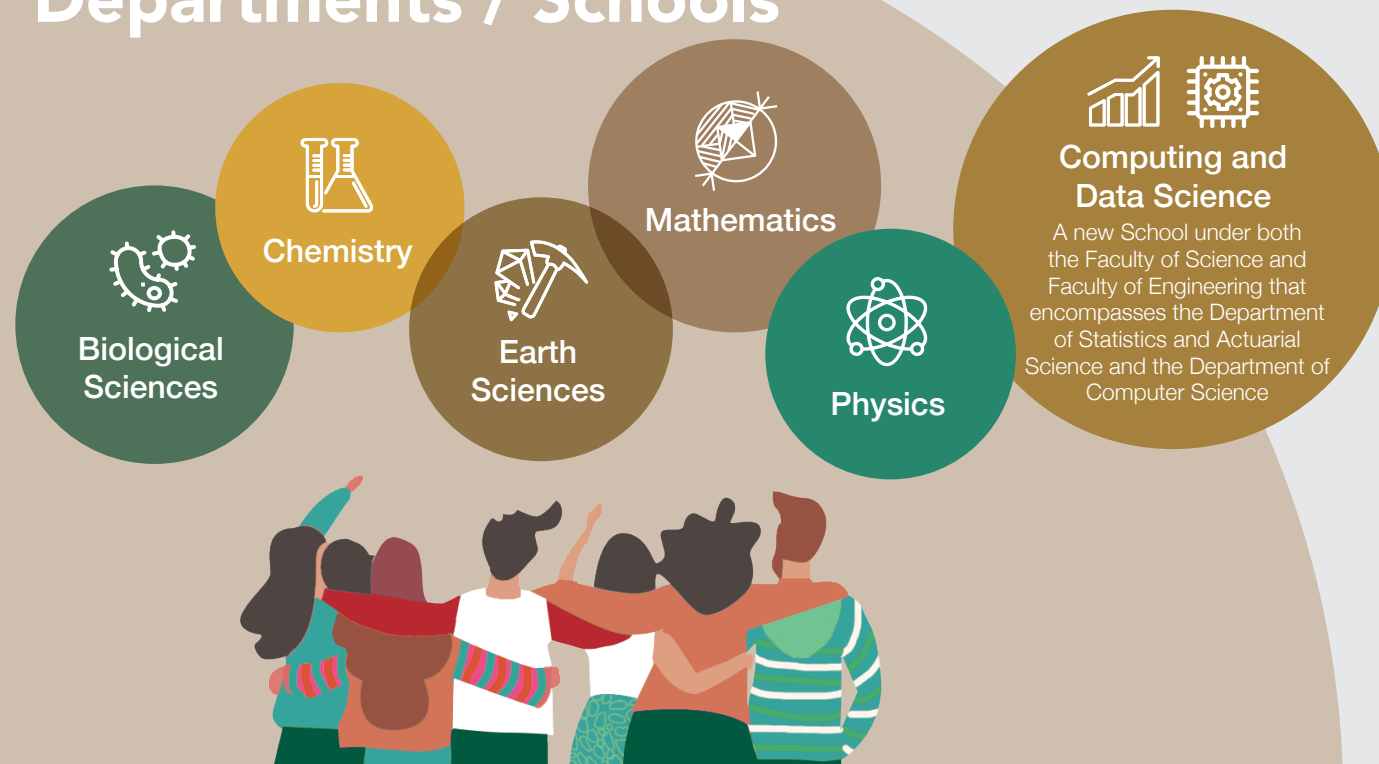
Clarivate Analytics' Essential Science Indicators

**18.3%** of our professoriate staff (average over the past decade) are classified **Top 1%** scholars

## Career Prospects

- Essentially **100%** employment rate (includes further studies) in the past decade
- A wide range of career opportunities, spanning fields such as scientific research, technology, business, commerce, healthcare, environmental management, and beyond

## Departments / Schools



Special features

# for Science Curricula

## Young Scientist Scheme (YSS)

*Ample early research experiences for*

- Students in the 6688 Science Master Class Programme
- Outstanding students in the 6901 BSc Programme



## Cambridge-track under YSS

*HKU-Cambridge Undergraduate Recruitment Scheme (Natural Sciences) for selected YSS participants*

- Earning 3-4 degrees upon successful completion of 2 years of studies at HKU and 2-3 years of studies at Cambridge



## Intensive Majors

*Specialisation and intensive training make experts*

- Biological Sciences (Intensive)
- Chemistry (Intensive)
- Ecology & Biodiversity (Intensive)
- Geology (Intensive)
- Mathematics (Intensive)
- Molecular Biology & Biotechnology (Intensive)
- Physics (Intensive)

## Accreditations

*Quality assured through recognition by international professional bodies*



HKIQU  
香港環專會



The Geological Society  
Accredited programme



Royal Society of  
Biology  
Accredited Degree



Royal Society of  
Chemistry  
Accredited degree

## Articulation Pathways

*Seamless articulation to widely recognised postgraduate programmes*

- Taught Postgraduate Programmes at HKU Science
- Doctor of Veterinary Medicine (DVM) at University of Melbourne (UoMelb)

## Minor in Science Entrepreneurship

*Opening the doors to science entrepreneurship*

- Visualises how training in science bears relevance to the real world



# Bachelor of Science

Empowers scientific intellectuals to formulate solutions to society's challenges

## The Programme

One entry in the application, with a free choice of

### 11 Science Majors

- Biochemistry
- Biological Sciences
- Chemistry
- Earth System Science
- Ecology & Biodiversity
- Environmental Science<sup>1</sup>
- Food & Nutritional Science
- Geology
- Mathematics
- Molecular Biology & Biotechnology
- Physics

