Create Your Unique Colour of Science

Undergraduate Programmes 2022 | 2023

- Intensive Majors
- Accreditations
- Articulation Pathways
- Interdisciplinary Programmes
- Young Scientist Scheme and Cambridge-track
- Minor in Science Entrepreneurship

**Bachelor of Science**

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

**Bachelor of Science and Bachelor of Laws** (5-year Double Degree Programme)

**Bachelor of Science in Actuarial Science**

**Bachelor of Arts and Sciences** (Applied AI)

**Bachelor of Arts and Sciences**

**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

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

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

6224 Bachelor of Arts and Sciences (Applied Artificial Intelligence)
Impacts the world with the limitless power of AI
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

6212 Bachelor of Arts and Sciences
Nurture 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

6729 Bachelor of Science in Actuarial Science
A gateway to the actuarial profession with internationally recognised qualifications
Key features:
• Only programme in Hong Kong accredited by the Institute and Faculty of Actuaries
• Provides specialist academic and professional training
• Internship opportunities and career prospects in major insurance companies, actuarial consulting firms, investment banks, etc.

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 STEM talents and legal professionals
• Free choice of 14 Science Majors
• Articulation to Postgraduate Certificate in Laws (PCLL) as a step towards professional legal qualification

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 industrial and government sectors
High University Rankings

Global Experience

Committed to nurturing students as global citizens with overseas experiences such as:
- Worldwide exchange studies
- Overseas Research Fellowships
- 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 Ranking 2021)

Top-ranked Scientists
(Clarivate Analytics’ Essential Science Indicators 2020) 16.5% of professional staff in the Faculty are the world’s top 1% scholars

Career Prospects
Essentially 100% employment rate (inclusive of further studies) in the past decade

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

Accreditations
- Quality assured through recognition by international professional bodies
- Hong Kong Institute of Qualified Environmental Professionals
- Royal Society of Biology, UK
- Royal Society of Chemistry, UK
- The Geological Society, 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

Why

HKU Science

Departments

- Biological Sciences
- Chemistry
- Earth Sciences
- Mathematics
- Statistics & Actuarial Science

Special Features
for Science curricula

Young Scientist Scheme (YSS)

Cambridge-track under YSS

Accreditations

Articulation Pathways

Minor in Science Entrepreneurship
**6688**

**BSc&MRes**

**SCIENCE MASTER CLASS**

*Incubates the next generation of scientists*

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

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**Programme information**

<table>
<thead>
<tr>
<th>Study load</th>
<th>BSc</th>
<th>MRes</th>
</tr>
</thead>
<tbody>
<tr>
<td>303 credits for 2 degrees</td>
<td>240 credits</td>
<td>63 credits</td>
</tr>
</tbody>
</table>

**Class schedule**

- Full time

**Academic advising**

- Students in the programme will be given individual advice to properly plan their study
- Each student will be assigned an academic adviser at the start of the study to guide them through the whole study

**Tuition fees**

- Local: HKD 42,000/year
- Non-local: HKD 171,000/year

* Scholarships will be provided to cover at least 50% of the tuition fee of the MRes programme

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**What the Programme covers**

**Bachelor of Science**

- Fast-track for completing 2 degrees

**Master of Research**

- Learning from Science Masters
- Grand Masters through special tutorials
- Masters as academic advisers
-足机会在我们的旗舰青年科学家方案（YSS）中进行研究项目

- 学生们将被分配到导师和研究项目中

**Catering to the needs of elite students**

- disciplinary-based intensive study for research-aspired students

**Research-oriented**

- Research postgraduate courses and research projects to enhance students’ scientific method and research skills

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**Learning from Renowned Scientists**

- 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

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**What You will Learn**

**University Education (44 credits)**

- Biological Sciences (44 credits)
- Chemistry (34 credits)
- Ecology & Biodiversity (44 credits)
- Geology (52 credits)
- Molecular Biology & Biotechnology (54 credits)
- Physics (54 credits)

**Elective Courses** (14-40 credits)

- Special tutorials by Grand Masters exclusive for this programme

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

- Entrance Scholarship
- Cambridge-track
- Summer Research Fellowship
- Overseas Research Fellowship
- International exchange studies
- Research project* (42 credits)

