



Faculty of Science
The University of Hong Kong



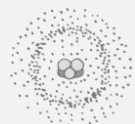
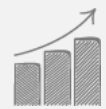
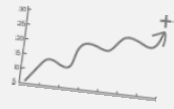
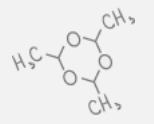
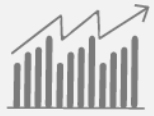
6901 BSc Programme & Young Scientist Scheme (YSS)

6901 Bachelor of Science





Why HKU Science?



Teaching Departments



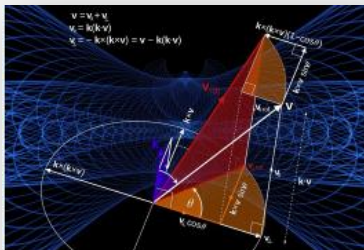
School of Biological
Sciences



Department of
Chemistry



Department of Earth
Sciences



Department of
Mathematics



Department of Physics



Department of
Statistics and Actuarial
Science

80

Glorious Years *of* Home to Science

Nurturing young intellectual minds into global leaders



HKU **SCIENCE**
Oak Anniversary
明德於櫟 格物以理

High University Rankings

QS World University
Rankings 2019

QS Asia University
Rankings 2019



#25

#2

Top-ranked Scientists

(Clarivate Analytics' Essential Science
Indicators 2018)

16% of professoriate staff

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



THE World University
Rankings 2019

THE Asia University
Rankings 2019

#36

#4



International Environment



#1



The Most International University
in the World



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



International collaborations



Global Experience



Committed to nurturing students as **global citizens**



Targeting at **100%** overseas experiences 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



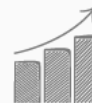
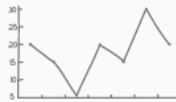
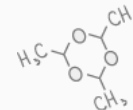
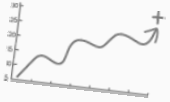
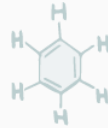
The 6901 BSc Programme

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

SCIENCE
IS
BREWING



A^{++}





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

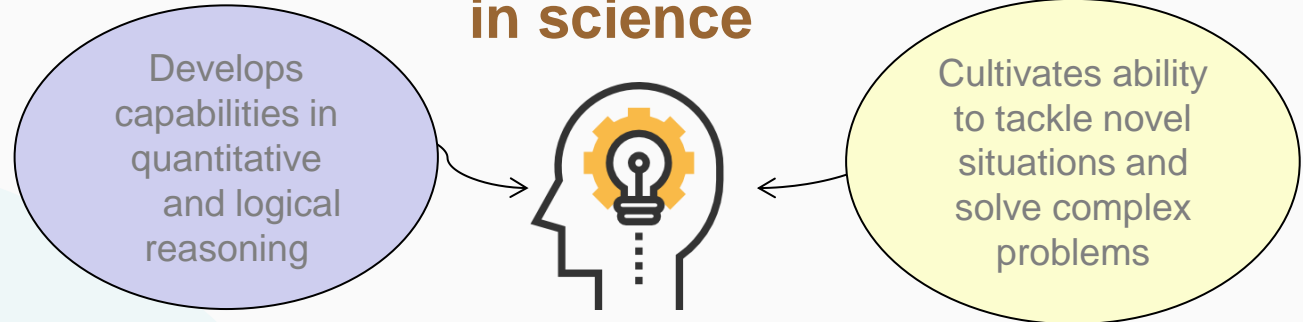
Academic Advising System

- One-on-one academic advice




6901 Bachelor of Science Programme








Comprehensive training in science



A choice of **14 Science Majors**

to suit your interests and career aspirations

-  Biochemistry
-  Biological Sciences
-  Chemistry
-  Decision Analytics
-  Earth System Science
-  Ecology and Biodiversity
-  Environmental Science

-  Food & Nutritional Science
-  Geology
-  Mathematics
-  Molecular Biology & Biotechnology
-  Physics
-  Risk Management
-  Statistics