### 7 Intensive Majors

- **Biological Sciences<sup>2</sup>**
- **Chemistry<sup>3</sup>**
- **Ecology & Biodiversity<sup>2</sup>**
- **Geology<sup>4</sup>**
- **Mathematics**
- **Molecular Biology & Biotechnology<sup>2</sup>**
- **Physics**

### Specialisation and intensive training make experts

- Offered alongside with the regular 96-credit Majors
- Provides students with extensive subject knowledge
- Equips students who intend to pursue research in science
- Listed in the transcript
- Has an advantage in job application, postgraduate studies, and when seeking chartered status



<<<<Learn more about our Science Majors

## Key Features

### Academic Advising System

One-on-one academic advice

### Options of 1 Major / 2 Majors / Major-Minor / Major-2 Minors

Students may take a 2<sup>nd</sup> Major or a Minor or 2 Minors in Science or non-Science disciplines

### No Quota nor GPA requirement for any Science Major

### Simple and Flexible

- One entry in application for a choice of 11 Majors and 7 Intensive Majors
- Up to 2 years time to choose a Major
- Flexibility in changing Majors

## Tackling Novel Situations

Nurtures a scientifically literate population to address the global challenges that human faces and to make wise decisions informed by scientific understanding

Our graduates are preferred by employers because of their numerical analytical skills, logical thinking and critical thinking



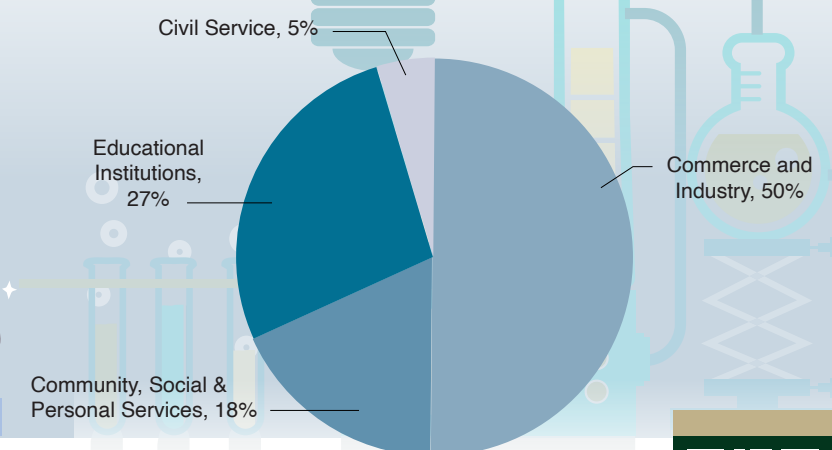
## Career Prospects

**Essentially 100% employment rate**  
(includes further studies) in the past decade

Many of our graduates are **holding positions that demand scientific expertise**, such as environmental scientists, nutritionists, clinical scientists, meteorologists, geologists, information specialists, financial analysts, teachers and forensic scientists

In particular, by equipping the students with in-depth knowledge and skills to tackle intricate and novel challenges posed by **Environmental, Social, and Governance (ESG)** issues, many of our majors have proven to be especially effective in nurturing ESG talents. As the importance of ESG continues to grow globally, our majors provide students with a manifest edge in the job market and the ability to impact their chosen fields positively.

### Major Occupation of HKU Science Graduates



(Source: HKU Graduate Employment Survey 2022)

Accredited by:



Programme website



# Young Scientist Scheme

Ample early research experiences for

- Students in the 6688 Science Master Class Programme
- Outstanding students in the 6901 BSc Programme



## What is Young Scientist Scheme (YSS) all about?

We are committed to providing outstanding students with the best science education and ample early research experiences, incubating the next generation of scientists.

A wide spectrum of scientific research areas



Biological Sciences



Chemistry



Earth Sciences



Mathematics



Physics

### Institutions for Overseas Research Fellowship

#### Examples

#### North America

- California Institute of Technology
- Columbia University
- Cornell University
- Massachusetts Institute of Technology (MIT)
- Stanford University
- University of California at Berkeley
- University of California at Los Angeles

#### Europe

- CERN
- University of Cambridge
- University College London

### Universities for international exchange, visiting or summer study

#### North America

- University of California
- University of Chicago
- Columbia University
- Johns Hopkins University
- Stanford University
- Yale University

#### Europe

- University of Cambridge
- Imperial College London
- King's College London

## Students in YSS are guaranteed with



Enrolment in our flagship **Summer Research Fellowship (SRF) Scheme** to conduct research under the supervision of our professors in the first summer

A further **SRF or an Overseas Research Fellowship (ORF) Scheme** in a foreign institution in a subsequent year

**International exchange, visiting or summer study**

Attendance in an **international scientific conference** on frontier scientific research

Individual **guidance from a personal research mentor** from the start of the undergraduate study

Enrolment in our **Frontiers of Science Honours Seminar** to learn how our award-winning professors solve their research problems

**Stipends for research programmes**

**An entrance scholarship** ranging from HKD 10,000 to HKD 70,000\*

Year 1

Individual Guidance from Research Mentor

Summer Research Fellowship

Year 2

2<sup>nd</sup> Summer Research Fellowship or Overseas Research Fellowship

Year 3

International Exchange, Visiting or Summer Study

Final Year Project

Year 4

International Conference

Frontiers of Science Honours Seminar



How to join YSS

\*Scholarships for Non-JUPAS students are considered on case-by-case basis

# HKU-Cambridge Undergraduate Recruitment Scheme (Natural Sciences)

Cambridge-track for Selected YSS Participants in Natural Sciences Disciplines

Earning 3-4 degrees upon successful completion of 2 years of studies at HKU and 2-3 years of studies at Cambridge

HKUer or Cantab?