* Only available to Majors in Natural Science disciplines

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**Where this Programme will lead you to**

**Professional recognition**

- 5 Intensive Majors* fulfill accreditation requirements of various societies in the UK
- Molecular Biology & Biotechnology (Intensive)
- Biological Sciences (Intensive)
- Ecology & Biodiversity (Intensive)
- Geology (Intensive)
- Chemistry (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

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**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
# BSc&LLB

**Bachelor of Science & Bachelor of Laws**

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

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**The Programme**

1. Offers first of its kind in Hong Kong for students who intend to develop expertise in both law and science.
2. Cultivates legal and scientific mindsets for academic talents.
3. Feeds into the development of STEM talents who are capable of handling a wide variety of innovation-related matters such as patent applications.
4. Copes with the soaring demand of patent practitioners and legal professionals in the technology industry.

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**World rankings of Law 2021:**

- #21

**World rankings of Science 2022:**

- #42 in Life Sciences
- #53 in Physical Sciences
- #52 in Natural Sciences

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**What You will Learn**

<table>
<thead>
<tr>
<th>Year</th>
<th>Science</th>
<th>Law</th>
<th>Law and science interdisciplinary electives</th>
<th>University Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>36</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>30</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>30</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>4 &amp; 5</td>
<td>42</td>
<td>60</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>156</td>
<td>-</td>
<td>36</td>
</tr>
</tbody>
</table>

- Disciplinary courses in Science, including capstone course.
- Compulsory courses, interdisciplinary core courses, disciplinary electives.
- Law and science interdisciplinary electives.
- Core University English, Practical Chinese for Science students, Common Core.

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**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

**LAWS**

- 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

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**Where this Programme will lead you to**

**Career developments**

- Joining commercial or intellectual property firms as patent agents or professionals focusing on business development in innovative and technology firms
- Solicitors, barristers or in-house counsel specialising in intellectual property/technology matters
- Entrepreneurs in biotechnology industry
- Government/ policy-makers/ regulatory officials handling IT, copyright, data protection, etc.
- Environmentalists specialising in animal environmental law
- Researchers or academics in the fields of science or law

**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

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**World rankings of Science 2022:**

- #21 in Life Sciences
- #53 in Physical Sciences
- #52 in Natural Sciences

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**World rankings of Law 2021:**

- #21

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**NEW Double degree programme**

Attaining 2 degrees in 5 years

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**6858**

Bachelor of Science & Bachelor of Laws

300 credits in 5 years

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**NEW Double degree programme**

Attaining 2 degrees in 5 years

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**5 years**

Bachelor of Science + Bachelor of Laws
Bachelor of Science (BSc)

Empowers scientific intellectuals to formulate solutions to society’s challenges

The Programme

- One entry in the application, with a free choice of 14 Science Majors and 7 Intensive Majors:
  - Biochemistry
  - Biological Sciences (Intensive)
  - Chemistry
  - Decision Analytics
  - Earth System Science
  - Ecology & Biodiversity
  - 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

BSc Curriculum Structure (240 Credits)

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

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

- PRIMARY SCIENCE MAJOR
  - Science Foundation Courses
  - Disciplinary Courses
  - Capstone Courses
  - 96 credits

- 2nd MAJOR / MINOR(S) / ELECTIVES
  - 90 credits

- 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

Key Features of Our BSc Curriculum

- Academic Advising System
  - One-on-one academic advice

- No Quota nor GPA requirement for any Science Major

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 and when seeking chartered status

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

Intensive Majors Curriculum Structure (240 Credits)

Spanning over 4 years of full-time study

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

- INTENSIVE SCIENCE MAJOR
  - Science Foundation Courses
  - Disciplinary Courses
  - Capstone Courses
  - 144-150 credits

- MINOR(S) / ELECTIVES
  - 36-42 credits

Remarks:

- Accredited by The Royal Society of Biology, UK
- Accredited by The Royal Society of Chemistry, UK
- Accredited by The Geological Society of London
- Accredited by Hong Kong Institute of Qualified Environmental Professionals
- Accredited by various professional bodies in the UK
Young Scientist Scheme
Ample Early Research Experiences for Outstanding Students in the 6901 BSc Programme & 6688 Science Master Class Programme

YSS participants are guaranteed to go on exchange, visiting or summer study in a top university

Students in YSS are guaranteed with:

- Summer Research Fellowship (SRF)
- A further SRF or an Overseas Research Fellowship (ORF)
- International exchange, visiting or summer study
- Attendance to an international scientific conference
- A research mentor
- Enrolment in the Frontiers of Science Honours Seminar
- Stipends for research activities
- Entrance scholarship
  *Scholarships for Non-JUPAS students are considered on case-by-case basis

In 2021, 46 students were admitted to YSS

- **JUPAS**
  Selected Non-JUPAS applicants will be invited to enrol in YSS
- **Non-JUPAS**
  6901 students with best 5 HKDSE Score of subjects* ≥ 35 (*Category A subjects, M1/M2) and 6688 students
  - automatically accepted to YSS
  - no interview is necessary

Notes:

- BSc students in 6901 BSc Programme not admitted to YSS on entry but show excellent talent afterwards would still:
  - be able to compete for SRF, ORF and/or international exchange during their study

The HKDSE ‘level to score’ conversion
Category A Core and Elective Subjects and Extended Module 1 or Module 2 in Mathematics

<table>
<thead>
<tr>
<th>Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>5*</th>
<th>5**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5.7</td>
<td>8.5</td>
</tr>
</tbody>
</table>

...in Year 3 to get prepared for the specialisation in Year 4.

3. Students will pay HKU fees and Cambridge fees for their study at HKU and Cambridge, respectively.

Remarks:

1. Students will study 3 science subjects in Year 3 to get prepared for the specialisation in Year 4.
2. Allows students to study abroad and experience overseas life and culture
3. Nurtures future science professionals to develop innovative solutions for global challenges
4. Ample learning opportunities in YSS
   - Summer Research Fellowship
   - Overseas Research Fellowship
   - International scientific conference
   - Guidance by research mentor

How to Enroll in the Cambridge-track

JUPAS Band A applicants and selected Non-JUPAS applicants of 6901 and 6688 will be invited to apply for the Cambridge-track. Those interested will undergo a selection process including an admissions test and an interview.

Basic Subject requirements:

- **JUPAS**
  M1/M2 in Mathematics;
  Level B in English Language
- **Non-JUPAS**
  GCEAL: Mathematics and Further Mathematics
  Other Qualifications: Excellent results in Mathematics

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

- Astrophysics
- Biochemistry
- Chemistry
- Earth Sciences
- Genetics
- Materials Science
- Mathematics
- Pathology
- Or a broad Science programme:
  - Biological & Biomedical Sciences
  - Physical Sciences

Cambridge Master’s Degree

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

Reminders:

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 research internships at HKU to fulfill the University’s graduation requirements.
3. Students will pay HKU fees and Cambridge fees for their study at HKU and Cambridge, respectively.

Admissions of Students on the Cambridge-track to Cambridge

- Conditional Offer
- Satisfying the requirements
- Firm Offer by second year

Admissions test by Cambridge teachers

*Number of students selected for each cohort normally will not exceed 80% of the YSS population

Why not BOTH?

HKU or Cantab?

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

Special Feature

- Regular major will be listed on transcript when confirming 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

How to Enroll in the Cambridge-track

Cambridge-track for Selected YSS Participants in Natural Sciences Disciplines

Cambridge: 3 years

- BA (Hons)
- MSci(AMS)
- BA(Hons) + MA(Cantab)

HKU: 4 years

- BSc(HKU)
- BA(Cantab) + MA(Cantab)
- BSc(HKU) + BA(Cantab) + ORF + SRF

Other Qualifications:

- Excellent results in Mathematics
- A level in English Language
- GCEAL: Mathematics and Further Mathematics
- Other Qualifications: Excellent results in Mathematics

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

- Astrophysics
- Biochemistry
- Chemistry
- Earth Sciences
- Genetics
- Materials Science
- Pathology
- Or a broad Science programme:
  - Biological & Biomedical Sciences
  - Physical Sciences

Cambridge Master’s Degree

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

Ample learning opportunities in YSS

- Summer Research Fellowship
- Overseas Research Fellowship
- International scientific conference
- Guidance by research mentor

HKU–Cambridge Undergraduate Recruitment Scheme (Natural Sciences)

HKU students who excel in the BSc Programme are invited to enrol in the Cambridge-track at YSS for a Natural Sciences Degree.