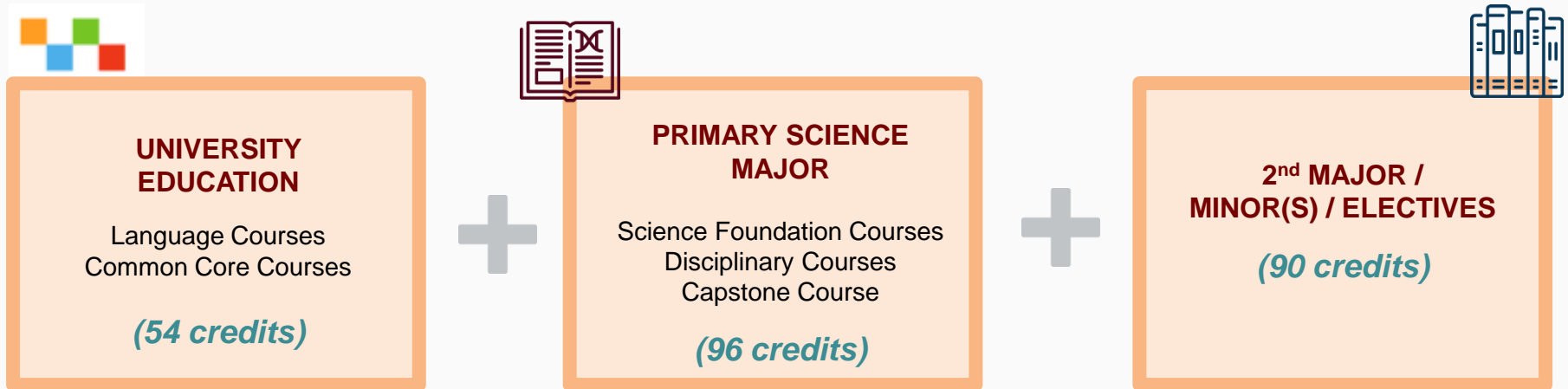


4 Intensive Majors in addition to the **14 regular Majors** for students to choose

~~ More information will be provided below! ~~

6901 BSc Curriculum Structure of Regular 96-credit Majors

Forty 6-credit courses spanning over 4 years of full-time study
(240 Credits)





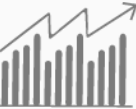
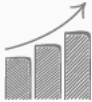
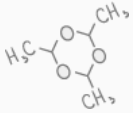
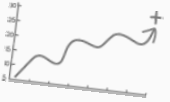
DIVERSE
LEARNING
EXPERIENCES



A^{++}



H H



International Exchange Studies

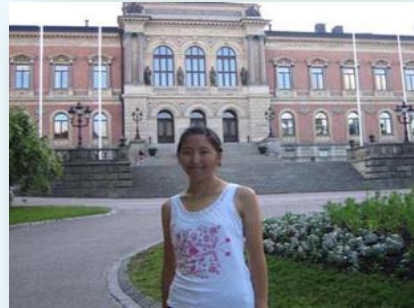
Around **300 partner universities** in more than **40 countries**, including:

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

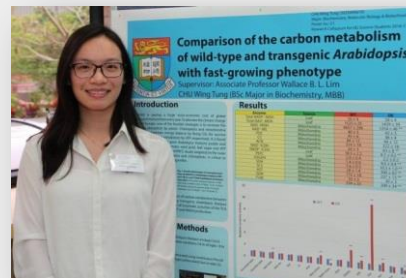
- California Institute of Technology
- Columbia University
- Cornell University
- MIT
- Stanford University
- University of California

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:

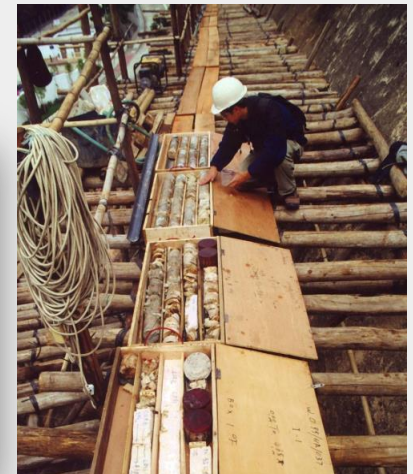
- Australia
- Canada
- Kenya
- Taiwan
- Thailand
- USA



