



Faculty of Science
The University of Hong Kong



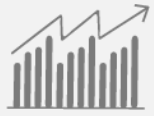
New Initiatives in 6901 BSc Programme & Young Scientist Scheme

2019
|
2020

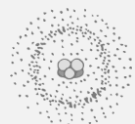
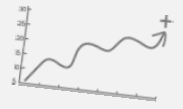
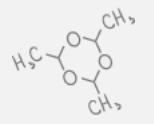
6901 Bachelor of Science



Why HKU Science?



A^{++}



High University Rankings



QS World University
Rankings 2019

QS Asian University
Rankings 2019

#1

among the
Universities in
Hong Kong

#25

In the world

#2

Top-ranked Scientists

(Clarivate Analytics' Essential Science
Indicators 2018)

16% of professoriate staff

are the world's **top 1%** scholars



Times Higher Education
World University Rankings 2019

#1

among the
Universities in
Hong Kong

#4

among the
Universities in
Asia

#36

In the world





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

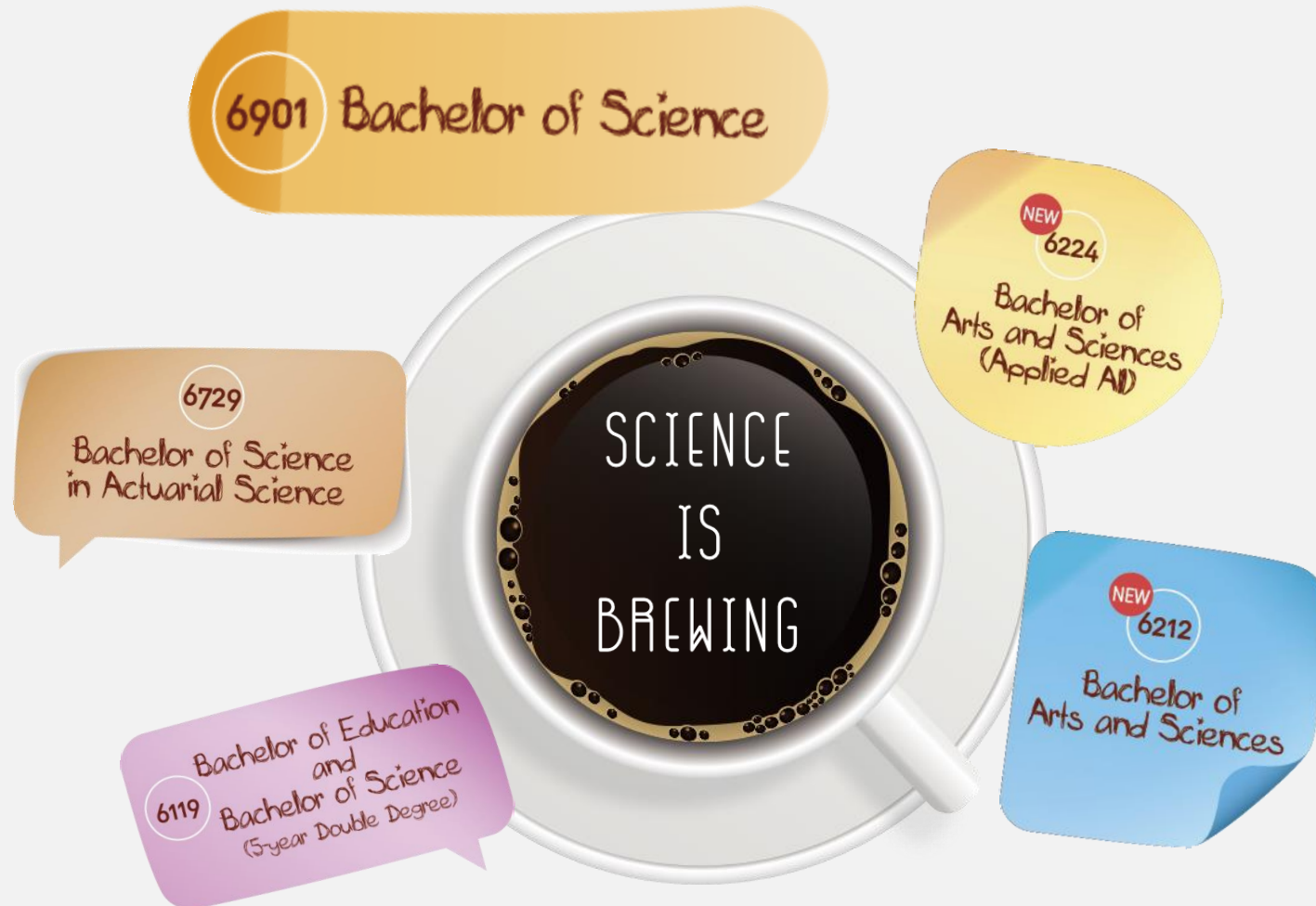
- Worldwide exchange studies
- Overseas Research Fellowships
- Field trips
- Summer courses
- International scientific conferences
- Internships