Why not BOTH?



## Key Features

- A joint recruitment scheme that allows selected YSS students to pursue studies in two renowned universities
- Allows students to experience overseas life and culture
- Nurtures future science professionals to develop innovative solutions for global challenges
- Ample learning opportunities facilitated by YSS

Selected students can follow either of the paths below and attain degrees from both HKU & Cambridge in 4-5 years:



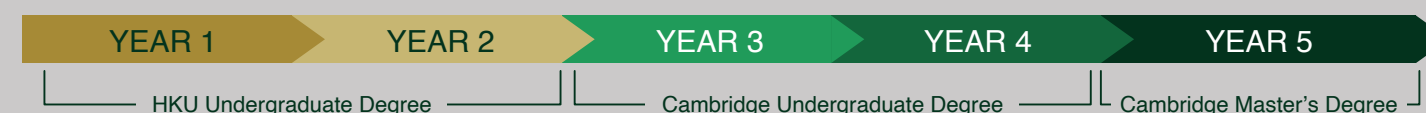
<sup>#</sup> Regular major will be listed on transcript when conferring BSc(HKU) to 6688 students

<sup>\*</sup> The MA is conferred by right on holders of the BA degree at Cambridge, upon application after certain years' seniority as members of Cambridge

## Study Path for YSS Students in the Cambridge Scheme (2+2+1) mode

HKU

Cambridge



Admissions of Students on the Cambridge-track to Cambridge

- 1 Admissions test & interview in year 2 by Cambridge teachers
- 2 Conditional offer
- 3 Satisfying the requirements
- 4 Firm offer by the end of year 2

Remarks: 1. Students who do NOT opt for a Master's degree at Cambridge will take extra research internships at HKU to fulfil the University's graduation requirements  
2. Students will pay HKU fees and Cambridge fees for their study at HKU and Cambridge, respectively



How to Enrol in the Cambridge-track  
Number of students selected for each cohort normally will not exceed 60% of the YSS population



Cambridge-track at YSS



Natural Sciences Tripos at Cambridge

# Articulations Pathways

Seamless articulation to widely recognised postgraduate programmes

## Taught Postgraduate Programmes

### @ HKU Science

Articulates HKU Bachelor Programmes to HKU Science Taught Master Programmes

4  
years

6901 Bachelor of Science

6729 Bachelor of Science  
in Actuarial Science

6224 Bachelor of Arts and  
Sciences in Applied Artificial  
Intelligence

Full-time study mode of 1 year or 1.5 years

1 year

- Master of Statistics
- MSc in Environmental Management
- MSc in Integrative Marine Ecology and Conservation
- MSc in the field of Applied Geosciences
- MSc in the field of Food Industry: Management and Marketing
- MSc in the field of Food Safety and Toxicology
- MSc in the field of Physics
- MSc in the field of Space Science
- MSc in the field of Chemical Technologies for Health and Materials

1.5 years

- Master of Data Science
- MSc in Artificial Intelligence

**Quota:** No quota for the aforementioned articulation pathway except that for Master of Data Science, a maximum of 2 places will be offered each year

### Guaranteed admission to selected outstanding students

- Provides a convenient channel of specialised training for deepening knowledge in specific fields of science

### Application requirements

- Students who have completed year 3
- With a CGPA of 3.5 at graduation
- Fulfilment of the MSc admissions requirements

*Remark: the list of taught postgraduate programmes for this articulation pathway is subject to change*



## Doctor of Veterinary Medicine (DVM)

### @ University of Melbourne (UoMelb)

Pathway to talented students who aspire to pursue a career in veterinary

In collaboration with University of Melbourne (UoMelb) in Australia, HKU Science provides a pathway to 6901 BSc students with the following majors to articulate into the DVM of the UoMelb:

- Biochemistry
- Biological Sciences
- Ecology & Biodiversity
- Molecular Biology & Biotechnology
- Food & Nutritional Science



Obtains 2 degrees from the 2 universities in as fast as 7 years  
– the HKU BSc degree and the DVM in UoMelb



HKU 6901  
Bachelor of Science

BSc

I

II

III

Optional  
IV  
1<sup>st</sup> semester

HKU BSc  
+  
UoMelb DVM

articulation pathway to  
the Doctor of Veterinary  
Medicine at the University  
of Melbourne



Doctor of Veterinary Medicine  
(DVM) at the University of  
Melbourne (UoMelb)

DVM

1

DVM

2 3 4

DVM degree  
at UoMelb

Credits transferred  
to HKU BSc

HKU 6901 BSc  
degree

**Quota:** A maximum of 5 places annually

Requirements for selected HKU Science  
undergraduate students

Successful  
completion  
of a minimum of  
6 semesters



gaining 186  
credits under  
BSc 6901  
programme

Credits obtained during the first year of DVM at UoMelb can be transferred to HKU as electives for fulfilling the credit requirements of the BSc programme (subject to relevant HKU regulations)

**Programme fees:** Students will pay HKU fees and UoMelb fees for their study at HKU and UoMelb, respectively



### Career aspects

Graduates can register as veterinary surgeons and practise in HK through Veterinary Surgeons Board of Hong Kong and in many countries such as Australia, UK and US.