Internships

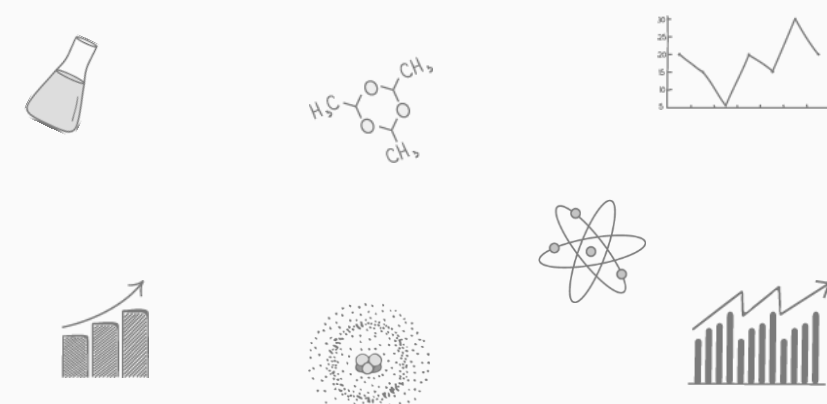
- Enable students to apply knowledge in the workplace
- Prepare students for their careers

More than
**126 internship
opportunities**
were offered in 2017-18



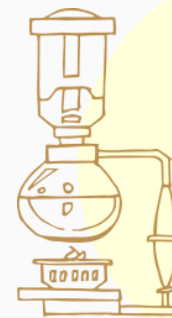


New Initiatives in 6901 BSc



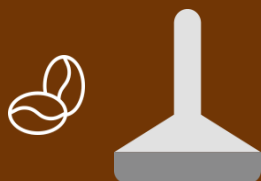
NEW INITIATIVES

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

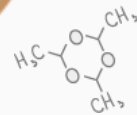


 Articulation Pathways

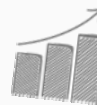
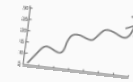




Intensive Majors



Specialisation and intensive training make experts





Specialisation and intensive training make experts



The Faculty has adapted **4 Majors** which were accredited by UK professional bodies into **4 NEW Intensive Majors**, alongside with the regular 96-credit Majors.

4 NEW Intensive 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.

Gain extensive
subject
knowledge

Fulfill the
accreditation
requirements of
various royal
societies in UK

Equip students
who intend to
pursue research
in science

Enjoy an
advantage at
job application



Specialisation and intensive training make experts



A choice of

4 Intensive Majors and **14 Science Majors**















to suit your interests and career aspirations

4 Intensive Majors

-  Chemistry (Intensive)
-  Ecology & Biodiversity Major (Intensive)
-  Geology (Intensive)
-  Molecular Biology & Biotechnology (Intensive)

More Intensive Majors
will be offered
subsequently

14 Regular Majors

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



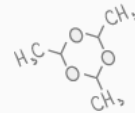
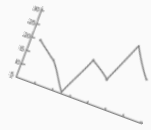
Specialisation and intensive training make experts

Curriculum structure for BSc (Intensive Majors)

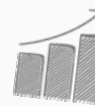
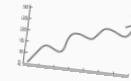
Spanning over 4 years of full-time study

(240 Credits)





Quality assured through recognition by international professional bodies





Quality assured through recognition by international professional bodies

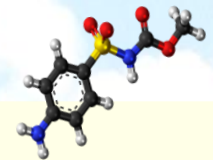
NEW

Royal Society of Biology, UK



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

- gain additional recognition for skills and experience
- learn the latest development in life sciences



Royal Society of Chemistry (RSC), UK

Chemistry Major (Intensive)

- final year students are qualified to apply for RSC membership
- an authorised certificate to recognise students' achievements



The Geological Society, UK

Geology Major (Intensive)