A glance of undergraduate programmes in the Faculty of Science



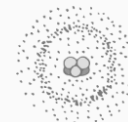
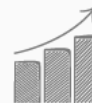
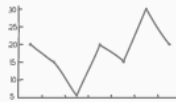
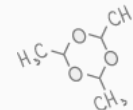
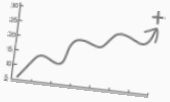
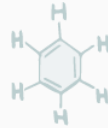
Faculty of Science
The University of Hong Kong



The 6901 BSc Programme

*Empowers scientific intellectuals to
formulate solutions to society's challenges*

SCIENCE
IS
BREWING





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



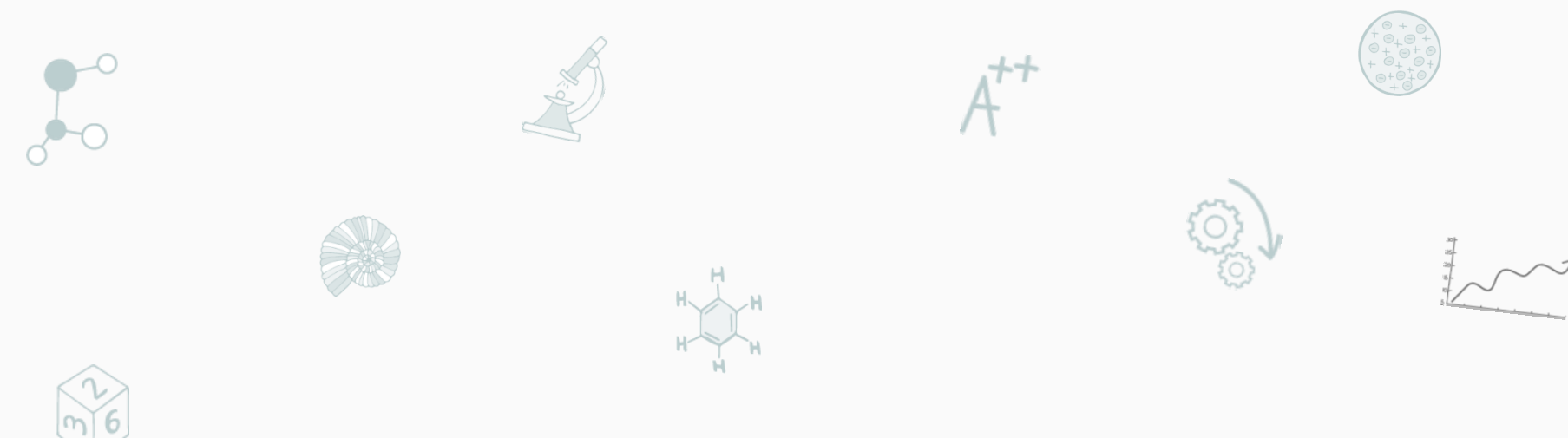
1 Major / 2 Majors / Major-Minor / Major-2 Minors

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

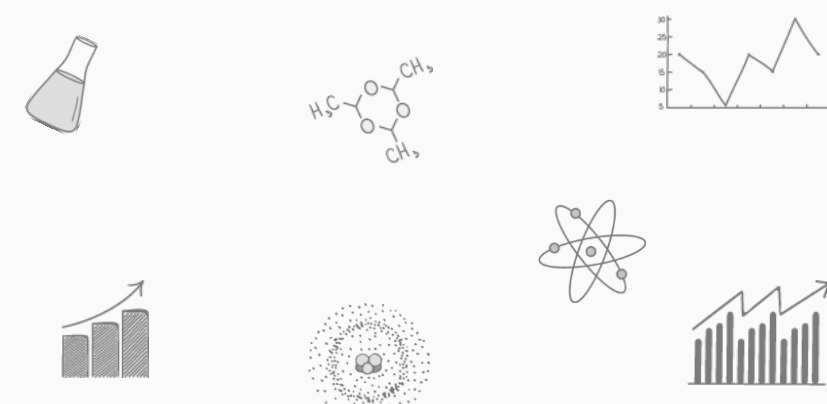
No Quota for Any Science Major

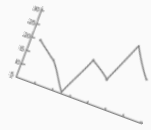
Academic Advising System

- One-on-one academic advice

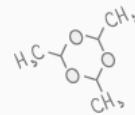


New Initiatives in 6901 BSc

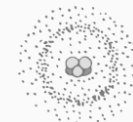
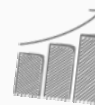
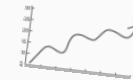




Intensive Majors



Specialisation and intensive training make experts





6901

Bachelor of Science 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)

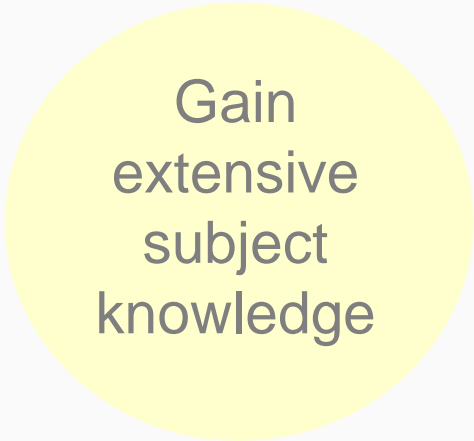
More intensive majors will be offered subsequently.

