



*Ignite Your Bright Future  
with Science*



# Science

Undergraduate  
Programmes 2023-24



- 6901** Bachelor of Science
- 6688** Bachelor of Science & Master of Research (Science Master Class)
- 6858** Bachelor of Science and Bachelor of Laws (5-year Double Degree Programme)
- 6729** Bachelor of Science in Actuarial Science
- 6224** Bachelor of Arts and Sciences (AppliedAI)
- 6212** Bachelor of Arts and Sciences
- 6119** Bachelor of Education and Bachelor of Science (5-year Double Degree Programme)



# Programmes We offer

## 6901 Bachelor of Science

Empowers scientific intellectuals to formulate solutions to society's challenges

Key features

Simple and flexible

One entry in the application, with a free choice of 14 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

Double Degree Programme

6688

## Bachelor of Science & Master of Research (Science Master Class)

Incubates the next generation of scientists

Key features

Fast-track for completing 2 degrees

Learning from Science Masters

Catering the needs of elite students

Research-oriented

5-year Double Degree Programme

## 6858 Bachelor of Science and Bachelor of Laws

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

Key features

First of its kind in Hong Kong

Fast-track for completing 2 degrees in science and law

Interdisciplinary training for science talents and legal professionals

Free choice of 14 Science Majors

Articulation to Postgraduate Certificate in Laws (PCLL) as a step towards professional legal qualification

## 6729 Bachelor of Science in Actuarial Science

A gateway to the actuarial profession with internationally recognised qualifications

Key features

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.

## 6224 Bachelor of Arts and Sciences (Applied Artificial Intelligence)

Impacts the world with the limitless power of AI

Key features

Interdisciplinary programme for elite students

Highlights diverse AI applications with featured concentrations

Problem-based learning with a wide range of courses

Broad career prospects

## 6212 Bachelor of Arts and Sciences

Nurtures future global leaders to make changes in an interconnected world

Key features

Unique programme for elite students to develop a broad set of scholarly skills

Well-designed study pathways:

- 1) Cultures/ Societies
- 2) Physical World/ Biological/ Human Sciences

Wide career prospects

## 6119 Bachelor of Education and Bachelor of Science

Consolidates scientific knowledge through practical experience and teaching in science

Key features

Covers both academic and professional studies

Incorporates a graduate teaching qualification

Development opportunities not just in education, but also in commercial and government sectors

5-year Double Degree Programme



# Why HKU Science

## Global Experiences

Committed to nurturing students as global citizens

- with overseas experiences such as:
- Worldwide exchange studies
  - Overseas summer courses
  - Overseas Research Fellowship
  - International scientific conferences
  - Field trips
  - Internships

## International Environment

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

**#1** The Most International University in the World  
(THE World University Rankings 2022)

## Top-ranked Scientists

(Clarivate Analytics' Essential Science Indicators 2021) **18%** of professorial staff in the Faculty are the world's **top 1%** scholars

## Career Prospects

**#10** in QS Graduate Employability Rankings 2022  
Essentially **100%** employment rate (inclusive of further studies) in the past decade

## High University Rankings



QS Asia University Rankings 2022 **#3** QS World University Rankings 2023 **#21**

QS Graduate Employability Rankings 2022 **#10**



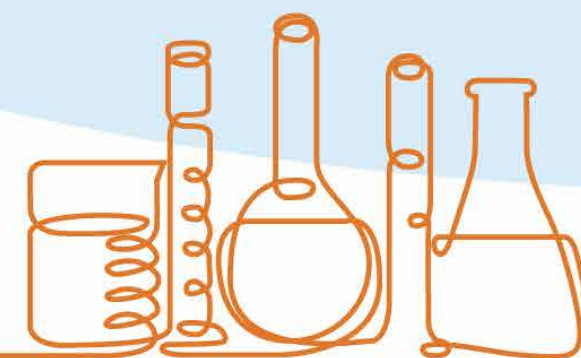
THE Asia University Rankings 2022 **#4** THE World University Rankings 2022 **#30**

THE Most International Universities in the World 2022 **#1**

## Departments



# Special Features for Science Curricula



1



## Young Scientist Scheme (YSS)

Ample early research experiences for outstanding students in the 6901 BSc Programme and 6688 Science Master Class Programme

2



## 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

3

## 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)



4

## Accreditations

Quality assured through recognition by international professional bodies

- Hong Kong Institute of Qualified Environmental Professionals
- Royal Society of Chemistry, UK
- Royal Society of Biology, UK
- The Geological Society, UK
- Institute and Faculty of Actuaries, UK