- 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



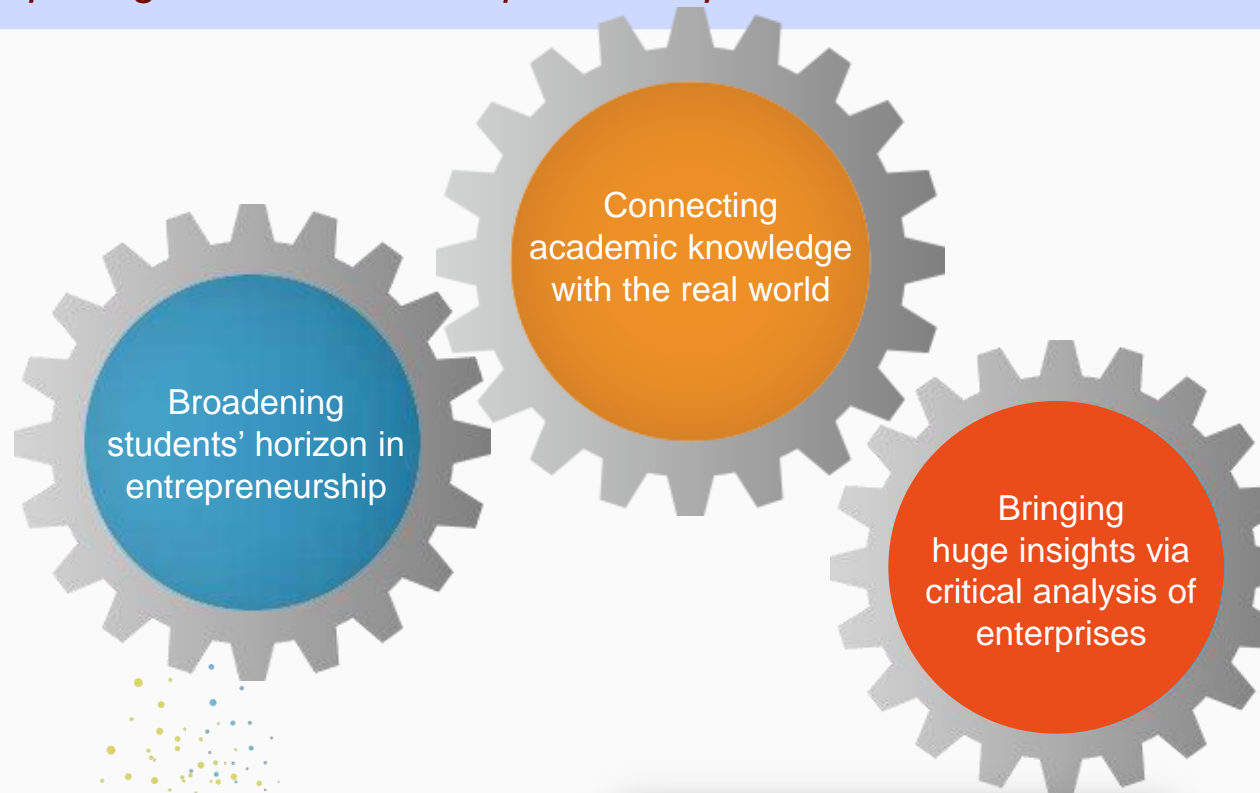

Mentoring offered by entrepreneurs or senior staff in industry/ business



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



New courses tailor-made for this Minor

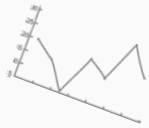
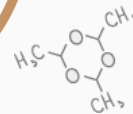
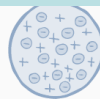
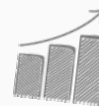


4



Articulation Pathways

Seamless articulation to widely recognised postgraduate programmes in HK and overseas





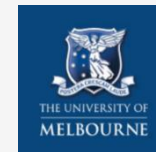
Seamless articulation to widely recognised postgraduate programmes

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.



New articulation pathway for pursuing a career in veterinary



BSc (HKU)

DVM (UoMelb)

BSc I

BSc II

BSc III

(Optional)
BSc IV
(1st sem)

DVM1

DVM2

DVM3

DVM4

DVM degree at
the University
of Melbourne
(UoMelb)

credit
transfer
to HKU
BSc

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
-  **Selected students should achieve a minimum cumulative GPA of 3.45 at the last regular semester at HKU**

Scholarship

to partially cover the tuition fees in the first year of study at UoMelb

Quota

A maximum of 5 places annually

About DVM at UoMelb

QS World University Rankings 2019 by Subject – Veterinary Science

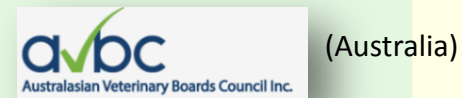
#17

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:



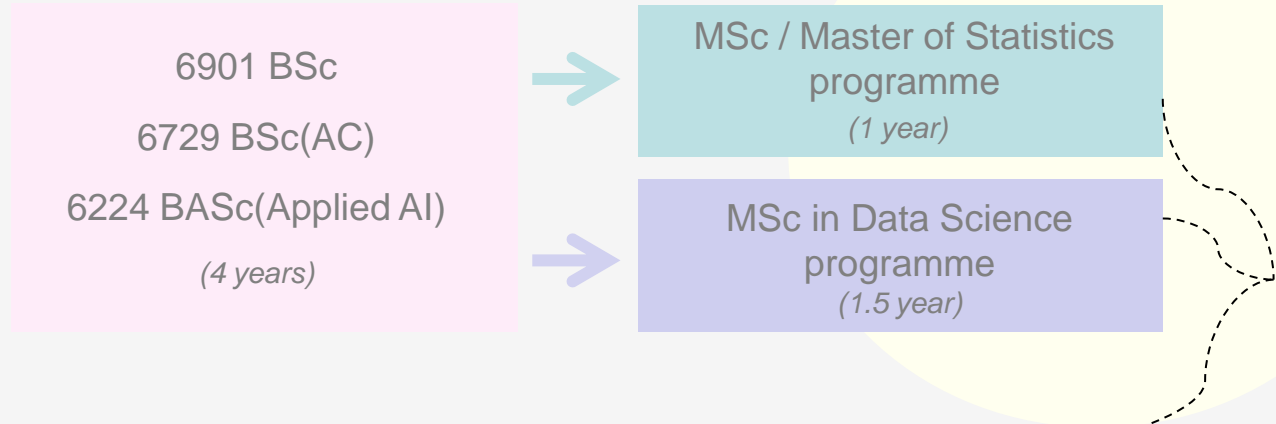
NEW









Seamless articulation to widely recognised postgraduate programmes



To Taught Postgraduate Programmes at HKU Science



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

NEW



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

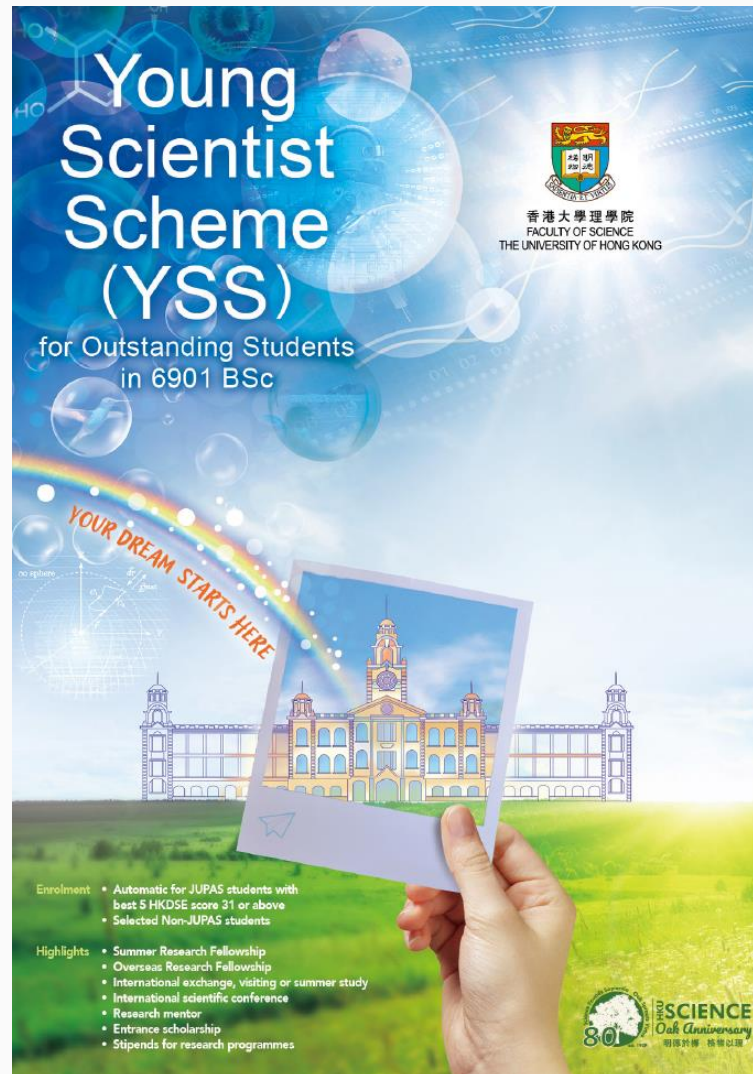
2nd year

Transfer to Northeastern University to complete the remaining studies



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 31 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