Who are eligible to join YSS?

- 6901 students with best 5 HKDSE Score of subjects* ≥ 35 (*Category A subjects, M1/M2)
- 6688 students
  - automatically accepted to YSS
  - no interview is necessary

Who are eligible to join YSS?

- JUPAS Band A applicants
- Selected Non-JUPAS applicants
- 6901 students with best 5 HKDSE Score of subjects* ≥ 35 (*Category A subjects, M1/M2)
- 6688 students
  - automatically accepted to YSS
  - no interview is necessary

Available for students majoring in:

- Biological & Biomedical Sciences
- Biomedical Sciences
- Chemistry
- Development & Neuroscience
- Earth Sciences
- Neuroscience
- Genetics
- Plant Sciences
- Materials Science
- Zoology
- Pathology

Students in 6901 BSc Programme not admitted to YSS on entry but show excellent talent afterwards would still:

- be able to compete for SRF, ORF and/or international exchange during their study
- attend an admissions test and an interview.

JUPAS Band A applicants and selected Non-JUPAS applicants of 6901 and 6688 will be invited to enrol in YSS.
Seamless articulation to widely recognised postgraduate programmes

Taught Postgraduate Programmes
@ HKU Science

- Attach Bachelor Programmes to HKU Science Taught Master Programmes

Full-time study mode of 1 year or 1.5 years

- Master of Statistics (MStat)
- MSc in Environmental Management
- 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
- MSc in Artificial Intelligence
- Master of Data Science (MDASC)

1 YEAR

1.5 YEARS

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
  - Fulfillment 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

University of Melbourne (UoMelb)
Pathway to talented students who aspire to pursue a career in veterinary medicine

- 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

HKU BSc + UoMelb DVM articulation pathway to the Doctor of Veterinary Medicine at the University of Melbourne

HKU 6901 Bachelor of Science

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

- 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 18th in Veterinary Science of QS World University Rankings 2021
- Accredited by Australasian Veterinary Boards Council Inc. (Australia), American Veterinary Medical Association (USA) and Royal College of Veterinary Surgeons (UK)
This Minor aims at:

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

Some highlights of the Minor:

- Co-taught by other Faculties such as Faculty of Business and Economics
- Strong emphasis on practical experience: Internship, Capstone project
- 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: University of California at Los Angeles
- Summer Research Fellowship (SRF)
- Undergraduate Research Colloquium
- Final-year projects
- Directed studies

International Exchange Studies

Over 300 partner universities in more than 40 countries, including:
- Europe: University of Cambridge, University College London
- North America: University of California

Field Trips

Provide students with hands-on learning experience
Examples of field trip destinations:
- Kenya
- Thailand
- Japan
- USA

Internships

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

Royal Society of Biology, UK

- Biological Sciences, Ecology & Biodiversity and Molecular Biology & Biotechnology Intensive Majors have been conferred the accreditation
- The Ecology & Biodiversity Major is the first programme of its type 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 the life sciences
  - gain additional recognition for their skills and experience
  - develop their professional network
  - demonstrate their support for the future of biology

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

- 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
Bachelor of Science in Actuarial Science  
BSc(ActuarSc)

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
• Validated 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

Dr Patrick S C Poon
Scholarship in Actuarial Science

BSc(ActuarSc)
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

2ND MAJOR/ MINOR(S)/ ELECTIVES
54 credits

*Additional credits required

BASc(AppliedAI)  
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

2ND MAJOR/ MINOR(S)/ ELECTIVES
90 credits

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

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

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

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

Impacts the world with the limitless power of AI

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

Impacts the world with the limitless power of AI
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:
  - (1) Cultures/ Societies
  - (2) Physical World/ Biological/ Human Sciences
- **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, museum, heritage or science writing/journalism and non-governmental organisation work, etc.

