New Initiatives in 6901 BSc Programme & Young Scientist Scheme
Why HKU Science?
High University Rankings

QS World University Rankings 2019
#1 among the Universities in Hong Kong

Times Higher Education World University Rankings 2019
#1 among the Universities in Hong Kong

QS Asian University Rankings 2019
#2

Top-ranked Scientists

(Clarivate Analytics’ Essential Science Indicators 2018)

16% of professoriate staff are the world’s top 1% scholars

16% of professoriate staff are the world’s top 1% scholars
International Environment

About **40%** academic staff are from overseas

The International Student Rank 2018
*by THE World University Rankings*

#22 in the world

#1 in Asia

International collaborations
Global Experience

Committed to nurturing students as global citizens

Targeting at 100% overseas experience by 2022

Examples of overseas experiences

• Worldwide exchange studies
• Overseas Research Fellowships
• Field trips
• Summer courses
• International scientific conferences
• Internships
A glance of undergraduate programmes in the Faculty of Science

Faculty of Science
The University of Hong Kong

6901 Bachelor of Science

6729 Bachelor of Science in Actuarial Science

Science Is Brewing

NEW 6224 Bachelor of Arts and Sciences (Applied Arts)

NEW 6212 Bachelor of Arts and Sciences
The 6901 BSc Programme

Empowers scientific intellectuals to formulate solutions to society's challenges
6901 Bachelor of Science Programme

Simple and Flexible
- One entry in application for a choice of 14 Majors and 4 Intensive Majors
- Up to 2 years time to choose a Major
- Flexibility in changing Majors

Key Features of Our BSc Curriculum

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

No Quota for Any Science Major

Academic Advising System
- One-on-one academic advice
New Initiatives in 6901 BSc
Specialisation and intensive training make experts
The Faculty has adapted four Majors, which were accredited by UK professional bodies, into 4 NEW Intensive Majors, alongside with the regular 96-credit Majors.

**4 NEW Intensive Majors** in addition to **14 Science Majors**

- **Chemistry (Intensive)** (144 credits)
- **Ecology & Biodiversity Major (Intensive)** (144 credits)
- **Geology (Intensive)** (150 credits)
- **Molecular Biology & Biotechnology (Intensive)** (144 credits)

*More intensive majors will be offered subsequently.*

**Regular 96-credit Majors**

- Biochemistry
- Biological Sciences
- Chemistry
- Decision Analytics
- Earth System Sciences
- Ecology and Biodiversity
- Environmental Science
- Food & Nutritional Science
- Geology
- Mathematics
- Molecular Biology & Biotechnology
- Physics
- Risk Management
- Statistics
Specialisation and intensive training make experts

- Gain extensive subject knowledge
- Offered alongside with the regular 96-credit Majors
- Enjoy an advantage at job application
- Fulfill the accreditation requirements of various royal societies in UK
- Equip students who intend to pursue research in science
- Equip students who intend to pursue research in science
Curriculum structure for BSc (Intensive Majors)
Spanning over 4 years of full-time study
(240 Credits)

- **UNIVERSITY EDUCATION**
  - Language Courses
  - Common Core Courses
  - (54 credits)

- **INTENSIVE SCIENCE MAJOR**
  - Science Foundation Courses
  - Disciplinary Courses
  - Capstone Course
  - (144 - 150 credits)

- **MINOR / ELECTIVES**
  - (36 - 42 credits)
Quality assured through recognition by international professional bodies
Quality assured through recognition by international professional bodies

**Ecology & Biodiversity Major (Intensive)**
**Molecular Biology & Biotechnology Major (Intensive)**
have been conferred the accreditation from
**Royal Society of Biology, UK**
- gain additional recognition for skills and experience
- learn the latest development in life sciences

**Chemistry Major (Intensive)**
have been conferred the accreditation from
**Royal Society of Chemistry (RSC), UK**
- final year students are qualified to apply for RSC membership
- an authorised certificate to recognise students’ achievements

**Geology (Intensive)**
Students completing specified geology courses will receive an accredited degree from
**The Geological Society, UK**
- The qualification is recognised internationally and in HK
- an accelerated route to achieve the professional qualification
Minor in Science Entrepreneurship

Opening the doors to entrepreneurship
Opening the doors to entrepreneurship

Highlights of the Minor:

- Strong emphasis on practical experience:
  - Internship
  - Capstone project

- Mentoring offered by entrepreneurs or senior staff in industry/business

- Co-taught by other Faculties such as Faculty of Business and Economics

- New courses tailor-made for this Minor and related courses offered by other Faculties

Connecting academic knowledge with the real world

Broadening students’ horizon in entrepreneurship

Bringing huge insights via critical analysis of enterprises
Seamless articulation to widely recognised postgraduate programmes in HK and overseas
To Doctor of Veterinary Medicine (DVM) at University of Melbourne (UoMelb)

- Selected students, upon successful completion of a minimum of 6 semesters and gaining 186 credits under BSc 6901 programme, could enroll in DVM at UoMelb.