80th Anniversary
FACULTY OF SCIENCE
明理致輝 精學益群

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

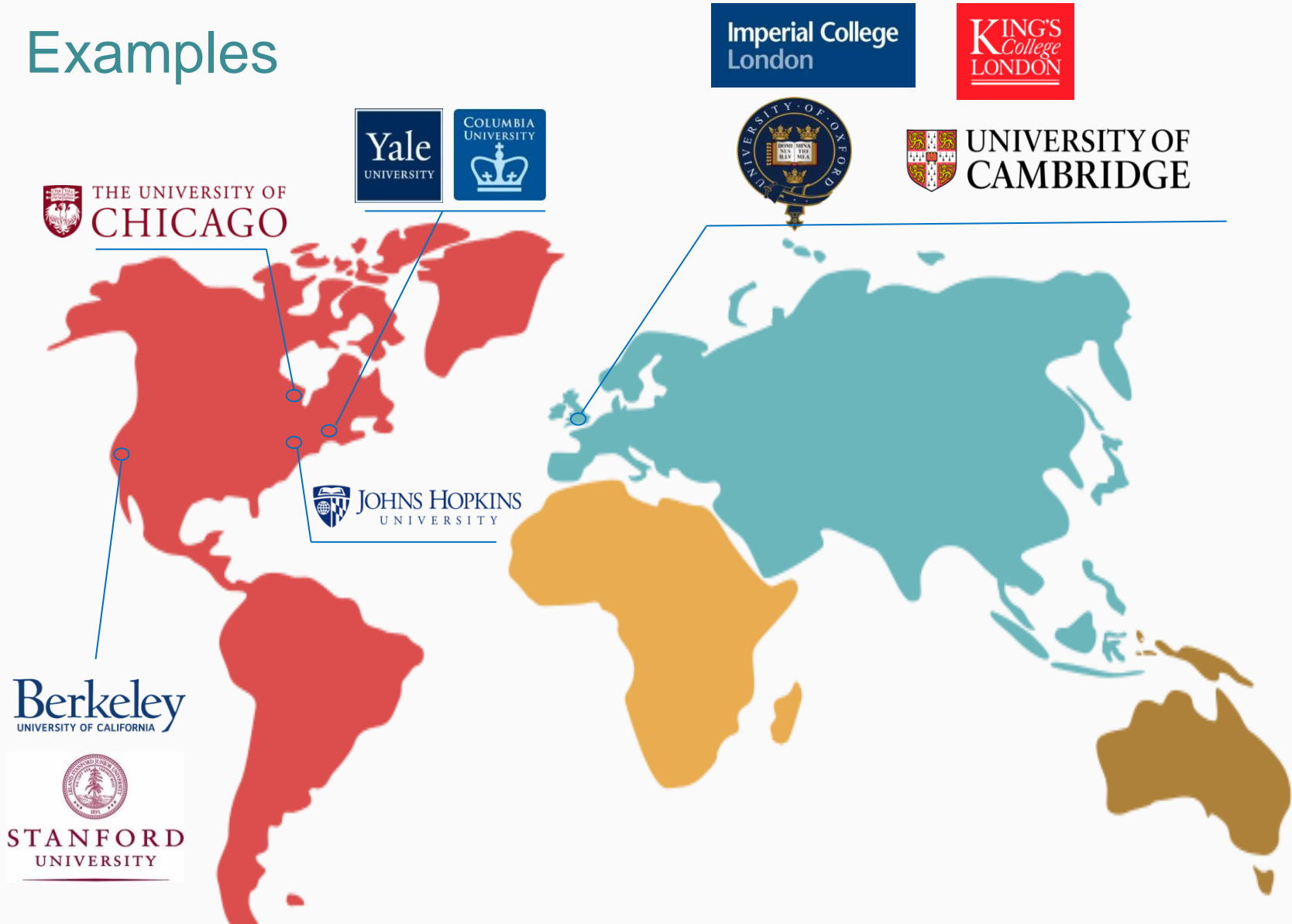
Guidance from
Research Mentor

Summer Research
Fellowship



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

Examples



How to join YSS?