Regular 96-credit Majors

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



Specialisation and intensive training make experts



Gain
extensive
subject
knowledge



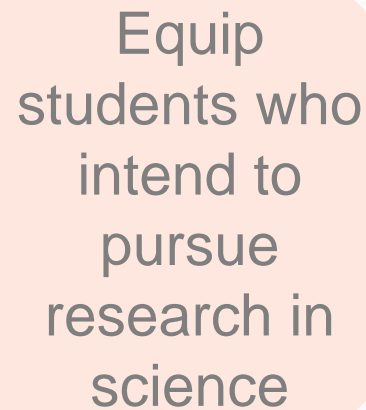
Offered
alongside with
the regular
96-credit
Majors



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



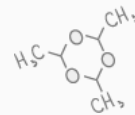
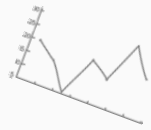
Specialisation and intensive training make experts

Curriculum structure for BSc (Intensive Majors)

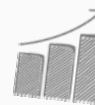
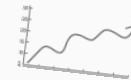
Spanning over 4 years of full-time study

(240 Credits)





Quality assured through recognition by international professional bodies





Quality assured through recognition by international professional bodies

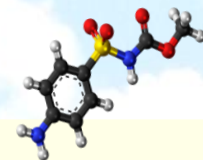
 **Ecology & Biodiversity Major (Intensive)**
 **Molecular Biology & Biotechnology Major (Intensive)**



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

NEW



Minor in Science Entrepreneurship

Opening the doors to entrepreneurship

Highlights of the Minor:

Strong emphasis on practical experience:

- Internship
- Capstone project



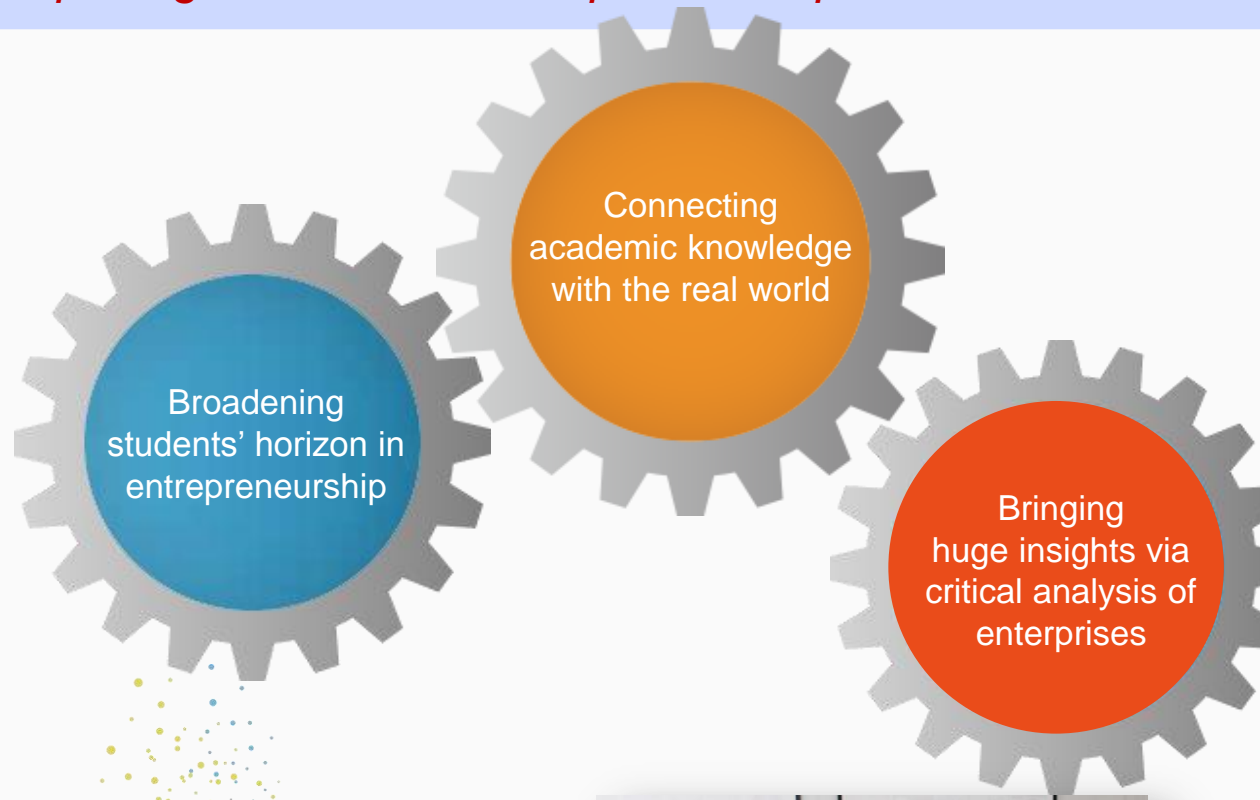
Mentoring offered by entrepreneurs or senior staff in industry/ business

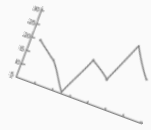


Co-taught by other Faculties such as Faculty of Business and Economics

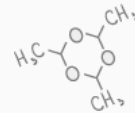


New courses tailor-made for this Minor and related courses offered by other Faculties

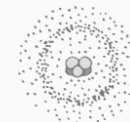
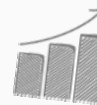
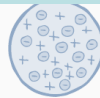




Articulation Pathways



Seamless articulation to widely recognised postgraduate programmes in HK and overseas





Seamless articulation to widely recognised postgraduate programmes

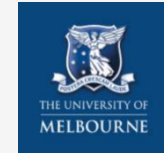
To Doctor of Veterinary Medicine (DVM) at University of Melbourne (UoMelb)

- ◆ 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.