**BASc Curriculum Structure**
(240 credits)
Spanning over 4 years of full-time study

**UNIVERSITY EDUCATION**
- Language Courses: 36 credits
- Common Core Courses: 18 credits

**BA Sc CORE COURSES**
- Interdisciplinary curriculum: 96 credits
  - 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

**ELECTIVES**
- 90 credits

**Bachelor of Education & Bachelor of Science**
(BEd&BSc)
Consolidates scientific knowledge through practical experience and teaching in science

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 of 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

**BEd&BSc Curriculum Structure**
(300 credits)
Spanning over 5 years of full-time study

**UNIVERSITY EDUCATION**
- Language Courses: 42 credits
- Common Core Courses: 42 credits

**SCIENCE MAJOR**
- 96 credits

**PROFESSIONAL CORE SCIENCE EDUCATION**
(including Professional Practicum)
- 120 credits

**ELECTIVES**
- 42 credits
Michael TANG
BSc alumnus (major in Physics, minor in German)
Participant of Undergraduate Overseas/ Mainland Experiential Learning Abroad 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 upon 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.”

Daisy LEUNG
BSc alumnus (major in Chemistry)

“As a Chemistry student at HKU, I was exposed to a myriad of opportunities, including both internal and external internships. The curriculum was comprehensive and flexible that enabled students to develop an independent and logical mindset, acquire robust analytical skills, and allowed students to choose their own interest in specific chemistry areas.”

Yaochen WU
BSc alumnus (major in Mathematics and minor in Physics)
Participant of Summer Research Fellowship Scheme 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 rigorous 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.”

Teresa TSUI
BSc alumnus (major in Environmental Science)
2020 Cohort 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.”

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 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 arrived.”

Raina XIN
BASc(Applied AI) 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.”

Cameron Xavier VAN BREDA
BSc student (major in Molecular Biology and Biotechnology, minor in Science Entrepreneurship)
Co-founder & CEO of Helix
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.”

Career Prospects
HKU ranks #9 in QS World Graduate Employability Rankings 2020

Major occupation of HKU Science graduates

Employability Rankings 2020

HKU ranks #9 in QS World Graduate Employability Rankings 2020

Major occupation of HKU Science graduates

Some of our graduates’ first employers

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

Graduates pursued further studies in 2019

Business, Computing, Economics, Engineering, Materials Sciences, Medical Sciences, Pharmacology (%)
### Admissions Requirements

**JUPAS Applicants**

Minimum programme entrance requirements:

<table>
<thead>
<tr>
<th>Programme</th>
<th>English Language</th>
<th>Chinese Language</th>
<th>Mathematics</th>
<th>Liberal Studies</th>
<th>Elective Subjects: Category A subjects and Extended Module 1 or 2 in Mathematics (M1/M2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6688 BSc&amp;MRes</td>
<td>Level 5*</td>
<td>Level 3</td>
<td>Level 4</td>
<td>Level 2</td>
<td>Level 4 in M1/M2 Level 3 in 2 Science 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>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>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 5*</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>6212 BASc</td>
<td>Level 5*</td>
<td>Level 3</td>
<td>Level 2</td>
<td>Level 2</td>
<td>Level 3 in 2 subjects</td>
</tr>
</tbody>
</table>

Remarks:
- Candidates with level 4 in English Language but with excellent results in Science subjects/ Mathematics will be exceptionally considered on a case-by-case basis.
- Science subject: Biology, Chemistry, Physics, or Combined Science
- One of the elective subjects must be a Science subject: Biology, Chemistry, Physics, Combined Science, or Integrated Science.
- 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).

### Contacts for Further Information

**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

**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

**BASc: Faculty of Social Sciences**

- [www.socsc.hku.hk/basc/](http://www.socsc.hku.hk/basc/)
- 3917-1207
- socscug@hku.hk

**Non-JUPAS Applicants**

Students holding non-HKDSE qualifications are considered individually.

**Useful Information**

HKU Undergraduate Admissions

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