## About DVM @ UoMelb

Renowned university in the global arena

Its DVM programme ranks 29<sup>th</sup> in  
Veterinary Science of QS World University  
Rankings 2024

Accredited by the Australasian Veterinary  
Boards Council Inc. (Australia),  
American Veterinary Medical Association (USA)  
and Royal College of Veterinary  
Surgeons (UK)

# Minor in Science Entrepreneurship

Opening the doors to entrepreneurship

## Aims

- Broadening the horizon of our undergraduate students **with respect to entrepreneurship**
- Offering more competitive edges to our students by **connecting their academic knowledge with the real world**
- Bringing students huge insights through **critical analysis of existing enterprises' operation**

Start

## Highlights

- **Co-taught by other Faculties** such as HKU Business School
- Strong emphasis on **practical experience**: Internship, Capstone projects
- **Mentorship** by entrepreneurs or senior staff in industry/ business
- Incorporates **new courses tailor-made for this Minor** such as organisational behaviours, leadership, principles of technology entrepreneurship, science-based innovation development, strategic marketing and user analysis

Analysis

Commitment



# Accreditations

Quality assured through recognition by international professional bodies



## Hong Kong Institute of Qualified Environmental Professionals

- The Environmental Science Major has been conferred the accreditation
- Students need to complete 11 courses for the accredited pathway and can enrol in HKIQEP's Student Membership during their study at HKU
- Students who graduate on the HKIQEP accredited programme will:

have a fast-track to Professional Membership (only 5 years of work experience needed after the degree)



Accredited Degree

## Royal Society of Biology (RSB), UK

- Biological Sciences, Ecology & Biodiversity and Molecular Biology & Biotechnology Intensive Majors have been conferred the accreditation
- The Ecology & Biodiversity Intensive Major is the first programme of its kind accredited by RSB in Asia
- Students completed the RSB accredited programme will be awarded a certificate by the School of Biological Sciences, with authorisation by the RSB, to recognise their achievements
- Graduates will receive one year of guest membership of RSB at Associate level, helping them to:

stay up-to-date with what is happening across life sciences

gain additional recognition for their skills and experience

demonstrate their support for the future of biology

develop their professional network

# Diverse Learning Experiences

## Undergraduate Research Experiences

Examples:

### North America

- California Institute of Technology
- Columbia University
- Cornell University
- MIT

### Overseas Research Fellowship (ORF):

- Stanford University
- University of California at Berkeley
- University of California at Los Angeles

### Europe

- CERN
- University of Cambridge
- University College London

### Summer Research Fellowship (SRF)

### Colloquium Final-year Projects

### Undergraduate Research

### Directed Studies

## Internships

### Opportunities in:

- Government bodies
- Scientific laboratories
- Non-government agencies / NGOs
- Commercial companies

## International Exchange Studies

Over 300 partner universities in more than 40 countries, including:

### North America

- University of California
- The University of Chicago
- Columbia University
- Johns Hopkins University
- Stanford University
- Yale University

### Europe

- University of Cambridge
- University of Oxford
- Imperial College London

## Field Trips

Provide students with hands-on learning experience

Examples of field trip destinations:

- Australia
- Japan
- Kenya
- Thailand
- USA



## Royal Society of Chemistry (RSC), UK

- Exclusively for students who wish to specialise in chemistry
- Students completed the RSC accredited Chemistry Intensive programme will be awarded a certificate by the Department of Chemistry with authorisation by RSC to recognise their achievements
- All students in the final year of this accredited programme are qualified to apply for membership to RSC



The Geological Society  
Accredited programme

## The Geological Society, UK

- Students completed specified Geology Intensive programme and fulfilled the specific project requirement in EASC4999 Earth Sciences Project will receive an accredited degree which provides an accelerated route to achieve the qualification
- Students completed The Geological Society accredited programme will be awarded a certificate by the Department of Earth Sciences with the authorisation by the Society to recognise their achievements
- Qualification recognised internationally and in Hong Kong, and chartered geologists are regarded as professionally equivalent to chartered engineers



# Science Master Class

Learn from the Best Minds Be Inspired by Our Science Masters

## Double degree programme for elite students

Provides a **fast-track of study** for talented students:

Completing **2 degrees** at an accelerated pace

Bachelor of Science

**BSc**

Master of Research

**MRes**

Remarks: Students in the programme have to maintain a high CGPA in order to remain in this double degree programme or else they have to switch to the 6901 BSc programme

## Learning from Renowned Scientists Including

- Members of Chinese Academy of Sciences
- Members of Academy of Sciences of Hong Kong
- Members of Hong Kong's Young Academy of Sciences
- International Member for US National Academy of Sciences
- Foreign Member of Academia Europaea
- Awardees of State Natural Science Awards
- A number of highly cited scientists



Caters specifically to the needs of science-inclined students, with more learning opportunities, intensive training and inspirations



Allows research-aspired students to immerse themselves in an **authentic research environment and learn from Grand Masters and Masters** with diverse backgrounds in Science

**Grand Masters**  
through special tutorials

**Masters as**  
academic advisers



Incubates the next generation of dynamic scientists who are able to **translate scientific knowledge into practical applications** with far- and wide- reaching impacts



**disciplinary-based intensive study for research-aspired students**

## ample opportunities available in our flagship Young Scientist Scheme (YSS) including

- Summer Research Fellowship
- Overseas Research Fellowship
- A chance to join the Cambridge-track\*
- Entrance Scholarship
- Exchange Study