HKU 6901 BSc

**New articulation pathway for pursuing
a career in veterinary**



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

BSc I

BSc II

BSc III

(Optional)
BSc IV
(1st sem)

DVM1

↓
credit
transfer
to HKU
BSc

DVM2

DVM3

DVM4

DVM degree at
the University
of Melbourne
(UoMelb)

Bachelor of Science at HKU

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

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

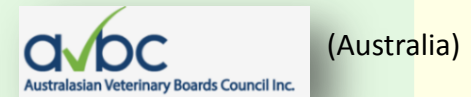
#15

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:



NEW

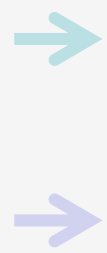


Seamless articulation to widely recognised postgraduate programmes



To Taught Postgraduate Programmes at HKU Science





6901 BSc
6729 BSc(AC)
6224 BASc(Applied AI)
(4 years)



MSc / Master of Statistics programme
(1 year)

MSc in Data Science programme
(1.5 year)

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

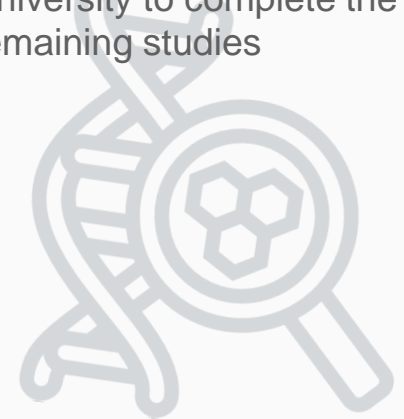


1st year

May complete the course work online

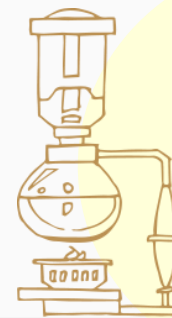
2nd year

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



NEW INITIATIVES

in 6901 BSc programme



3

Opening the doors to entrepreneurship



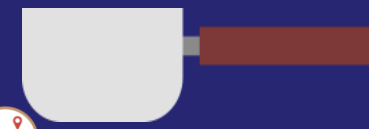
visualises how training in science bears relevance to the real world



 Minor in Science Entrepreneurship

4

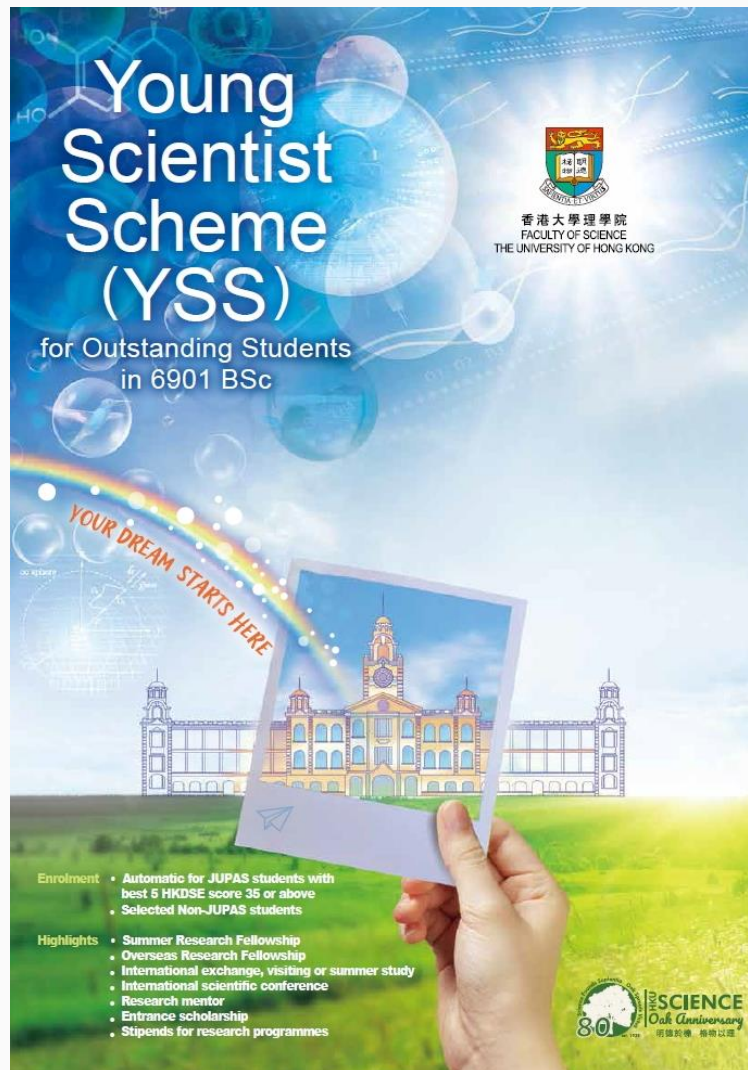
Seamless articulation to widely recognised postgraduate programmes in HK and overseas



