6901 Bachelor of Science & Young Scientist Scheme (YSS) 2018 - 19
The talk will introduce:

- HKU Faculty of Science
- 6901 BSc programme
- Diverse learning experiences
- Young Scientist Scheme (YSS) for Outstanding Science Students
- Career prospects
- Admission requirements
HKU Faculty of Science
HKU
Science Family

- Biological Sciences
- Chemistry
- Earth Sciences
- Mathematics
- Physics
- Statistics & Actuarial Science
High University Rankings

Rankings of HKU

QS World University Rankings 2018

#26 in the world

#4 among the universities in Asia

#1 among the universities in Hong Kong

Times Higher Education World University Rankings 2018

#40 in the world

#4 among the universities in Asia

#1 among the universities in Hong Kong
World University Rankings by Faculty – Natural Science

QS University Rankings 2017

14% of our professoriate staff are the world’s top 1% scholars

according to Clarivate Analytics’ Essential Science Indicators 2016
Total no. of academic staff: **152**

~60% academic staff are from outside Hong Kong

**Diverse origins and cultures of students**

**HKU hosts students from over 100 countries/regions**
Targeting at 100% overseas experience by 2022

Examples of overseas experiences:
- Field trips
- International scientific conferences
- Internships
- Overseas Research Fellowships
- Summer courses
- Worldwide exchange studies

Essentially 100% employment rate (inclusive of further studies) in the past decade
Science Undergraduate Programmes

**6901 BSc**
Bachelor of Science
4-year Programme

**6729 BSc(AC)**
BSc in Actuarial Science
4-year Programme

**6119 BEd & BSc**
Bachelor of Education & Bachelor of Science
5-year Double Degree Programme
6901 Bachelor of Science Programme
# 6901 Bachelor of Science Programme

**Comprehensive training in science**

- Develop capabilities in quantitative and logical reasoning
- Cultivate ability to tackle novel situations and solve intricate problems

**A choice of 14 Science Majors**

<table>
<thead>
<tr>
<th>Biochemistry</th>
<th>Food &amp; Nutritional Science</th>
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<tbody>
<tr>
<td>Biological Sciences</td>
<td>Geology *</td>
</tr>
<tr>
<td>Chemistry #</td>
<td>Mathematics</td>
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<tr>
<td>Decision Analytics</td>
<td>Molecular Biology &amp; Biotechnology</td>
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<tr>
<td>Earth System Science</td>
<td>Physics</td>
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<tr>
<td>Ecology &amp; Biodiversity</td>
<td>Risk Management</td>
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<td>Environmental Science</td>
<td>Statistics</td>
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* Includes an option to follow the accredited Royal Society Chemistry programme

# Includes an option to follow the accredited Geology programme
Key Features of 6901 BSc curriculum

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

Students may take a **2nd Major** or a **Minor** or **2 Minors** in Science or non-Science disciplines

One-on-one academic advice
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**
- University of Cambridge
- Imperial College London
- University of Oxford

151 BSc students travelled abroad for international exchange in 2016-17

Summer Exchange Opportunities

- Yale University
- Johns Hopkins University
- University of California at Berkeley
- University of California at Irvine
- University of Cambridge
Undergraduate Research Experiences

- **Overseas Research Fellowship (ORF)**
- **Summer Research Fellowship (SRF)**
- **Undergraduate Research Colloquium**
- **Final-year projects**
- **Directed studies**

**Examples of institutes for ORF:**

**North America**
- California Institute of Technology
- Columbia University
- Cornell University
- MIT
- Stanford University
- University of California at Berkeley
- University of California at Los Angeles

**Europe**
- CERN
- University of Cambridge
- University College London
Field Trips

Provide students with hands-on learning experience outside classroom

Examples of field trip destinations:

- Australia
- Canada
- Kenya
- Taiwan
- Thailand
- USA
More than 200 internship opportunities were offered in 2016-17

Examples of internship opportunities:
- Government bodies
- Scientific laboratories
- Non-government agencies/NGOs
- Commercial companies

Internships

- Enable students to apply knowledge in the workplace
- Prepare students for their careers
Young Scientist Scheme (YSS) for Outstanding Science Students

Provides ample early research experiences for outstanding undergraduate students
### YSS — Early Research Experiences for Outstanding Students

**Students in YSS are guaranteed with:**

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<tbody>
<tr>
<td><strong>1</strong></td>
<td>Summer Research Fellowship (SRF)</td>
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<tr>
<td><strong>2</strong></td>
<td>A further SRF or an Overseas Research Fellowship (ORF)</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>International exchange, visiting or summer study</td>
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<td><strong>4</strong></td>
<td>Attendance to an international scientific conference</td>
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<tr>
<td><strong>5</strong></td>
<td>A research mentor</td>
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<td><strong>6</strong></td>
<td>Enrollment in the Frontiers of Science Honours Seminar</td>
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<td><strong>7</strong></td>
<td>Stipends for research activities</td>
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<td><strong>8</strong></td>
<td>Entrance scholarship</td>
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Gabriel Gallardo, majoring in Physics, spent his summer working in CERN through ORF in 2015.