5

## 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)

6

## Minor in Science Entrepreneurship

Opening the doors to science entrepreneurship

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



6901

BSc

# 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

- Biochemistry
- Biological Sciences
- Biological Sciences (Intensive)<sup>1</sup>
- Chemistry
- Chemistry (Intensive)<sup>2</sup>
- Decision Analytics
- Earth System Science
- Ecology & Biodiversity
- Ecology & Biodiversity (Intensive)<sup>1</sup>
- Environmental Science<sup>4</sup>
- Food & Nutritional Science
- Geology
- Geology (Intensive)<sup>3</sup>
- Mathematics
- Mathematics (Intensive)
- Molecular Biology & Biotechnology
- Molecular Biology & Biotechnology (Intensive)<sup>1</sup>
- Physics
- Physics (Intensive)
- Risk Management
- Statistics

### • 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

- ### • Career prospects:
- The Faculty has essentially 100% employment rate (inclusive of 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
  - Our graduates are preferred by employers because of their numerical analytical skills, logical thinking and critical thinking



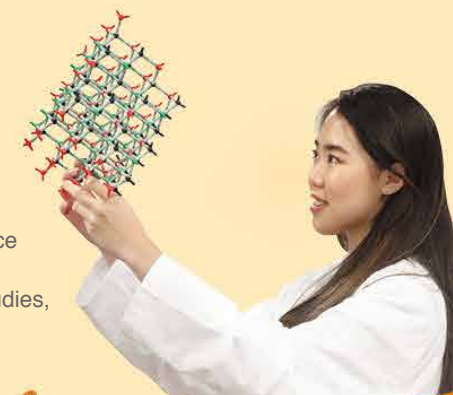
Remarks:

<sup>1</sup> Accredited by the Royal Society of Biology, UK<sup>2</sup> Accredited by the Royal Society of Chemistry, UK<sup>3</sup> Accredited by The Geological Society, UK<sup>4</sup> Accredited by Hong Kong Institute of Qualified Environmental Professionals

## Intensive Majors

Specialisation and intensive training make experts

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



# Intensive Majors

**Biological Sciences**  
(144 credits)\*

**Ecology & Biodiversity**  
(144 credits)\*

**Geology**  
(150 credits)\*

**Mathematics**  
(144 credits)

**Molecular Biology & Biotechnology**  
(144 credits)\*

**Physics**  
(144 credits)

**Chemistry**  
(144 credits)\*

\* Accredited by various professional bodies in the UK

**Intensive Majors**

Curriculum Structure

240 credits

Spanning over 4 years of full-time study

54 credits

UNIVERSITY EDUCATION  
Language Courses  
Common Core Courses

144-150 credits

INTENSIVE SCIENCE MAJOR  
Science Foundation Courses  
Disciplinary Courses  
Capstone Courses

NON-CREDIT BEARING REQUIREMENT

36-42 credits

MINOR(S) /  
ELECTIVES

BSc

Curriculum Structure

240 credits

Forty 6-credit courses spanning over 4 years of full-time study

54 credits

UNIVERSITY EDUCATION  
Language Courses  
Common Core Courses

96 credits

PRIMARY SCIENCE MAJOR  
Science Foundation Courses  
Disciplinary Courses  
Capstone Courses