 Articulation Pathways

Young Scientist Scheme (YSS)

Early Research Experiences
for Outstanding Science Students



Young Scientist Scheme (YSS)
for Outstanding Students
in 6901 BSc

香港大學理學院
FACULTY OF SCIENCE
THE UNIVERSITY OF HONG KONG

YOUR DREAM STARTS HERE

Enrolment

- Automatic for JUPAS students with best 5 HKDSE score 35 or above
- Selected Non-JUPAS students

Highlights

- Summer Research Fellowship
- Overseas Research Fellowship
- International exchange, visiting or summer study
- International scientific conference
- Research mentor
- Entrance scholarship
- Stipends for research programmes

80 SCIENCE
Oak Anniversary
栢達於德 務精以進

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 4

Final Year Project

International
Conference

Frontiers of Science
Honours Seminar



YEAR 3

International
Exchange Study,
Visiting or
Summer Study



YEAR 2

2nd Summer
Research Fellowship
or
Overseas Research
Fellowship



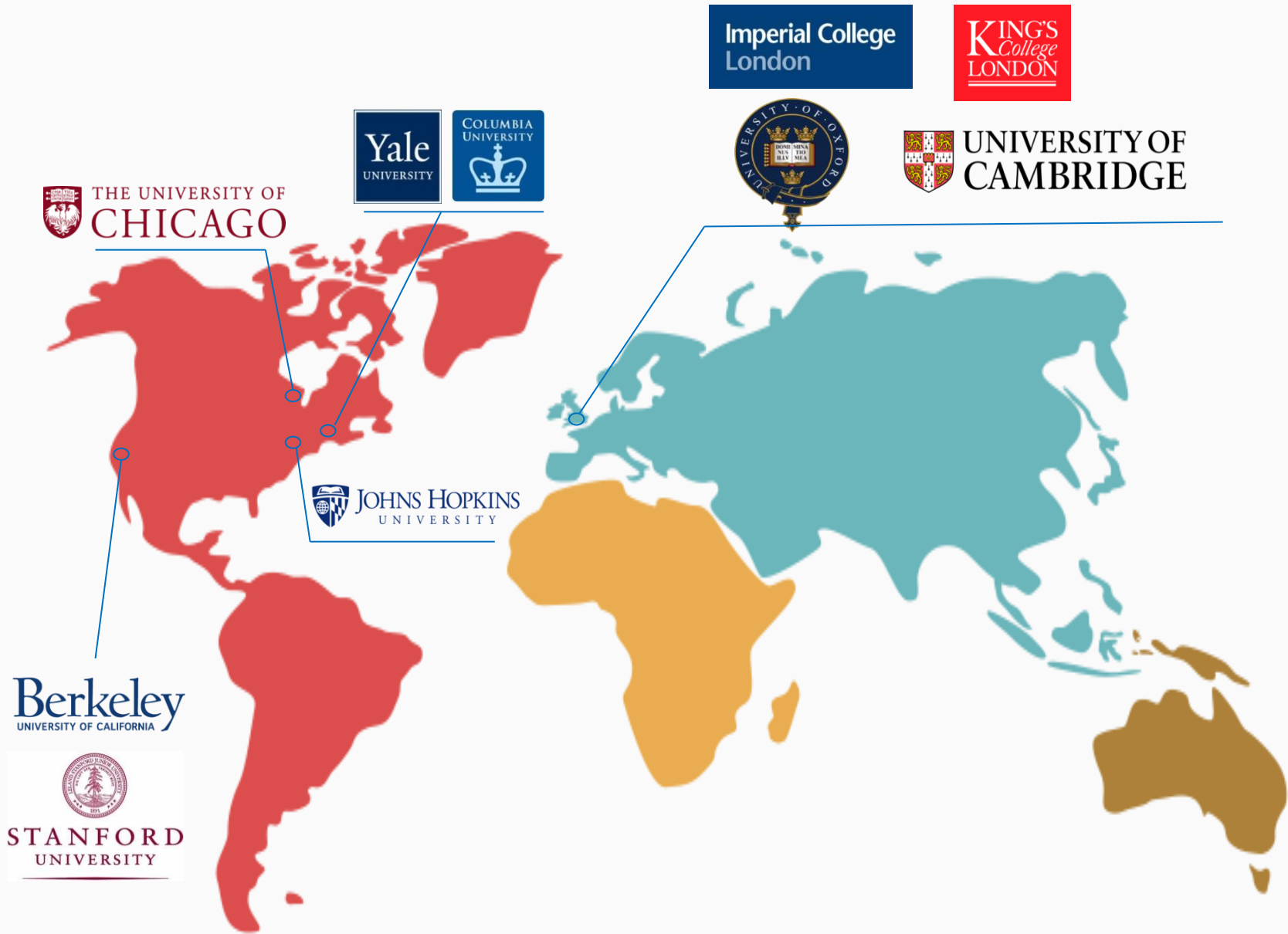
YEAR 1

Guidance from
Research Mentor

Summer Research
Fellowship



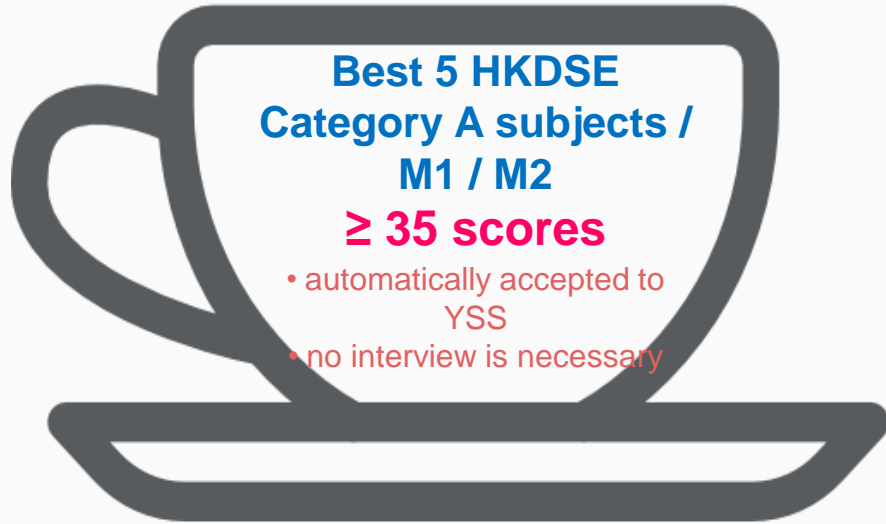