JUPAS



Total score of Best 5 HKDSE
Category A subjects*

≥ 35 scores

- automatically accepted to YSS
- no interview is necessary

In 2018,
33 students
were admitted
to YSS

Non-JUPAS



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

* Including Category A subjects / M1 / M2

HKU's HKDSE 'level to score' conversion introduced in 2019

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

6901 BSc students not admitted to YSS on entry still:

- have a second chance to enroll in YSS at a later stage
- could still compete for SRF, ORF and/or international exchange during their study



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

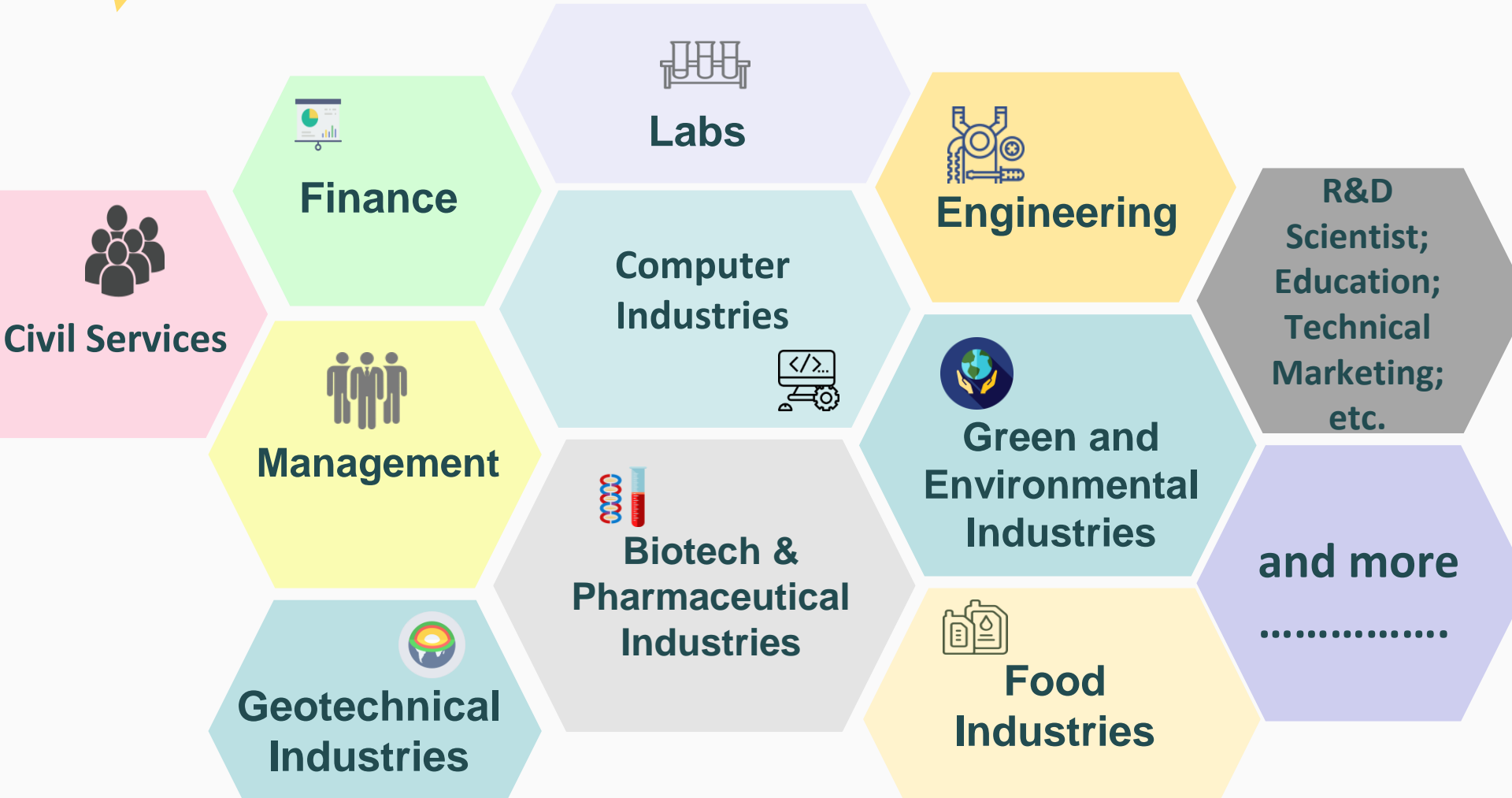
Cambridge	McGill	SLAC
Caltech	Michigan	Stanford
Chicago	MIT	Texas
Columbia	Oxford	UCLA
Harvard	Princeton	UC San Diego
Illinois	SBU	