90 credits

2<sup>nd</sup> MAJOR /  
MINOR(S) /  
ELECTIVES

NON-CREDIT BEARING  
REQUIREMENT

**Academic Advising System**

- One-on-one academic advice

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

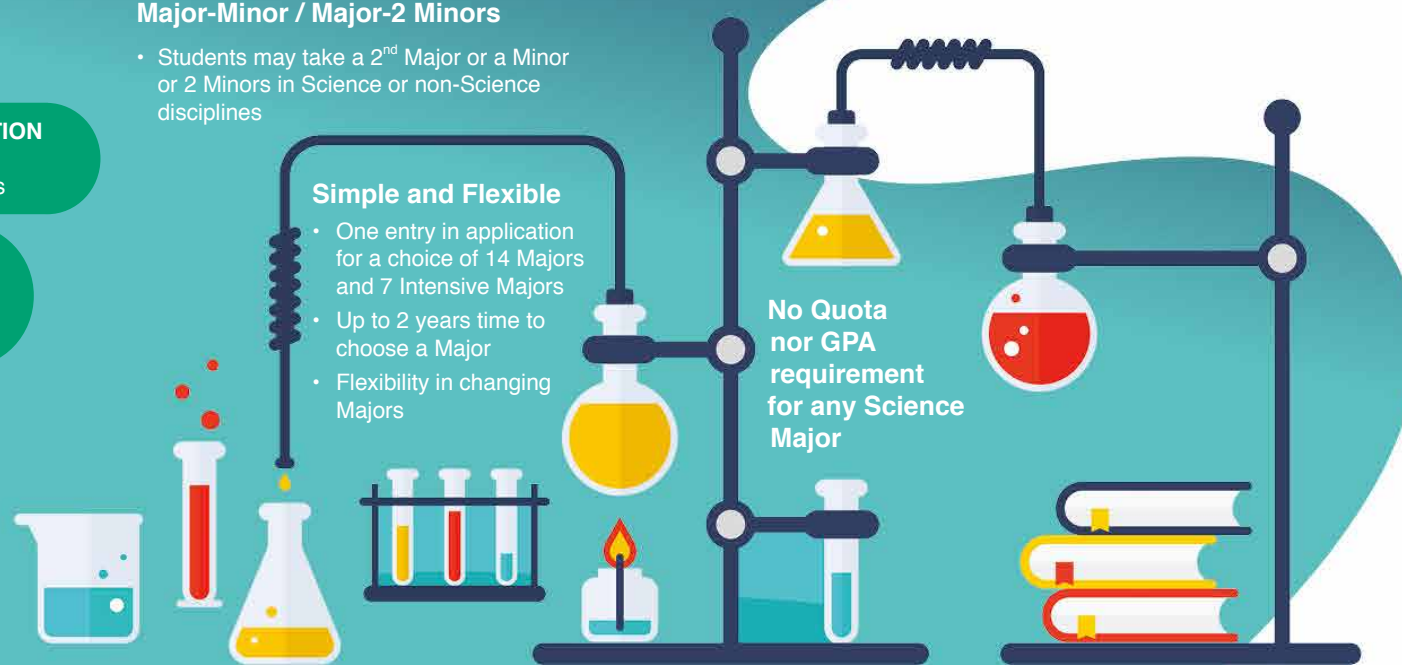
- Students may take a 2<sup>nd</sup> Major or a Minor or 2 Minors in Science or non-Science disciplines

**Key Features**

**Simple and Flexible**

- One entry in application for a choice of 14 Majors and 7 Intensive Majors
- Up to 2 years time to choose a Major
- Flexibility in changing Majors

No Quota nor GPA requirement for any Science Major





# Young Scientist Scheme (YSS)



for Outstanding Students in  
6901 Bachelor of Science &  
6688 Science Master Class

## 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



Statistics and  
Actuarial Science

## Examples of institutions for Overseas Research Fellowship

### 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

## Examples of 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

## How to join YSS



[bit.ly/3CRWX7g](http://bit.ly/3CRWX7g)

**Stipends**  
for research  
programmes

**An entrance scholarship**  
ranging from HKD 20,000 to  
HKD 70,000\*

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



HKUer or  
Cantab? Why not  
**BOTH?**

**SPECIAL FEATURE**

## 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

### The Track

A joint recruitment  
scheme that  
allows selected  
YSS students to  
pursue studies  
in two renowned  
universities

Allows students  
to study abroad  
and experience  
overseas life  
and culture

Nurtures future  
science professionals  
to develop innovative  
solutions for global  
challenges

Ample learning  
opportunities in YSS  
– Summer Research  
Fellowship  
– Overseas Research  
Fellowship  
– International scientific  
conference  
– Guidance by  
research mentor

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

2 years at HKU  
+  
2 + 1 years at  
Cambridge

BSc(HKU)<sup>#</sup>  
+  
BA(Cantab)  
+  
MA(Cantab)\*  
+  
MSci(Cantab)

OR

2 years at HKU  
+  
2 years at  
Cambridge

BSc(HKU)<sup>#</sup>  
+  
BA(Cantab)  
+  
MA(Cantab)\*

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

\* 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

#### YEAR 1

#### HKU Undergraduate Degree

Available for students majoring in:

- Biochemistry
- Biological Sciences
- Chemistry
- Earth System Science
- Ecology & Biodiversity
- Environmental Science
- Geology
- Molecular Biology & Biotechnology
- Physics

### Cambridge

#### YEAR 3

#### Cambridge Undergraduate Degree

Specialisation for a Natural Sciences degree at Cambridge in year 4:

- Astrophysics
- Biochemistry
- Chemistry
- Earth Sciences
- Genetics
- Materials Science
- Pathology
- Physics
- Physiology, Development & Neuroscience
- Plant Sciences
- Zoology

Or a broad Science programme:

- Biological & Biomedical Sciences
- Physical Sciences

#### YEAR 4

#### YEAR 5

#### Cambridge Master's Degree

- Astrophysics
- Biochemistry
- Chemistry
- Earth Sciences
- History and Philosophy of Science
- Materials Science
- Physics
- Systems Biology

Remarks: 1. Students will study 3 science subjects in Year 3 to get prepared for the specialisation in Year 4.  
2. 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.  
3. Students will pay HKU fees and Cambridge fees for their study at HKU and Cambridge, respectively.