YSS participants are guaranteed to go on exchange, visiting or summer study in a top university, including:



How to join YSS?

In 2018,
33 students
were admitted
to YSS

JUPAS

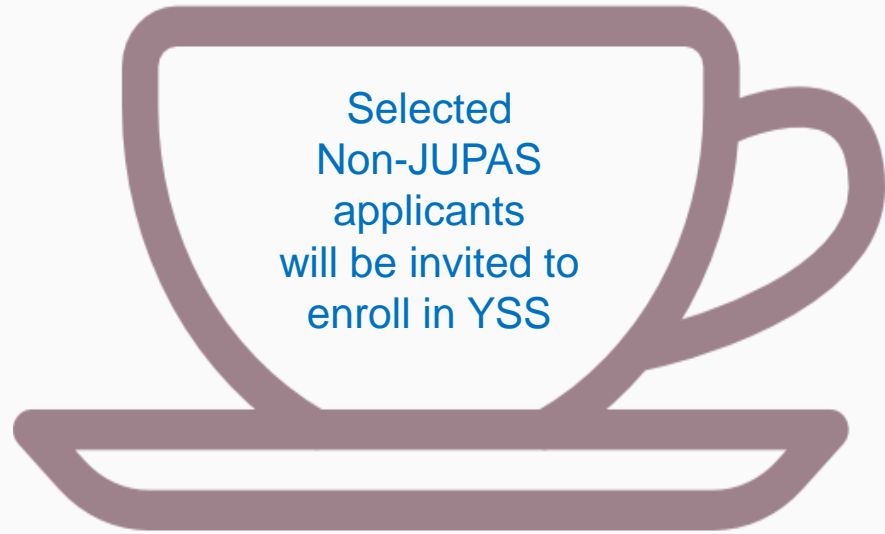


**Best 5 HKDSE
Category A subjects /
M1 / M2**

≥ 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

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



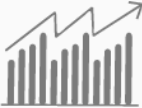
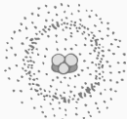
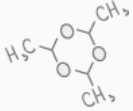
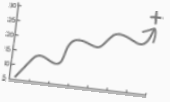
DIVERSE
LEARNING
EXPERIENCES



A^{++}



H H



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



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

Undergraduate Research Experiences

Ample undergraduate research opportunities are offered by the Faculty

➤ Overseas Research Fellowship (ORF)

Examples:

North America

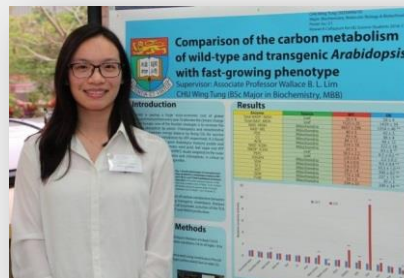
- California Institute of Technology
- Columbia University
- Cornell University
- MIT
- Stanford University
- University of California

Europe

- CERN
- University of Cambridge
- University College London

➤ Summer Research Fellowship (SRF)