\* Only available to Majors in Natural Sciences disciplines  
\* Subject to initial screening, interviews, and tests  
\* Candidates admitted to the Track will go through further screening by Cambridge

BSc credits distribution

YEAR 1  
72 credits



University Education (36 credits + non-credit bearing requirement)



INTENSIVE MAJORS

Biological Sciences  
(144 credits)

Chemistry  
(144 credits)

Ecology & Biodiversity  
(144 credits)

Geology  
(150 credits)

Mathematics  
(144 credits)

Molecular Biology & Biotechnology  
(144 credits)

Physics  
(144 credits)



Elective Courses (54-60 credits)



Special tutorials by Grand Masters exclusive for this programme

All opportunities available in our flagship Young Scientist Scheme (YSS) including:



Entrance Scholarship



Cambridge-track\*



Summer Research Fellowship



Overseas Research Fellowship



International exchange studies

\*\* Only available to Majors in Natural Science disciplines  
\* Subject to initial screening, interviews and tests

Year 4 Summer Semester/  
Year 5 Semester 1#

# Students are usually expected to spend the summer semester in Year 4 or the first semester in Year 5 to complete the research project of MRes

MRes (63 credits)

Total no. of credits: 303

3

60

MRes credits distribution



## Career Prospects



## Professional recognition

5 Intensive Majors\* fulfil accreditation requirements of various societies in the UK



Biological Sciences (Intensive)  
Ecology & Biodiversity (Intensive)  
Molecular Biology & Biotechnology (Intensive)



Geology (Intensive)



Chemistry (Intensive)

\* There is no accreditation available in the fields of Mathematics and Physics



## Career development & network

- Nurtures students who intend to pursue research in science
- After completing the BSc and the MRes, students will be fully equipped to further pursue graduate studies in prominent universities overseas or in HKU
- Builds a consortium of young researchers for cross fertilisation of innovative ideas and facilitate possible multidisciplinary projects



## Transferable skills

- Provides students with extensive subject knowledge and specialised training
- Nurtures a scientifically literate population to formulate solutions for challenges



Programme website



# Bachelor of Science and Bachelor of Laws

Nurtures professionals with scientific and legal knowledge in a STEM-driven society

Double degree programme · Attaining 2 degrees in **5** years

Scientist

Legal Professional



Interdisciplinary knowledge and skills in SCIENCE and LAW

## The Programme

### LAWS (156 credits)

- Foundational legal concepts and systematic honing of professional skills such as critical thinking, analytical and problem-solving skills, etc.

Courses on case reading, legal research and writing and statutory interpretation, etc.

- Valuable experiential learning opportunities

Experiential learning courses

### SCIENCE (96 credits)

- Scientific knowledge & research skills

Lectures, laboratory courses and workshops

### INTERDISCIPLINARITY (12 credits)

- Cross-disciplinary knowledge, analytical and evaluation skills

- Independent research experience with original thinking

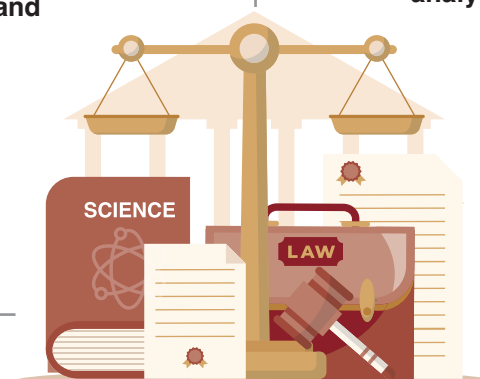
Research projects, field camps and project-based courses

- Work experience

Internships, placements

### UNIVERSITY EDUCATION (36 credits)

- Language Courses
- Common Core Courses
- Non-credit bearing requirement



300 credits in 5 years

## World Rankings

HKU

QS WORLD UNIVERSITY RANKINGS 2025  
#17

LAW

QS WORLD UNIVERSITY RANKINGS by subject 2024  
#20

THE WORLD UNIVERSITY RANKINGS by subject 2024  
#29

SCIENCE

THE WORLD UNIVERSITY RANKINGS by subject 2024  
#43 Life Sciences  
#47 Physical Sciences

QS WORLD UNIVERSITY RANKINGS by subject 2024  
#89 Natural Sciences

#31 Life Sciences & Medicine

## Key Features



**First of its kind** in Hong Kong for students who intend to develop expertise in both science and law



Cultivates **legal and scientific mindsets** for academic talents



Copes with the soaring demand of **patent practitioners and legal professionals** in the technology industry



Feeds into the development of **science talents** who are capable of handling a wide variety of innovation-related matters such as patent applications



## Career Prospects & Articulation Pathways

### Transferable skills

- Provides students with extensive subject knowledge and specialised training in law
- Nurtures a scientifically literate population with legal knowledge to formulate solutions for challenges

### Articulation

- Eligible to apply for the Postgraduate Certificate in Laws (PCLL) after completing the double degree programme
- In a position to apply for other postgraduate programmes in law or science



Educational institutions



Entrepreneurs in biotechnology industry



Researchers in the fields of science or law



• Community, social & personal services  
• Environmentalists



• Commerce and industry  
• Business compliance professionals in technology companies



Government or regulatory officials handling intellectual property/ technology-related matters



• Further studies in science  
• Professional qualifications in business management, accountancy, corporate administrations, etc.