## How to Enrol in the Cambridge-track



[bit.ly/3KDueVY](http://bit.ly/3KDueVY)



[bit.ly/3CMpljx](http://bit.ly/3CMpljx)

Cambridge-track at YSS



[bit.ly/3q5hsGb](http://bit.ly/3q5hsGb)

Natural Sciences Tripos  
at Cambridge

## Admissions of Students on the Cambridge-track to Cambridge

1 Admissions test & interview in  
year 2 by Cambridge teachers

Conditional offer

3 Satisfying the requirements

Firm offer by the end of year 2



# Articulation Pathways

Seamless articulation to widely recognised postgraduate programmes

## Taught Postgraduate Programmes

### @ HKU Science

- Attach HKU Bachelor Programmes to HKU Science Taught Master Programmes

Full-time study mode of 1 year or 1.5 years

1 year

- Master of Statistics
- MSc in Environmental Management
- 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 Space Science
- MSc in the field of Physics

1.5 years

- Master of Data Science
- MSc in Artificial Intelligence

4 years

6901 Bachelor of Science

6729 Bachelor of Science in Actuarial Science

6224 Bachelor of Arts and Sciences in Applied Artificial Intelligence

- **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/ MStat/ MDASC admissions requirements
- **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

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 of the following majors to articulate into the DVM of the UoMelb:

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



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



- 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)

- Obtain 2 degrees from the 2 universities in as fast as 7 years

– the HKU BSc degree and the DVM in UoMelb

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

**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

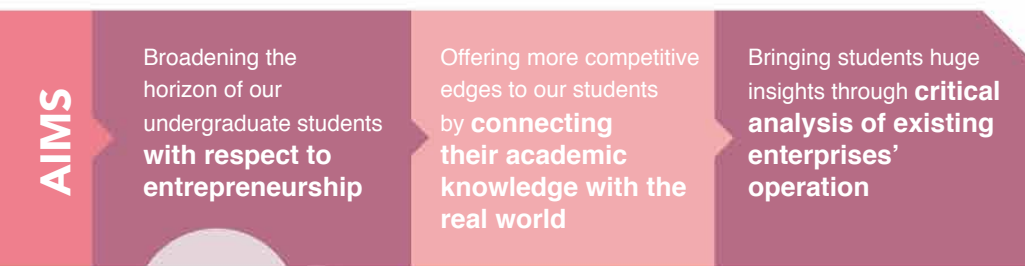
- Renowned university in the global arena
- Its DVM programme ranks 21<sup>st</sup> in Veterinary Science of QS World University Rankings 2022
- Accredited by Australasian Veterinary Boards Council Inc. (Australia), American Veterinary Medical Association (USA) and Royal College of Veterinary Surgeons (UK)





# Minor in Science Entrepreneurship

Opening the doors to entrepreneurship



## HIGHLIGHTS

**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



## Undergraduate Research Experiences

### • Overseas Research Fellowship (ORF):

Examples:

#### North America

- California Institute of Technology
- Columbia University
- Cornell University
- MIT
- 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)**
- **Undergraduate Research Colloquium**
- **Final-year projects**
- **Directed studies**

## Internships

### Opportunities in:

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

## Diverse Learning Experiences

### 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
- Thailand
- Japan
- USA
- Kenya

## Accreditations

Quality assured through recognition by international professional bodies



**Hong Kong Institute of Qualified Environmental Professionals, Hong Kong**

- The Environmental Science Major has been conferred the accreditation
- Students need to complete 7 specific advanced 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)

be exempted from certain portions of the Professional Assessment

**Royal Society of Biology, 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



**Royal Society of Chemistry, 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 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 Geological Society to recognise their achievements
- Qualification recognised internationally and in Hong Kong, and chartered geologists are regarded as professionally equivalent to chartered engineers



6688

BSc&amp;MRes



# Science Master Class

Learn from the Best Minds  
Be Inspired by Our Science Masters



## This Elite Programme

Provides a **fast-track of study** for talented students: completing 2 degrees at an accelerated pace



**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

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

## What the Programme Covers

Bachelor of Science



**Fast-track for completing 2 degrees**

Master of Research

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 Science Masters



Grand Masters through special tutorials

Masters as academic advisers

Research-oriented



Research postgraduate courses and research projects to enhance students' scientific knowledge and research skills

