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

**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.

**Bachelor of Arts and Sciences (Applied Artificial Intelligence)**
- Impacts the world with the limitless power of AI
- Broad career prospects

**Bachelor of Arts and Sciences**
- Nurtures future global leaders to make changes in an interconnected world
- 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

**Bachelor of Science and Bachelor of Laws**
- 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 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

**Bachelor of Education and Bachelor of Science**
- Consolodiates 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

**Bachelor of Science & Master of Research (Science Master Class)**
- Incubates the next generation of scientists
- Research-oriented

**Bachelor of Arts and Sciences**
- Nurtures future global leaders to make changes in an interconnected world
- Unique programme for elite students to develop a broad set of scholarly skills
- Well-designed study pathways:
  1) Cultures/ Societies
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- Wide career prospects
Why

HKU Science

Global Experiences
Committed to nurturing students as global citizens with overseas experiences such as:
• Worldwide exchange studies
• Overseas Research Fellowship
• Field trips
• Overseas summer courses
• International scientific conferences
• 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

<table>
<thead>
<tr>
<th>QS Asia University Rankings 2022</th>
<th>#3</th>
</tr>
</thead>
<tbody>
<tr>
<td>QS World University Rankings 2023</td>
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<td>THE Most International Universities in the World 2022</td>
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Young Scientist Scheme (YSS)
Ample early research experiences for outstanding students in the 6901 BSc Programme and 6688 Science Master Class 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

• Royal Society of Chemistry, UK
• Royal Society of Biology, UK
• Institute and Faculty of Actuaries, UK

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

Special Features for Science Curricula

Departments

Intensive Majors
• Biological Sciences (Intensive)
• Chemistry (Intensive)
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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:
  - Biochemistry
  - Biological Sciences
  - Biological Sciences (Intensive)
  - Chemistry
  - Chemistry (Intensive)
  - Decision Analytics
  - Earth System Science
  - Ecology & Biodiversity
  - Ecology & Biodiversity (Intensive)
  - Environmental Science
  - Food & Nutritional Science
  - Geology
  - Geology (Intensive)
  - Mathematics
  - Mathematics (Intensive)
  - Molecular Biology & Biotechnology
  - Molecular Biology & Biotechnology (Intensive)
  - 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.

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

Academic Advising System

- One-on-one academic advice

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

- Students may take a 2nd Major or a Minor or 2 Minors in Science or non-Science disciplines.
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, inculcating 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:
- University of California at Los Angeles
- Overseas Research Fellowship
- Examples of institutions for visiting or exchange:
  - Massachusetts Institute of Technology (MIT)
  - Stanford University
  - University of California at Berkeley
  - University of California at Los Angeles

Examples of universities for international exchange, visiting or summer study:
- 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

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

Students in YSS are guaranteed with:
- A further SRF or an Overseas Research Fellowship (ORF) Scheme in a foreign institution in a subsequent year.
- 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.

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

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

HKU-Cambridge Undergraduate Recruitment Scheme (Natural Sciences)

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

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

HKU Undergraduate Degree
Available for students majoring in:
- Biotechnology
- Biomedical Sciences
- Molecular Biology & Biotechnology
- Zoology
- Physiology, Development & Neuroscience
- Plant Sciences
- Earth Sciences
- Environmental Science
- Geology

Cambridge Undergraduate Degree
Specialisation for a Natural Sciences degree at Cambridge in year 4:
- Physics
- Chemistry
- Earth Sciences
- Materials Science
- Mathematics
- Biology

Cambridge Master's Degree
Available for students majoring in:
- Astrophysics
- Biochemistry
- Biomedical Sciences
- Biological Sciences
- Biotechnology
- Chemical Sciences
- History and Philosophy of Science
- Materials Science
- Physics

Admissions of Students on the Cambridge-track to YSS

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

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 years at Cambridge
- 2+2+1 mode
- 2 years at HKU, 2+1 years at Cambridge

Remarks:
- Admissions to the Cambridge-track will be made on a competitive basis.
- A minimum of two years of seniority as members of Cambridge College is required.
- The MA is conferred by right on holders of the BA degree at Cambridge, upon application after certain years' seniority as members of Cambridge.

Number of students selected for each cohort normally will not exceed 60% of the YSS population.
**Articulation Pathways**

Seamless articulation to widely recognised postgraduate programmes

**Taught Postgraduate Programmes**

@ HKU Science

- Attach HKU Bachelor Programmes to HKU Science Taught Master Programmes

<table>
<thead>
<tr>
<th>4 years</th>
<th>6901 Bachelor of Science</th>
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<tbody>
<tr>
<td>1 year</td>
<td>Master of Statistics</td>
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<tr>
<td></td>
<td>MSc in Environmental Management</td>
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<td></td>
<td>MSc in the field of Applied Geosciences</td>
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<td></td>
<td>MSc in the field of Food Industry: Management and Marketing</td>
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<tr>
<td></td>
<td>MSc in the field of Food Safety and Toxicology</td>
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<td></td>
<td>MSc in the field of Space Science</td>
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<td>MSc in the field of Physics</td>
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<tr>
<td>1.5 years</td>
<td>Master of Data Science</td>
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<td></td>
<td>MSc in Artificial Intelligence</td>
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</tbody>
</table>