Solicitors, barristers of in-house counsel (specialising in intellectual property/ technology-related matters)

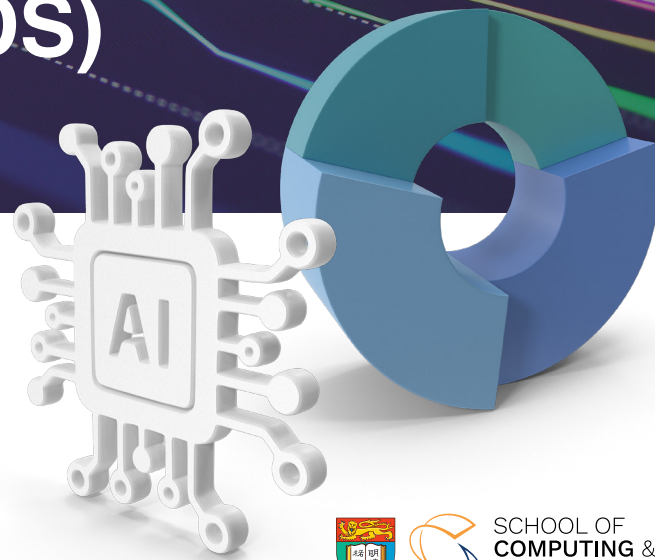


Programme website



# Embark on an Inspirational Journey with School of Computing and Data Science (CDS)

A new school under the Faculty of Science and Faculty of Engineering encompassing the Department of Statistics and Actuarial Science and the Department of Computer Science has been established, with a mission to consolidate and foster education and research related to Computing, Data Science, Statistical Sciences, and Artificial Intelligence.



## JUPAS Programmes under CDS

6224

**Bachelor of Arts and  
Sciences in Applied Artificial  
Intelligence**  
BASc(AppliedAI)

6248

**Bachelor of Arts and Sciences in  
Financial Technology**  
BASc(FinTech)

6729

**Bachelor of Science in  
Actuarial Science**  
BSc(ActuarSc)

6779 \*

**Bachelor of Science in  
Decision Analytics**  
BSc(DA)

**Bachelor of Science in  
Risk Management**  
BSc(RM)

**Bachelor of Science in  
Statistics**  
BSc(ST)

6999 \*

**Bachelor of Engineering  
in Computer Science**  
BEng(CompSc)

**Bachelor of Engineering  
in Artificial Intelligence  
and Data Science**  
BEng(AI&DataSc)

\*Subject to approval



About CDS

6224

BASc(AppliedAI)

# Bachelor of Arts and Sciences in Applied Artificial Intelligence

Impacts the world with the limitless power of AI

## The Programme



Highlights **diverse AI applications** to help students develop intellectual capacity for meeting new challenges



Emphasises **problem-based learning** with a wide range of courses: computer science, geography, mathematics, psychology, statistics and urban studies



Delivers both **fundamental and practical knowledge** in the **design and construction of intelligent systems** to fit into different career settings



Nurtures students to **transfer interdisciplinary scientific knowledge** into a range of integrated applications and technological innovations



## Career Prospects

Science and technology, environmental protection, medical informatics, health care, business, banking, finance, urban development, neurocognitive science, etc.



## Key Features

### Interdisciplinary programme for elite students

Provides formal academic training to elite students who wish to join the AI profession

### Featured concentrations

**Technology**  
in **Business and Finance**  
in **Smart City**  
in **Medicine**  
in **Neurocognitive Science**

### Interdisciplinary training

Facilitates a coordinated approach in collaboration with the Faculties of Engineering, Social Sciences and Architecture



Programme  
website



# Bachelor of Science in Actuarial Science

A gateway to the actuarial profession with internationally recognised qualification

## The Programme

- Provides **specialist academic and professional training** in actuarial science
- Prepares students for **professional examinations to Associateship level**
  - UK Institute and Faculty of Actuaries
  - North America Casualty Actuarial Society and Society of Actuaries
- Accredited by professional bodies** where graduates will be exempted from various professional examinations
  - UK Institute and Faculty of Actuaries
  - North America Society of Actuaries
- Offers courses with Validation by Educational Experience (VEE)**
  - North America Casualty Actuarial Society, Society of Actuaries and Canadian Institute of Actuaries
- Internship opportunities** with major insurers, actuarial consulting firms, reinsurers, investment firms, auditing firms and management consulting firms



## Key Features

- Specialisation:** The ONLY programme in Hong Kong accredited by Institute and Faculty of Actuaries
  - Professional recognition:** The Department of Statistics & Actuarial Science has been designated a Centre of Actuarial Excellence by the Society of Actuaries since 2011
- Their University-Earned Credit programme allows students to obtain credit for preliminary exams by achieving a required exam mark in specified BSc(ActuarSc) courses



## Career Prospects

Abundant career opportunities in Hong Kong and mainland China. Graduates develop their careers in major insurance and reinsurance companies, actuarial consulting firms and investment banks

## Dr Patrick S C Poon Scholarship in Actuarial Science

5 scholarships are awarded annually to freshly-admitted first year students with outstanding entrance records, each at HK\$50,000 or HK\$60,000

Renewable based on satisfactory performance in each year's study in the programme