Catering to the needs of elite students



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

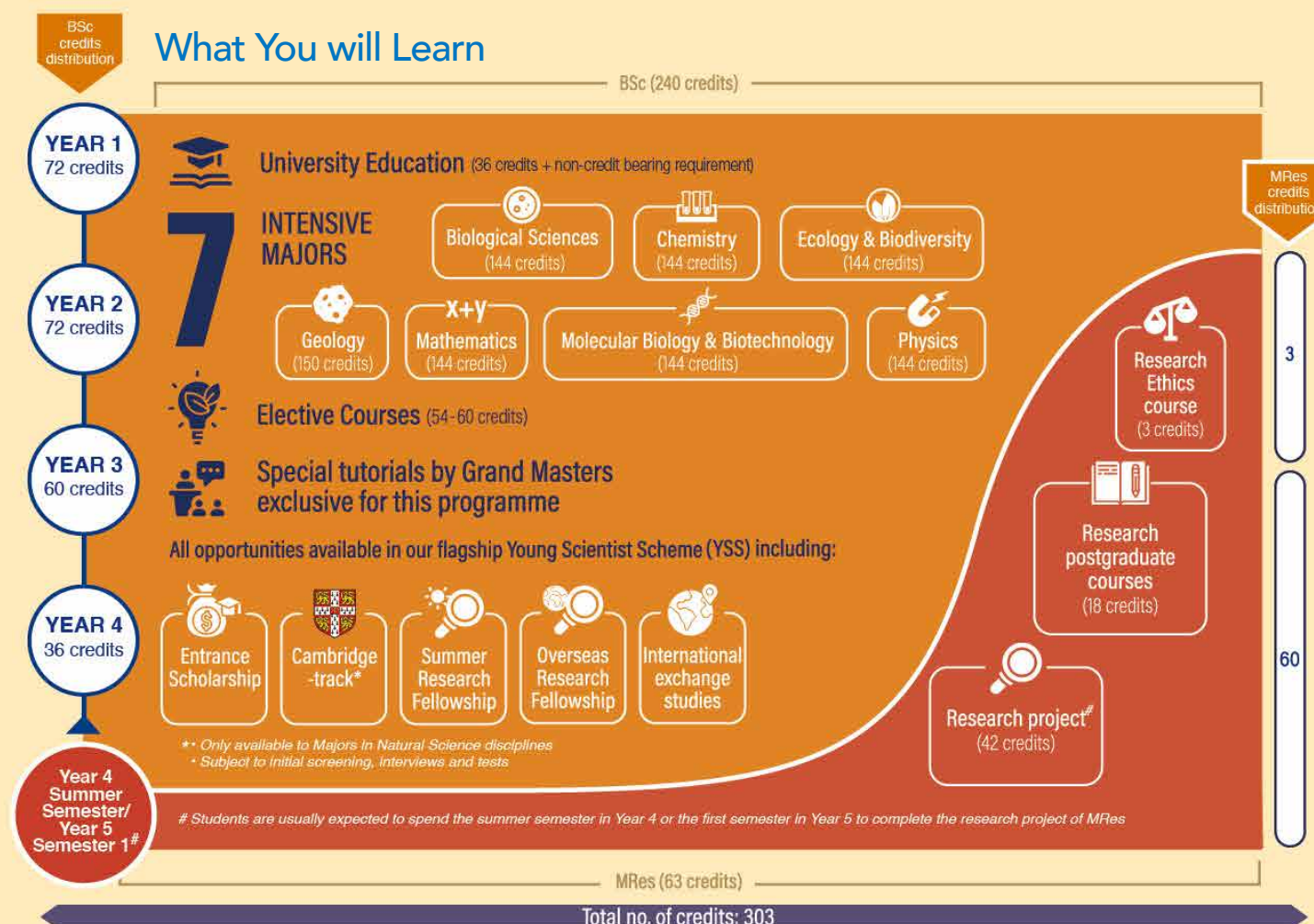
## Learning from Renowned Scientists Including

- 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

Scan to learn more about our Science Masters



## What You will Learn



## Where this Programme will Lead You to

### 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



6858

BSc&amp;LLB

# Bachelor of Science & Bachelor of Laws

Double degree programme

Attaining 2 degrees in 5 years

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

Bachelor of Science

Bachelor of Laws

5 years



Scientist

Interdisciplinary knowledge and skills in science and law

Legal Professional

World ranking of HKU:

QS WORLD UNIVERSITY RANKINGS 2023 #21

World rankings of HKU Law:

QS WORLD UNIVERSITY RANKINGS 2022 #20

THE WORLD UNIVERSITY RANKINGS 2022 #36

World rankings of Science 2022:

THE WORLD UNIVERSITY RANKINGS 2022 #42

#53 Life Sciences Physical Sciences

QS WORLD UNIVERSITY RANKINGS 2022 #57

Natural Sciences

## The Programme



**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



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



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

## Where this Programme will lead you to

### 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

Graduate with BSc&LLB double degree

### Career paths

Continue to pursue Postgraduate Certificate in Laws (PCLL)

- Commerce and industry
- Business compliance professionals in technology companies

Entrepreneurs in biotechnology industry

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

- Community, social & personal services
- Environmentalists

Researchers in the fields of science or law

Educational institutions

- 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)

## What You will Learn

	Year				Total	
	1	2	3	4&5		
Science	18	18	18	42	96	Disciplinary courses in Science, including capstone course
Law	36	30	30	60	156	Compulsory courses, interdisciplinary core courses, capstone course, disciplinary electives
Law and science interdisciplinary electives	–	–	–	12	12	Law and science interdisciplinary electives
University Education	6	12	12	6	36	Core University English, Practical Chinese for Science students, Common Core Courses and Non-credit Bearing Requirement
					300	300 credits in 5 years

## What the Programme Covers

### LAWS

- Foundational legal concepts and systematic honing of professional skills such as critical thinking, analytical and problem-solving skills, etc.
- Valuable experiential learning opportunities
  - Mooting competitions
  - Clinical legal education

### SCIENCE

- Scientific knowledge & research skills
  - Lectures, laboratory and workshops courses

### INTERDISCIPLINARY

- 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



6729

BSc(ActuarSc)

# 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 body**, where graduates will be exempted from various professional examinations (subject to re-accreditation)
  - 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



## Unique 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
- **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

**BSc (ActuarSc)**  
Curriculum Structure  
**240**  
credits

Forty 6-credit courses  
spanning over 4 years  
of full-time study

**54**  
credits  
UNIVERSITY EDUCATION  
Language Courses  
Common Core Courses

**132**  
credits  
PROGRAMME CORE  
Disciplinary Courses  
Capstone Course

**54**  
credits  
2<sup>nd</sup> MAJOR\* / MINOR(S) / ELECTIVES  
NON-CREDIT BEARING REQUIREMENT  
\*Additional credits required

## 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

6224

BASc(AppliedAI)

# Bachelor of Arts and Sciences in Applied Artificial Intelligence

Impacts the world with the limitless power of AI

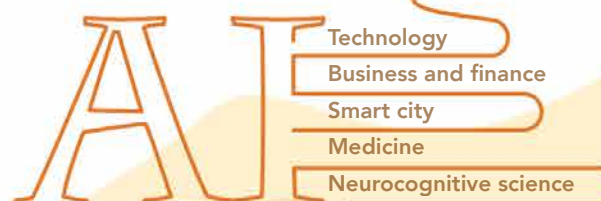


## The Programme

- Highlights **diverse AI applications** to help students to 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

## Unique Features

- **Interdisciplinary programmes for elite students:**  
Provides formal academic training to elite students who wish to join the AI profession
- **Featured concentrations:**



- **Career prospects in diverse areas:**  
Science and technology, environmental protection, medical informatics, health care, business, banking, finance, urban development, neurocognitive science, etc.
- **Interdisciplinary training:**  
Facilitates a coordinated approach in collaboration with the Faculties of Engineering, Social Sciences and Architecture

**BASc (AppliedAI)**  
Curriculum Structure

**240**  
credits

Spanning over 4 years  
of full-time study

**36**  
credits  
UNIVERSITY EDUCATION  
Language Courses  
Common Core Courses

**18**  
credits  
BASc CORE COURSES

**96**  
credits  
PROGRAMME CORE  
Core Courses  
Concentration & Electives  
Capstone Course

**90**  
credits  
2<sup>nd</sup> MAJOR\* / MINOR(S) / ELECTIVES

NON-CREDIT BEARING REQUIREMENT

\*Additional credits required





62/2

BASc

# Bachelor of Arts & Sciences

Nurtures future global leaders to make changes in interconnected world



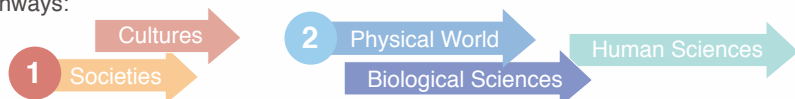
## The Programme

- Co-offered by the Faculties of Social Sciences, Arts, and Science
- Designed for intellectually ambitious students who want to **develop a broad set of scholarly skills** in order to become leaders across a diverse range of fields to meet important global challenges
  - Social intelligence
  - Creative problem-solving
  - Analytical skills
  - Communication skills
  - Ethical responsibility
  - Interdisciplinary perspective in understanding our world