- Undergraduate Research Colloquium
- Final-year projects
- Directed studies



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

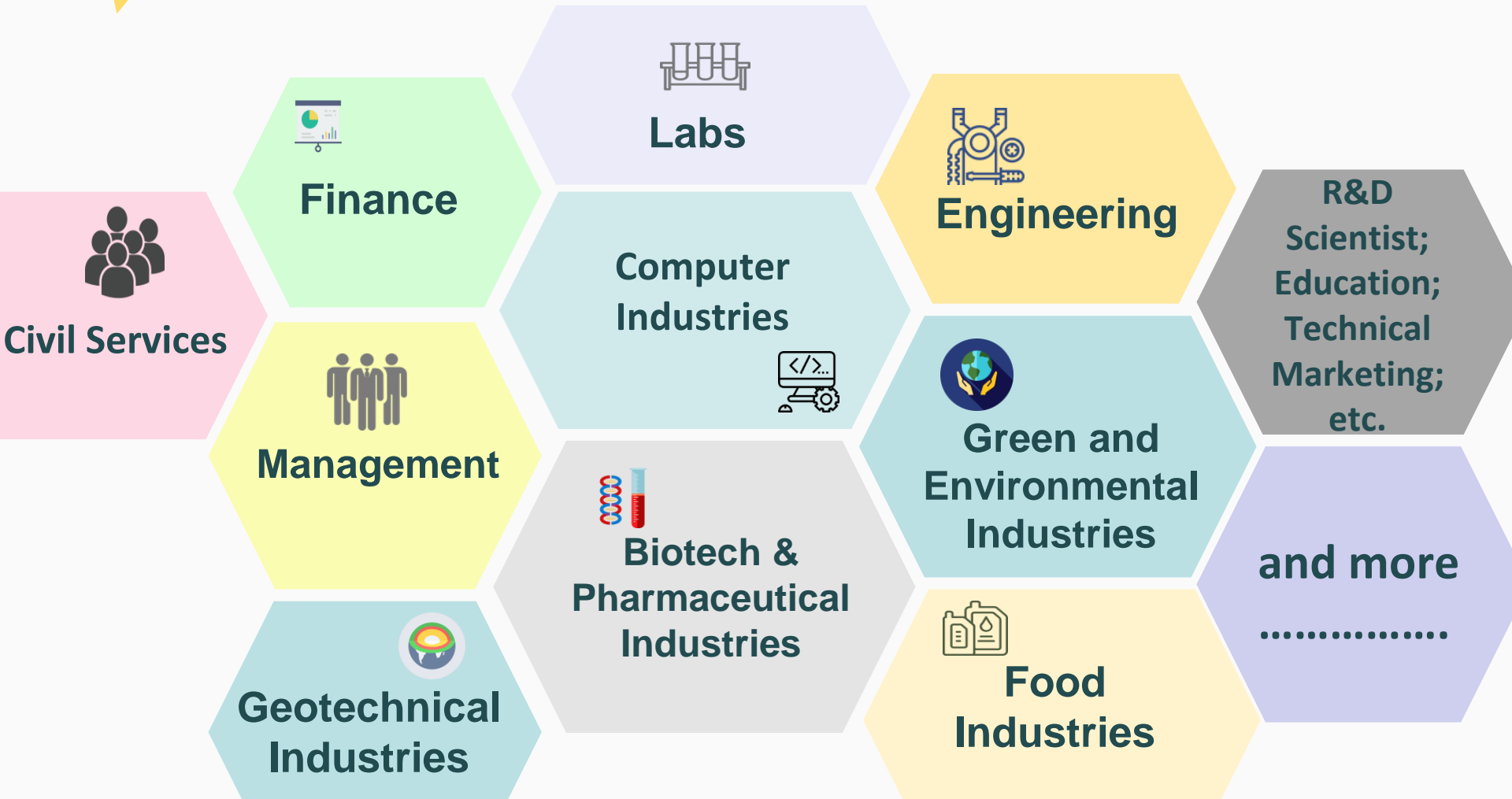
Cambridge	McGill	SLAC
Caltech	Michigan	Stanford
Chicago	MIT	Texas
Columbia	Oxford	UCLA
Harvard	Princeton	UC San Diego
Illinois	SBU	

Wide Career Prospects



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

- 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



Mathematics

Level 2



Liberal Studies

Level 2



Chinese Language

Level 3



English Language

Level 3



6901 BSc

Elective subject*

Level 3



Elective subject*

Level 3



2019 Admission Quota
336#

(JUPAS + Local Non-JUPAS)

(Separate quota for mainland and international students)

Subject to confirmation



Heavier weight for Science Electives, Math and M1/M2

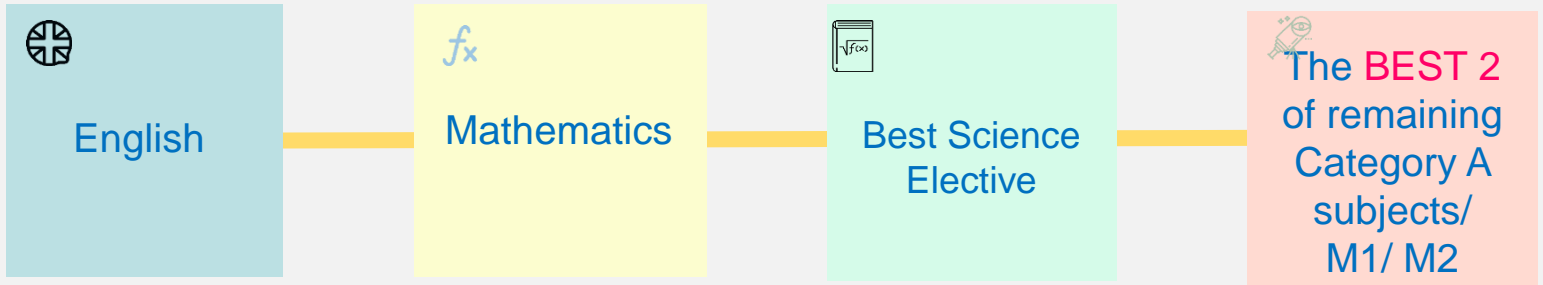
* Elective subjects can be any Category A subject, one of them must be a Science subject