- 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

Full-time study mode of 1 year or 1.5 years

**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

- 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 21st 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)

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

**HIGHLIGHTS**
- Co-taught by other Faculties such as Faculty of Business and Economics
- Mentorship by entrepreneurs or senior staff in industry/business
- Strong emphasis on practical experience: Internship, Capstone project

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

**Learning Experiences**

**International Exchange Studies**
- Over 300 partner universities in more than 40 countries, including:
  - North America: University of California, 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

**Undergraduate Research Experiences**
- Overseas Research Fellowship (ORF):
  - Examples: North America: California Institute of Technology, Columbia University, Cornell University, MIT, Stanford University
  - Europe: CERN, University of Cambridge, University College London
- Summer Research Fellowship (SRF)
- Undergraduate Research Colloquium
- Final-year projects
- Directed studies

**Accreditations**

Quality assured through recognition by international professional bodies

**HKIQEP – 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 RSBI in Asia
- Students completed the RSBI accredited programme will be awarded a certificate by the School of Biological Sciences, with authorisation by the RSBI, to recognise their achievements
- Graduates will receive one year of guest membership of RSBI 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, UK**
- Exclusively for students who wish to specialise in geology
- 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

Field Trips
- Examples of field trip destinations: Australia, Thailand, Japan, USA, Kenya

**Internships**
- Opportunities in:
  - Government bodies
  - Scientific laboratories
  - Non-government agencies / NGOs
  - Commercial companies
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
Master of Research
Research-oriented
Catering to the needs of elite students

Programme Information
Study load:
BSc: 303 credits for 2 degrees
MRes: 240 credits
Class schedule:
BSc: Full-time
MRes: Full-time
Academic advising:
BSc: Students in the programme will be given individual advice to properly plan their study
MRes: Each student will be assigned an academic adviser at the start of the study to guide them through the whole study
Tuition fees:
BSc: Local: HKD 42,000/year
MRes: Local: HKD 120,000/year (full course)

What You Will Learn

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

Core Majors
- Biological Sciences (Intensive)
- Ecology & Biodiversity (Intensive)
- Molecular Biology & Biotechnology (Intensive)
- Chemistry (Intensive)
- Geology (Intensive)

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

Where this Programme Will Lead You To
Professional recognition
5 Intensive Majors* fulfil accreditation requirements of various societies in the UK

Career Development & Network

Special tutorials by Grand Masters exclusive for this programme
All opportunities available in our flagship Young Scientist Scheme (YSS) including:
- Biological Sciences (Intensive)
- Ecology & Biodiversity (Intensive)
- Molecular Biology & Biotechnology (Intensive)
- Chemistry (Intensive)
- Geology (Intensive)
- Entrance Scholarship
- Cambridge track
- Summer Research Fellowship
- Overseas Research Fellowship
- International Exchange Studies
- Research Project (60 credits)
- Research postgraduate courses (90 credits)

* Only available to Majors in Natural Sciences disciplines
** 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
- There is no accreditation available in the fields of Mathematics and Physics

Tips for Students in the Programme
- 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

Scan to learn more about our Science Masters

Scan to learn more about our Science Masters

Scan to learn more about our Science Masters
Nurtures professionals with scientific and legal knowledge in a STEM-driven society

World rankings of HKU:
- #21

World rankings of HKU Law:
- #20
- #36

World rankings of Science 2022:
- #20
- #42
- #53
- #57

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

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)

What You will Learn

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<tr>
<th>Year</th>
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<th>2</th>
<th>3</th>
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<td>Law and science interdisciplinary electives</td>
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<td>University Education</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>36</td>
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<tr>
<td>Disciplinary courses in Science, including capstone course</td>
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<tr>
<td>Compulsory courses, interdisciplinary core courses, capstone course, disciplinary electives</td>
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<td>Core University English, Practical Chinese for Science students, Common Core Courses and Non-credit Bearing Requirement</td>
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300 credits in 5 years

What the Programme Covers

SCIENCE
- 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

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

Where this Programme will lead you to

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

Transfers 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

Attaining 2 degrees in 5 years

Entrepreneurs in biotechnology industry

Researchers in the fields of science or law

Education institutions

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

Further studies in science

Entrepreneurs in biotechnology industry

Researchers in the fields of science or law

Education institutions

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

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

A gateway to the actuarial profession with internationally recognised qualification

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

Bachelor of Science in Actuarial Science

Curriculum Structure

240 credits

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

UNIVERSITY EDUCATION

Language Courses
Common Core Courses

54 credits

PROGRAMME CORE

Disciplinary Courses
Capstone Course

132 credits

NON-CREDIT BEARING REQUIREMENT

54 credits

2nd MAJOR*/MINOR(S)/ELECTIVES

90 credits

NON-CREDIT BEARING REQUIREMENT

2nd MAJOR*/MINOR(S)/ELECTIVES

90 credits

*Additional credits required

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:
  – Technology
  – Business and finance
  – Smart city
  – Medicine
  – Neurocognitive science
• 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

Curriculum Structure

240 credits

Spanning over 4 years of full-time study

UNIVERSITY EDUCATION

Language Courses
Common Core Courses

36 credits

BASc CORE COURSES

18 credits

PROGRAMME CORE

Core Courses
Concentration & Electives
Capstone Course

96 credits

NON-CREDIT BEARING REQUIREMENT

90 credits

2nd MAJOR*/MINOR(S)/ELECTIVES

90 credits

*Additional credits required
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.