## Unique Features

### • Interdisciplinary major:

Students take disciplinary courses from the 3 Faculties and also elective courses within 2 pathways:



### • Developing intellectual toolkit:

Learn how to intertwine knowledge from various disciplines and integrate them together through

- Case studies
- Capstone learning
- Experiences of thought leaders in professions

### • Career prospects:

Wide career prospects in government, management consultancy, public relations, banking, public policy, environmental services, museums, heritage or science writing/ journalism and non-governmental organisation work, etc.



36 credits

**UNIVERSITY EDUCATION**  
Language Courses  
Common Core Courses

18 credits

**BASc CORE COURSES**

96 credits

### PROGRAMME CORE

- Interdisciplinary curriculum
- Qualitative and Quantitative Research Methods in Interdisciplinary Studies
- Interdisciplinary Capstone Course
- Courses from Two Pathways: (a) Cultures/ Societies (b) Physical World/ Biological/ Human Sciences
- Internship

90 credits

**ELECTIVES**

+

**NON-CREDIT BEARING REQUIREMENT**

**BASc**  
Curriculum Structure

240 credits

Spanning over 4 years of full-time study

61/9

BEd&amp;BSc

# Bachelor of Education & Bachelor of Science

Consolidates scientific knowledge through practical experience and teaching in science

BEd&amp;BSc

Curriculum Structure

300 credits

Spanning over 5 years of full-time study

42 credits

**UNIVERSITY EDUCATION**  
Language Courses  
Common Core Courses

96 credits

**SCIENCE MAJOR**

120 credits

**PROFESSIONAL CORE SCIENCE EDUCATION**  
(including Professional Practicum)

42 credits

**ELECTIVES**

**NON-CREDIT BEARING REQUIREMENT**

## The Programme

- 5-year Double Degree Programme
- Offered jointly by the Faculty of Education and the Faculty of Science
- Integrated programme offering both academic and professional studies
- 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

## Unique 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 subject, 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



# Listen *to our* students



## Physics

### Michael TANG

BSc alumnus (major in Physics, minor in German)  
Participant of Undergraduate Overseas/ Mainland Experiential Learning Activities at RIKEN in summer, 2018

"The Physics Major allowed us to explore our interests with flexible course choices and common core courses, and placed a great emphasis on expanding and developing our toolset – from problem-solving skills to computational techniques in modern research projects. Thanks to various career opportunities provided by HKU, I was able to embark on a fruitful career in information technology, where the skills that I had accumulated over these four years had proven time after time to be unexpectedly useful."

## Food and Nutritional Science



### Celine KOSASIH

BSc alumna (major in Food & Nutritional Science)

"The Food and Nutritional Science Major allowed me to gain both in-depth knowledge and hands-on experiences through numerous laboratory sessions to apply the concepts learnt in lectures. The food marketing internship that I undertook as a capstone requirement in my final year also exposed me to a possible career path. The highlight of the programme, though, was that it filled with passionate professors who were always ready to answer my questions whether they were about studies or career related. Overall, this Major definitely prepped me for my future endeavours within the food industry."

## Articulation to DVM@UoMelb

### Luis Francisco Bueno LABUGUEN

BSc student (major in Biological Sciences)

"Being a veterinarian has been a long-standing dream of mine because it enables me to work at the forefront of animal healthcare, as well as manifest my compassion for animals and interest in medicine. I actively volunteered at animal shelters and wildlife conservation organisations to prepare myself to enter the field of veterinary medicine. The DVM articulation pathway provided me with the perfect opportunity to develop a strong foundation in biology at HKU prior to pursuing a degree in veterinary medicine at the University of Melbourne. I also took relevant physiology and anatomy courses during my undergraduate studies."



## Environmental Science

### Teresa TSUI

BSc alumna (major in Environmental Science)  
2020 Master of International Forestry at the University of British Columbia

"The interdisciplinary programme structure allowed me to explore a wide range of topics such as pollution, earth system science, ecology and biodiversity, and environmental law in Hong Kong. This enriched my academic background and enhanced my critical thinking when I was addressing and examining complicated environmental issues. Participating in different field trips and research, doing laboratory work and internships, also prepared me as an all-rounded person with practical skills and interpersonal skills."