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

Partner Universities for YSS:

North America:
- University of California
- Columbia University
- Yale University
- Johns Hopkins University

Europe:
- University of Cambridge
- Imperial College London
- King's College London
- The University of Chicago
Who are eligible to join YSS?

In 2017, 22 students were admitted to YSS.* Including Category A subjects and M1/M2 JUPAS Best 5 HKDSE Category A subjects* ≥ 31 scores

- automatically accepted to YSS
- no interview is necessary

Non-JUPAS

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

JUPAS

Best 5 HKDSE Category A subjects* ≥ 31 scores

- automatically accepted to YSS
- no interview is necessary

1. 6901 BSc students not admitted to YSS on entry but show excellent talent afterwards would still have a second chance to enroll in YSS. Details to be announced later.
2. Students who are not admitted to YSS can still compete for SRF, ORF and/or international exchange during their study.
Career Prospects
18% of Science graduates in 2016 pursued further studies. 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
HKU BSc + UoM DVM
(articulation pathway to the Doctor of Veterinary Medicine at the University of Melbourne)

Remarks: students can also choose to study in HKU for 3.5 years, and obtain both degrees in 7.5 years
HKU BSc + UoM DVM
(articulation pathway to the Doctor of Veterinary Medicine at the University of Melbourne)

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

Prerequisite for application
- CGPA Requirement \( \geq 3.5 \)
- One semester of biology courses (cellular/general)
- Pass + 1 chemistry course + 1 advanced level biochemistry course

Complete 180 credits by the 5th semester of study

Selection period
- Year 2 of the study

Quota
- up to 5 students every year

Scholarship
- to cover partial tuition fees of 1st year of study at UoM

 Eligible majors

CGPA Requirement \( \geq 3.5 \)

Pass
- + 1 chemistry course
- + 1 advanced level biochemistry course

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HKU BSc + UoM DVM
(articulation pathway to the Doctor of Veterinary Medicine at the University of Melbourne)

6901 BSc
the only Doctor of Veterinary Medicine articulation programme in HK

UoM
#32 Times Higher Education World University Rankings 2018
#41 QS World University Rankings 2018
#15 QS World University Rankings 2017 by Subject – Veterinary Science

After completion
Students will obtain international accreditation AVBC (Australia), AVMA (USA) and RCVS (UK)

Graduates are also qualified to register as veterinary surgeons in Hong Kong
4 + 1 (BSc/ BSc (ActuarSc) + MSc/ MStat)

(Articulation pathway to MSc/ MStat Programmes at HKU; 4 years in 6901 BSc/ 6729 BSc (ActuarSc) plus 1 year in MSc/MStat)

Guaranteed admission to the taught postgraduate programmes offered by the Faculty to selected outstanding BSc students.

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

CGPA requirement (at graduation) \( \geq 3.5 \)

Quota
- MSc in Data Science: 2
- No quota for other TPG programmes

Accepts applications from Year4 students

Scholarship for the Tpg study
- Students who are awarded the highest amount of scholarship will only need to pay 50% of tuition fee
Wide Career Prospects

Essentially 100% employment rate (71% of graduates were employed & 18% of them pursued further study)

- Computer Industries
- Engineering
- Green and Environmental Industries
- Management
- Labs
- Food Industries
- Geotechnical Industries
- Biotech & Pharmaceutical Industries
- R&D Scientist; Education; Technical Marketing; etc.
- Civil Services

and more
Admission Requirements
HKU General Admission Requirements

- **Elective subjects** can be any Category A subject, one of them must be a Science subject.
6901 BSc Programme

Admission Principle – Best 5

- English
- Mathematics
- Best Science Elective
- The BEST 2 of other subjects / M1 / M2

Heavier weight for Science Electives, Math and M1/M2

Aptitude test to differentiate borderline students
2017 JUPAS Admission Scores

Total score of best 5 HKDSE subjects among the 6901 intakes

6901 BSc

The HKDSE ‘level to score’ scale

<table>
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<th>5*</th>
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2017 Non-JUPAS Admission Scores

6901 BSc

**GCEAL**

Average admission score

2A*, 1A

**IB**

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.
2017 Admission Figures

Total no. of students admitted: **476**

- **299 (62.8%)** Non-JUPAS (Local students)
- **74 (15.5%)** Non-JUPAS (Mainland)
- **56 (11.8%)** Non-JUPAS (International students from 17 countries)

2018 Admission Quota for 6901 BSc programme

**361** (JUPAS + Local Non-JUPAS)

(Separate quota for mainland and international students)
Science Entrance Scholarships

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

Score of 35 $70,000
Score of 34 $60,000
Score of 33 $50,000
Score of 32 $40,000
Score of 31 $30,000

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

* The amounts are subject to approval
THANK YOU