- Graduates will be conferred 2 degrees from the 2 universities – the HKU BSc degree and the DVM in UoMelb in no less than 7 years.

New articulation pathway for pursuing a career in veterinary medicine

**HKU 6901 BSc**

<table>
<thead>
<tr>
<th>BSc I</th>
<th>BSc II</th>
<th>BSc III</th>
<th>(Optional) BSc IV (1st sem)</th>
</tr>
</thead>
</table>

**HKU 6901 BSc degree**

**A minimum of 7 years**
Seamless articulation to widely recognised postgraduate programmes

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

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

Prerequisite for application
Gain 186 credits upon successful completion of a minimum of 6 semesters

Quota
A maximum of 5 places annually

Scholarship
To partially cover the tuition fee in the first year of study at UoMelb

About DVM at UoMelb
QS World University Rankings 2018 by Subject – Veterinary Science #15

Graduates will be able to
- register as a veterinary surgeon and practise in HK
- practise as a veterinarian in many countries such as Australia, UK and North America

Accredited by:
- AVBC (Australia)
- AVMA (USA)
- RCVS (UK)
TPg Programmes include:
- MSc in the field of Food Safety and Toxicology
- MSc in the field of Applied Geosciences
- MSc in Environmental Management
- Master of Statistics
- MSc in the field of Food Industry: Management and Marketing
- MSc in Data Science

Eligibility:
With a CGPA of 3.5 at graduation and fulfillment of the respective admissions requirements
Seamless articulation to widely recognised postgraduate programmes

To the Master of Science in Biotechnology at Northeastern University

HKU Science graduates with a GPA of 3.2 or above are eligible for direct admission to the programme.

1st year
May complete the course work online

2nd year
Transfer to Northeastern University to complete the remaining studies
NEW INITIATIVES
in 6901 BSc programme

1. Specialisation and intensive training make experts
   - Chemistry (Intensive)
   - Ecology & Biodiversity (Intensive)
   - Geology (Intensive)
   - Molecular Biology & Biotechnology (Intensive)

2. Quality assured through recognition by international professional bodies

Intensive Majors

Accreditations
NEW INITIATIVES in 6901 BSc programme

3. Opening the doors to entrepreneurship visualises how training in science bears relevance to the real world

4. Seamless articulation to widely recognised postgraduate programmes in HK and overseas

Minor in Science Entrepreneurship

Articulation Pathways
Young Scientist Scheme (YSS)
Early Research Experiences for Outstanding Science Students
YSS — Early Research Experiences for Outstanding Students

Students in YSS are guaranteed with:

1. Summer Research Fellowship (SRF)
2. A further SRF or an Overseas Research Fellowship (ORF)
3. International exchange, visiting or summer study
4. Attendance to an international scientific conference
5. A research mentor
6. Enrollment in the Frontiers of Science Honours Seminar
7. Stipends for research activities
8. Entrance scholarship
Pathway of YSS

YEAR 1
- Summer Research Fellowship
- Guidance from Research Mentor
- Summer Research Fellowship

YEAR 2
- 2nd Summer Research Fellowship
- Overseas Research Fellowship

YEAR 3
- International Exchange Study, Visiting or Summer Study
- Frontiers of Science Honours Seminar

YEAR 4
- Final Year Project
- International Conference
- Frontiers of Science
YSS participants are guaranteed to go on exchange, visiting or summer study in a top university, including:
How to join YSS?