## 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."



## Major occupation of HKU Science graduates



HKU ranks #10 in QS World Graduate Employability Rankings 2022

## Some of our graduates' first employers



## Science Master Class

### En Yu YAP

BSc&MRes student (major in Chemistry (Intensive))

"Through the pandemic, we get to see how the world can rely on technology to move forward – we are able to host almost everything online. However, I think we can do more. I wish to work on molecular electronics or more specifically in display technology. Chemistry studies are the building blocks of everything, including the phones and tablets. We can make the materials more efficient, bid down the price and make electronic devices

more accessible for everyone. I hope that one day I will be able to discover more about whichever field that I end up going into, and share with the world my own findings."



## Statistics

### Feiqing HUANG

BSc alumna (major in Statistics)

"Department of Statistics and Actuarial Science provided me with a diversity of opportunities that satisfied my cravings for inspiration and all-round development. There were Overseas Research Fellowship (ORF) Scheme and Career Advising Programme (CAP) tailor-made for statistics and actuarial science students. The accessibility to abundant opportunities was what I was truly grateful for, as it prepared me to embrace the challenge when the time arrives."



## Applied AI

### Raina XIN

BASc(AppliedAI) student  
Recipient of Future Leaders of the Year Scholarships (HKU)

"This Applied AI programme helps you find your own passion in AI, with various concentrations in year 3 that you could choose from, and interdisciplinary and all-round training. I am interested in applying AI to medicine and conducting research about building an AI classifier to perform cardiovascular disease early screening. Leading researchers share their insights in the lectures and spared their time for further discussion after class. There are also plenty of internship and research opportunities available to help us gain more experience."



## Science Entrepreneurship

### Cameron Xavier VAN BREDa

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



## Mathematics

### Yaochen WU

BSc alumnus (major in Mathematics and minor in Physics)  
Participant of Summer Research Fellowship Scheme (SRF) in Department of Mathematics, 2017

"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."



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

Business, Computing, Economics, Engineering, Materials Sciences, Medical Sciences, Pharmacology



28%

Graduates pursued further studies in 2020



# Admissions Requirements



## JUPAS Applicants

Minimum programme entrance requirements:

	 English Language	 Chinese Language	 Mathematics	 Liberal Studies	 Elective Subjects: Category A subjects and Extended Module 1 or 2 in Mathematics (M1/M2)
6901 BSc & 6119 BEd&BSc	Level 3	Level 3	Level 2	Level 2	Level 3 in 2 subjects <sup>^</sup>
6688 BSc&MRes	Level 3	Level 3	Level 4	Level 2	Level 3 in 2 Science or 1 Science + M1/M2 subjects <sup>#</sup>
6858 BSc&LLB	Level 5	Level 4	Level 2	Level 2	Level 3 in 2 subjects <sup>^</sup>
6729 BSc(ActuarSc)	Level 3	Level 3	Level 4	Level 2	Level 4 in M1/M2 Level 3 in 1 subject
6224 BASc(AppliedAI)	Level 4 <sup>◇</sup>	Level 3	Level 4	Level 2	Level 4 in M1/M2 Level 3 in 1 subject
6212 BASc	Level 5 <sup>+</sup>	Level 3	Level 2	Level 2	Level 3 in 2 subjects <sup>^</sup>

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

<sup>#</sup> Science elective subjects: Extended Modules 1 or 2 in Mathematics (M1/M2), Biology, Chemistry, Physics and Combined Science

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>+</sup> Candidates with level 4 in English Language and good results in other HKDSE subjects will be exceptionally considered on a case-by-case basis. If these candidates are admitted, <sup>◇</sup> they will be required to take 6 additional credits in University English to complete their degree studies

<sup>^</sup> Level 3 or above in M1/M2 is preferred (but not required)

## Non-JUPAS Applicants

Students holding non-HKDSE qualifications are considered individually

## HKU Undergraduate Admissions



[www.aal.hku.hk/admissions](http://www.aal.hku.hk/admissions)


HKU Science | 



**BSc, BSc&MRes, BSc&LLB, BSc(ActuarSc) & BASc(AppliedAI):**  
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)



**BEd&BSc: Faculty of Education**


 [web.edu.hku.hk/programme/bedbsc\\_6119](http://web.edu.hku.hk/programme/bedbsc_6119)

 3917-4659


 [bedbsc@hku.hk](mailto:bedbsc@hku.hk)



**BASc: Faculty of Social Sciences**

 [www.socsc.hku.hk/basc/](http://www.socsc.hku.hk/basc/)

 3917-1212

 [socscug@hku.hk](mailto:socscug@hku.hk)