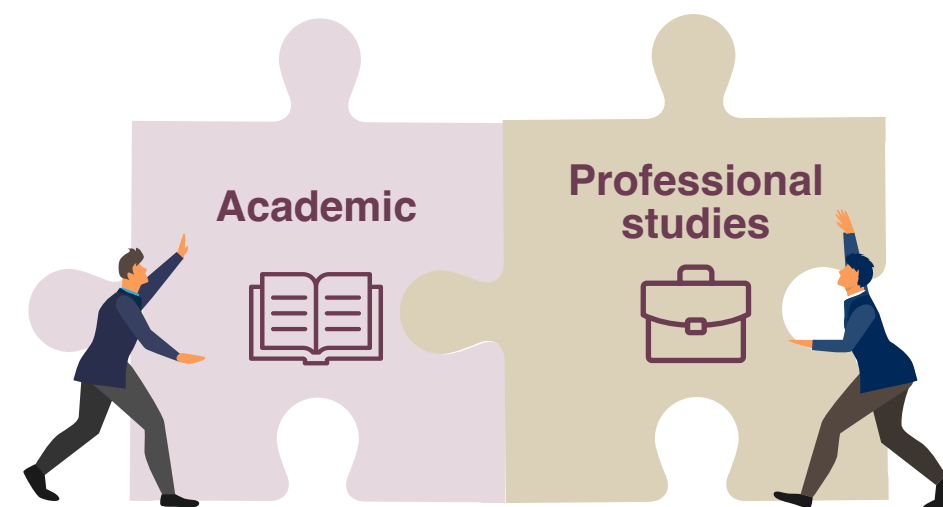
Programme website

# Bachelor of Education and Bachelor of Science

Consolidates scientific knowledge through practical experience and teaching in science

5-year double degree programme

Integrated programme offering both



## The Programme

Requires students to complete 300 credits of course units including:

- Science courses to fulfil the requirement of a Science Major
- Education professional core courses with the Faculty of Education

## Key Features

### Professional training

- Incorporates a graduate teaching qualification equivalent to a BSc plus a Postgraduate Diploma in Education
- Pedagogy courses and Teaching Practice in Hong Kong secondary schools

## Career Prospects

- Thorough knowledge of Science subjects, broad understanding of educational issues, and high level classroom expertise prepare graduates for teaching Science at all levels in local secondary and international schools
- Graduates also find employment opportunities in industrial and government sectors in which BSc graduates are often employed



Programme website

# Listen *to our* Students

## Physics

### Brian CHAN

BSc alumnus (major in Physics and Astronomy)

My experience studying physics at HKU provided valuable research and mathematical skills that have been essential in my AI work. My scientific background provides me with the ability to bring rigour and precision to the business world, resulting in the development of better algorithms. Physics also taught me to tackle complex problems by breaking them down, a skill that one finds useful in all aspects of life. Science graduates are highly sought-after, especially if they also possess strong interpersonal and presentation skills.



## Environmental Science

### Mark CHEUNG

BSc alumnus (major in Environmental Science)

I am dedicated to addressing the climate crisis and promoting climate justice. The Environmental Science Major in the Bachelor of Science programme does not only give me the fundamental knowledge to fight climate change. Its interdisciplinary nature and interconnectedness of climate change across different areas offered me unique perspective and confidence to voice my opinions in international initiatives, such as being the leader of the first university student delegation from Hong Kong to attend the Conference of the Parties (COP27).



## Science Master Class

### Chester Guo

BSc&MRes student (major in Ecology & Biodiversity)

With various opportunities offered by this programme, I am able to participate in the ecology research work that I have always been interested in. During my first 2 years at HKU, I assisted with research on ants and butterflies. After joining the Global Change and Tropical Conservation lab, I finished my SRF on spiders and have been working as a student RA on a light pollution project in the lab. Through all those research experiences, my understanding of ecology and biodiversity deepened, which made me one step closer to my dream to be a researcher. Besides, by learning from the Grand Masters in a series of master tutorials, I acquired fascinating transdisciplinary knowledge and methods of conducting research. Furthermore, inspired by their passion for scientific research, I hope one day I can devote myself to ecology research and protect the beautiful yet delicate natural world.



## Food and Nutritional Science

### Vivian CHOI

BSc alumna (major in Food and Nutritional Science)

Master of Science in the field of Food Safety and Toxicology

This Major equipped me with essential technical skills regarding nutrition and toxicology, and the knowledge of human physiology and biochemistry, which are very relevant to my job. Volunteering in a laboratory at SBS since Year 2 was the most rewarding experience during my undergraduate study. The opportunity to participate in human and animal nutritional research consolidated my technical skills and allowed me to find my own niche. After that, I further developed my interest in toxicology and regulatory affairs while I pursued my MSc degree in Food Safety and Toxicology from HKU.



## Articulation to DVM@UoMelb

### Jason WONG

BSc student (major in Molecular Biology and Biotechnology)

I was genuinely interested in biology since high school, and I was aware that there is an articulation pathway with this degree to Veterinary Medicine (DVM), which further encouraged me to join this programme. The Major provides specialised training in molecular and cell biology and translating basic knowledge into industrial and medical applications, with research opportunities to work in animal labs, where the concept of biosecurity and animal husbandry were first introduced to me. I further explored my interest in the field by volunteering at vet clinics. These experiences fueled my desire to become a veterinarian, leading me to enroll in the DVM programme at The University of Melbourne.



## Mathematics

### Yaochen WU

BSc alumnus (major in Mathematics and minor in Physics)

For me, mathematics is a beautiful language which reveals subtle things in its own way. I received much instruction and help from different members of the Department of Mathematics, in particular during the research projects or seminars. Teachers were always patient and encouraging, yet they were also serious and set challenging goals for me. If you appreciate the beauty of mathematics, you will certainly wish to join this Major where you can find plenty of opportunities and great instructors.



## Chemistry

### Daisy LEUNG

BSc alumna (major in Chemistry)

As a Chemistry student at HKU, I was exposed to a myriad of opportunities, including gaining experiences through internships. The curriculum is comprehensive and flexible that enables students to develop an independent and logical mindset and acquire meticulous analytical skills. It also allows students to choose their own interest in specific chemistry areas.