JUPAS

Best 5 HKDSE Category A subjects / M1 / M2 ≥ 35 scores
- automatically accepted to YSS
- no interview is necessary

Non-JUPAS

Selected Non-JUPAS applicants will be invited to enroll in YSS

The HKDSE ‘level to score’ conversion

| Category A: Core and Elective Subjects and Extended Module 1 or Module 2 of Mathematics |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Level                           | 1              | 2              | 3              | 4              | 5              | 5*             | 5**            |
| Score                           | 1              | 2              | 3              | 4              | 5.5            | 7              | 8.5            |

In 2018, 33 students were admitted to YSS

6901 BSc students not admitted to YSS on entry still:
- have a second chance to enroll in YSS
- could compete for SRF, ORF and/or international exchange during their study
DIVERSE LEARNING EXPERIENCES
International Exchange Studies

Around **300 partner universities** in more than **40 countries**, including:

**North America**
- University of California
- University of Chicago
- Columbia University
- Johns Hopkins University
- Stanford University

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

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**Undergraduate Research Experiences**

Ample undergraduate research opportunities are offered by the Faculty

- **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**

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284 BSc students travelled abroad for international exchange in 2017-18
Field Trips

Provide students with hands-on learning experience outside classroom

Examples of field trip destinations:

- Australia
- Canada
- Kenya
- Taiwan
- Thailand
- USA

Internships

- Enable students to apply knowledge in the workplace
- Prepare students for their careers

More than 126 internship opportunities were offered in 2017-18
Broad Further Study Options

On top of pursuing further study in science disciplines, our graduates also pursue further studies in other disciplines.

- business
- computing
- economics
- engineering
- materials sciences
- medical sciences
- pharmacology

Some of the institutions our students went for further studies

- Cambridge
- McGill
- SLAC
- Caltech
- Michigan
- Stanford
- Chicago
- MIT
- Texas
- Columbia
- Oxford
- UCLA
- Harvard
- Princeton
- UC San Diego
- Illinois
- SBU
- UC San Diego
Wide Career Prospects

- Many of our graduates are holding positions that demand scientific expertise
- They are also preferred by employers because of their numerical analytical skills and logical thinking

Essentially 100% employment rate (inclusive of further studies) in the past decade
**Admissions Requirements**

**JUPAS Applicants**

- **Mathematics**: Level 2
- **Liberal Studies**: Level 2
- **Chinese Language**: Level 3
- **English Language**: Level 3
- **Elective subject**: Level 3
- **Elective subject**: Level 3

**6901 BSc**

**2019 Admission Quota 336#**

(JUPAS + Local Non-JUPAS)

(Separate quota for mainland and international students)

# Subject to confirmation

* Elective subjects can be any Category A subject, one of them must be a Science subject
### Admissions Formula for 6901 BSc (For JUPAS)

**Selection principle:** BEST 5

<table>
<thead>
<tr>
<th>JUPAS</th>
<th>Non-JUPAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="icon.png" alt="English" /></td>
<td>Students holding non HKDSE qualifications are considered individually.</td>
</tr>
<tr>
<td><img src="icon.png" alt="fx" /></td>
<td></td>
</tr>
<tr>
<td><img src="icon.png" alt="Best Science Elective" /></td>
<td></td>
</tr>
<tr>
<td><img src="icon.png" alt="The BEST 2 of remaining Category A subjects/ M1/ M2" /></td>
<td></td>
</tr>
</tbody>
</table>

#### DSE Subjects
- **Science elective subjects** (Biology, Chemistry, Physics, Combined Science or Integrated Science)
- Mathematics
- Extended module 1 or 2 in Mathematics
- English language

#### Weighting
- English: 2
- Mathematics: 1.5
- Best Science Elective: 2
- The BEST 2 of remaining Category A subjects/ M1/ M2: 1.5

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Total score of best 5 HKDSE subjects among the 6901 intakes

6901 BSc

22 ~ 35

The HKDSE ‘level to score’ conversion

<table>
<thead>
<tr>
<th>Admission Year</th>
<th>HKDSE 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>2018</td>
<td>Conversion under the existing system</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2019</td>
<td>Conversion under the New Bonus Points system</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5.5</td>
<td>7</td>
<td>8.5</td>
</tr>
</tbody>
</table>
2018 Non-JUPAS Admissions Scores

6901 BSc

GCEAL

- Lowest admission score: 1A*, 2A
- Average admission score: 2A*, 1A

IB

- Lowest admission score: 34
- Average admission score: 38

- We accept students with other qualifications such as AD, HD, SAT.
- We also accept applications from students who have completed 1st year of AD/HD programme or degree programme from other universities.
Science Entrance Scholarships for 6901 BSc Students

HKDSE Results
Total score in the best 5 subjects (including M1 or M2)

Score $\geq 42.5$
$70,000$

Score $\geq 41$
$60,000$

Score $\geq 39$
$50,000$

Score $\geq 37$
$40,000$

Score $\geq 35$
$20,000$

* The amount is subject to approval

Note:
1. The results are based on one sitting only. Students must NOT BE HKDSE REPEATERS and must fulfill the minimum University entrance requirements.
Contacts for Further Information

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