6901

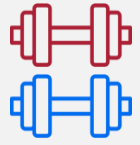
Admissions Formula for 6901 BSc (For JUPAS)

Selection principle: **BEST 5**

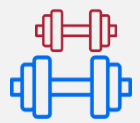
JUPAS



DSE Subjects



- Science elective subjects (Biology, Chemistry, Physics, Combined Science or Integrated Science)
- Mathematics
- Extended module 1 or 2 in Mathematics



English language

Weighting

× 2

× 1.5



Non-JUPAS

Students holding non HKDSE qualifications are considered individually.

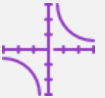


2018 JUPAS Admissions Scores

Total score of best 5 HKDSE subjects among the 6901 intakes

6901 BSc

22 ~ 35



The HKDSE 'level to score' conversion

Admission Year	HKDSE Level	1	2	3	4	5	5*	5**
2018	Conversion under the existing system	1	2	3	4	5	6	7
2019	Conversion under the New Bonus Points system	1	2	3	4	5.5	7	8.5



2018 Non-JUPAS Admissions Scores

6901 BSc

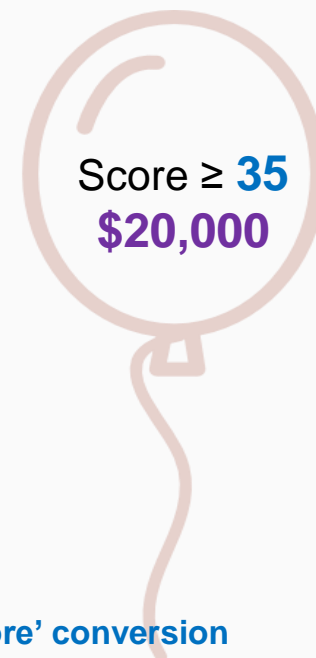
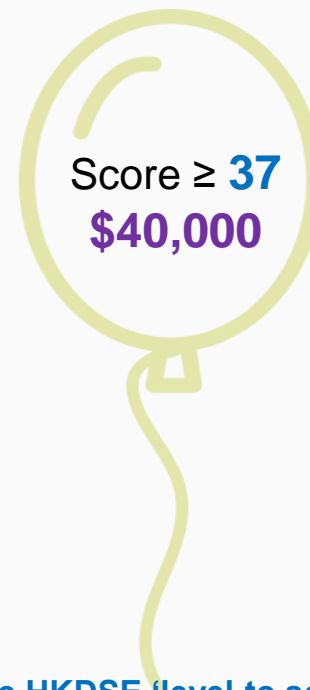
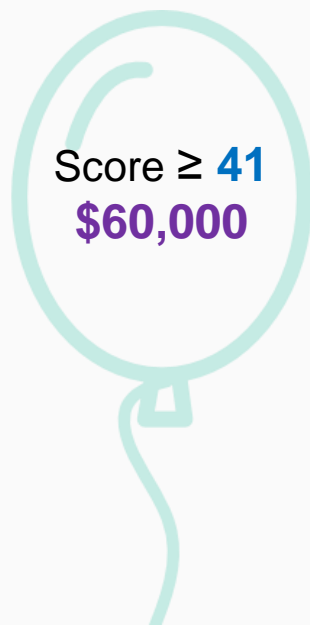
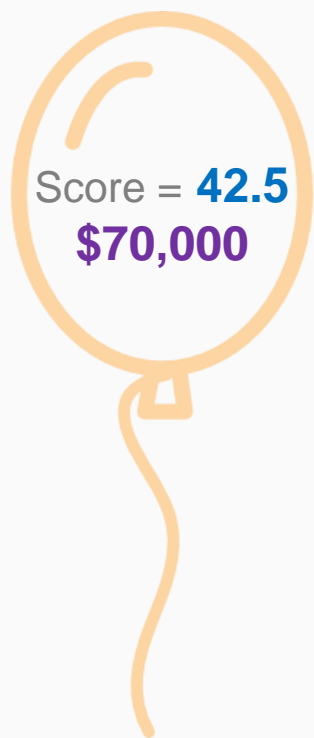


- We accept students with **other qualifications** such as AD, HD, SAT.
- We also accept applications from students who have completed 1st year of AD/HD programme or degree programme from other universities.

Science Entrance Scholarships for 6901 BSc Students

HKDSE Results

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



* The amount is subject to approval

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

Note:

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



Faculty of Science
The University of Hong Kong



Contacts for Further Information



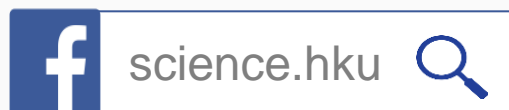
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