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 fulfill 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 RNKU 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, 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.”

Chemistry
Daisy LEUNG
BSc alumnus (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.”

Food and Nutritional Science
Celine KOSASIH
BSc alumnus (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 fulfilled 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 future endeavours within the food industry.”

Environmental Science
Teresa TSUI
BSc alumnus (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.”

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

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

Statistics
Feiqing HUANG
BSc alumnus (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
BEng (Applied AI) student
Participant of Future Leaders of the Year Scholarship (HKU)
“This Applied AI programme helps you find your own passion in AI, with various concentrations in year 3 that you could choose from, 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 Halo
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, pushing 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.”

Science Master Class
En Yu YAP
BSc&MRes student (major in Chemistry (Intensive))
2020 Master of International Forestry at the University of British Columbia
2020 Microsoft Imagine Cup World Champion
“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.”

28% Graduates pursued further studies in 2020

Career Prospects
HKU ranks #10 in QS World Graduate Employability Rankings 2022
Some of our graduates’ first employers

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce and Industry</td>
<td>51%</td>
</tr>
<tr>
<td>Community, Social &amp; Personal Services</td>
<td>19%</td>
</tr>
<tr>
<td>Educational Institutions</td>
<td>24%</td>
</tr>
<tr>
<td>Civil Service</td>
<td>6%</td>
</tr>
</tbody>
</table>

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

Minimum programme entrance requirements:

<table>
<thead>
<tr>
<th>Programme</th>
<th>EN Level</th>
<th>Chinese Level</th>
<th>Mathematics Level</th>
<th>Liberal Studies Level</th>
<th>Elective Subjects: Category A subjects and Extended Module 1 or 2 in Mathematics (M1/M2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6901 BSc &amp; 6119 BEd&amp;BSc</td>
<td>Level 3</td>
<td>Level 3</td>
<td>Level 2</td>
<td>Level 2</td>
<td>Level 3 in 2 subjects^</td>
</tr>
<tr>
<td>6688 BSc&amp;MRes</td>
<td>Level 3</td>
<td>Level 3</td>
<td>Level 4</td>
<td>Level 2</td>
<td>Level 3 in 2 Science or 1 Science + M1/M2 subjects^</td>
</tr>
<tr>
<td>6858 BSc&amp;LLB</td>
<td>Level 5</td>
<td>Level 4</td>
<td>Level 2</td>
<td>Level 2</td>
<td>Level 3 in 2 subjects^</td>
</tr>
<tr>
<td>6729 BSc(ActuarSc)</td>
<td>Level 3</td>
<td>Level 3</td>
<td>Level 4</td>
<td>Level 2</td>
<td>Level 4 in M1/M2 Level 3 in 1 subject</td>
</tr>
<tr>
<td>6224 BASc(AppliedAI)</td>
<td>Level 4 &amp; Level 3</td>
<td>Level 4</td>
<td>Level 2</td>
<td>Level 2</td>
<td>Level 4 in M1/M2 Level 3 in 1 subject</td>
</tr>
<tr>
<td>6212 BASc</td>
<td>Level 5 &amp; Level 3</td>
<td>Level 3</td>
<td>Level 2</td>
<td>Level 2</td>
<td>Level 3 in 2 subjects^</td>
</tr>
</tbody>
</table>

^ One of the elective subjects must be a Science subject: Biology, Chemistry, Physics, Combined Science, or Integrated Science

# 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

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, they will be required to take 6 additional credits in University English to complete their degree studies

+ 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

- BSc, BSc&MRes, BSc&LLB, BSc(ActuarSc) & BASc(AppliedAI):
  - Faculty of Science
  - Website: [www.scifac.hku.hk/prospective/ug](http://www.scifac.hku.hk/prospective/ug)
  - Phone: 3917-2683
  - Email: sci.ug.admission@hku.hk

- BEd&BSc: Faculty of Education
  - Website: [web.edu.hku.hk/programme/bedbsc_6119](http://web.edu.hku.hk/programme/bedbsc_6119)
  - Phone: 3917-4659
  - Email: bedbsc@hku.hk

- BASc: Faculty of Social Sciences
  - Website: [www.socsc.hku.hk/basc/](http://www.socsc.hku.hk/basc/)
  - Phone: 3917-1212
  - Email: socscug@hku.hk