## Science and Law

### Angela LAM

BSc&LLB student

This programme is the first of its kind provided to students in Hong Kong. I was really excited when I found this programme and was really interested in its interdisciplinary courses. For Science, this programme offers me with chances to explore more about Chemistry, equivalent to a Bachelor of Science Student. For law, I could also apply for the Postgraduate Certificate in Laws (PCLL) upon completion of this programme, equivalent to a Bachelor of Laws student.



## Career Prospects

HKU ranks #10 in QS World Graduate Employability Rankings 2022

Major occupation of HKU Science graduates



Some of our graduates' first employers



AECOM

Bloomberg

DBS 星展銀行

教育局 Education Bureau

HK LAB

香港天文台 HONG KONG OBSERVATORY

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

L'ORÉAL PARIS

KPMG

Microsoft

Morgan Stanley

PCCW 電訊盈科

SGS

香港賽馬會 The Hong Kong Jockey Club

Our students pursue further studies in a broad range of science and non-science disciplines at renowned institutions in

28% Graduates pursued further studies in 2022

Caltech

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

HARVARD UNIVERSITY

ILLINOIS

MIT Massachusetts Institute of Technology

McGill UNIVERSITY

PRINCETON UNIVERSITY

SLAC NATIONAL ACCELERATOR LABORATORY

Stanford University

Stony Brook University

TEXAS The University of Texas at Austin

THE UNIVERSITY OF CHICAGO

UCLA

UC San Diego

UNIVERSITY OF MICHIGAN

UNIVERSITY OF CAMBRIDGE

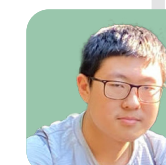
UNIVERSITY OF OXFORD

## Biological Sciences

### Tim SUI

BSc Student (major in Biological Sciences, minor in Mathematics)

As a member of the Faculty's Young Scientist Scheme, I got the privilege and sponsorship to go to Yale University for visiting study. At Yale, I experienced their graduation ceremony, attended some inspiring seminars, and even got to hear Nobel Laureate Svante Paabo share his insights. In addition, I took a research internship in Professor Gendron's lab, where I applied mathematical modelling to study plant photoperiodism, which enhanced my systems biology skills and further fuelled my goals.



## Science Entrepreneurship

### Cameron Xavier VAN BREDA

BSc alumnus (major in Molecular Biology and Biotechnology, minor in Science Entrepreneurship)  
Co-founder & CEO of Hollo  
2020 Microsoft Imagine Cup World Champion



The Minor in Science Entrepreneurship was truly insightful to share ideas and get feedback from teachers and other students that were thinking about innovation from different disciplines. The programme encouraged and facilitated a lot for us to establish our own start-ups, putting into the eyes of industry players using the university's platform to reach out and connect. Teachers also had driven and grounded the innovation and business potential of students' start-ups.



# Admissions Requirements



## JUPAS Applicants

Minimum programme entrance requirements:



English Language



Chinese Language



Mathematics



Citizenship and Social Development



Elective Subjects: Category A subjects and Extended Module 1 or 2 in Mathematics (M1/M2)

### Key programmes

6901 BSc	Level 3	Level 3	Level 2	Attained	Level 3 in 2 subjects <sup>^</sup>
6688 BSc&MRes	Level 3		Level 4		Level 3 in 2 Sciences <sup>#</sup> or Level 3 in 1 Science <sup>#</sup> & M1/M2
6858 BSc&LLB	Level 5		Level 2		Level 3 in 2 subjects <sup>^</sup>

### Other programmes

6119 BEd&BSc	Level 3	Level 3	Level 2	Attained	Level 3 in 2 subjects <sup>^</sup>
6224 BAsSc(AppliedAI)	Level 4 <sup>◇</sup>		Level 4		Level 4 in M1/M2 Level 3 in 1 subject
6248 BAsSc(FinTech)	Level 4 <sup>◇</sup>		Level 3		Level 3 in 2 subjects
6729 BSc(ActuarSc)	Level 3		Level 4		Level 4 in M1/M2 Level 3 in 1 subject
6779 Statistical Decision Sciences	Level 3		Level 4		Level 3 in 2 subjects <sup>θ</sup>
6999 Computing and Data Science	Level 3		Level 3		Level 3 in 2 subjects <sup>ψ</sup>

<sup>^</sup> One of the elective subjects must be a Science subject: Biology, Chemistry or Physics

<sup>#</sup> Science elective subjects: Biology, Chemistry or Physics

<sup>◇</sup> Candidates with level 4 in English Language, if admitted, will be required to take 6 additional credits in Core University English to complete their degree studies

<sup>θ</sup> Excluding Applied Learning (Category B subjects) and Other Language (Category C subjects)

<sup>ψ</sup> Level 3 or above in one of the following subjects: Biology, Chemistry, Physics, Economics, or Information and Communication Technology; Level 3 or above in Mathematics Extended Part (Module 1 or 2) is preferred

## Non-JUPAS Applicants

Students holding non-HKDSE qualifications are considered on an individual basis

HKU Undergraduate Admissions  
<https://admissions.hku.hk>



HKU Science | Q



**BSc, BSc&MRes and BSc&LLB**  
Faculty of Science

[www.scifac.hku.hk/prospective/ug](http://www.scifac.hku.hk/prospective/ug)

3917-2683

[sci.ug.admission@hku.hk](mailto:sci.ug.admission@hku.hk)