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

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



University Entrance Requirement (for JUPAS applicants)

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 non-local students)

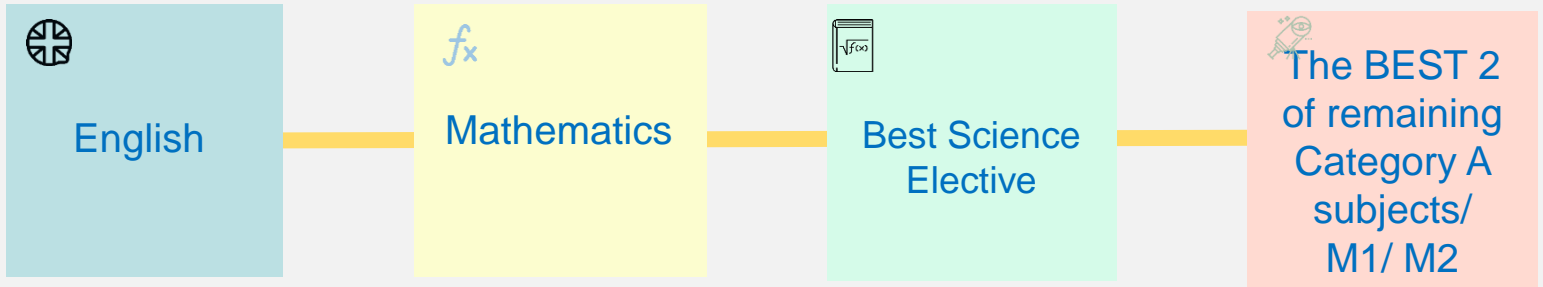
* Elective subjects can be any Category A subject, one of them must be a Science subject

6901

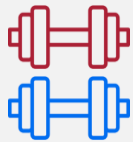
Admissions Formula for 6901 BSc (For JUPAS applicants)

Selection principle: **BEST 5**

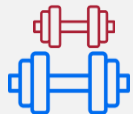
JUPAS



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

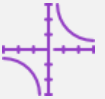
Students holding non HKDSE qualifications are considered on individual basis



2018 JUPAS Admissions Scores

Total score (without weighting) of best 5 HKDSE subjects among the 6901 intakes

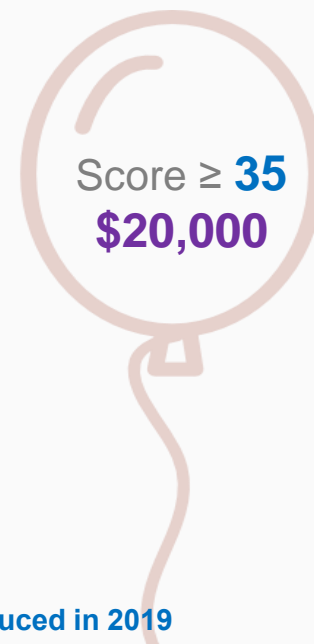
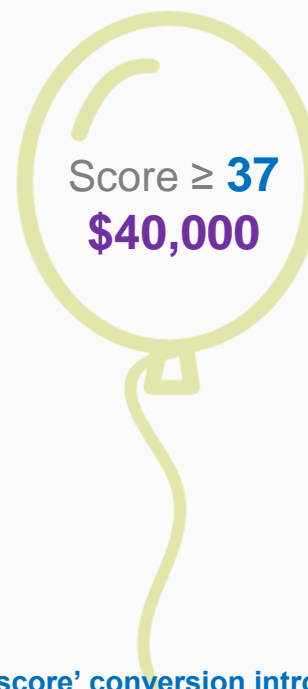
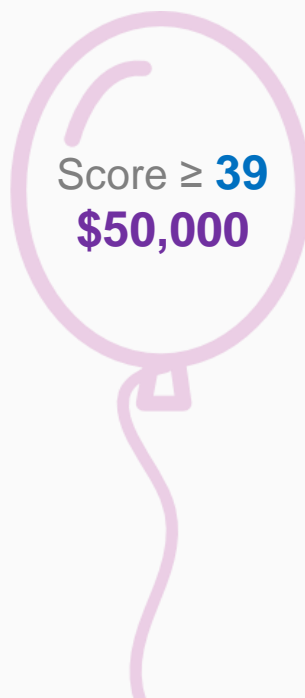
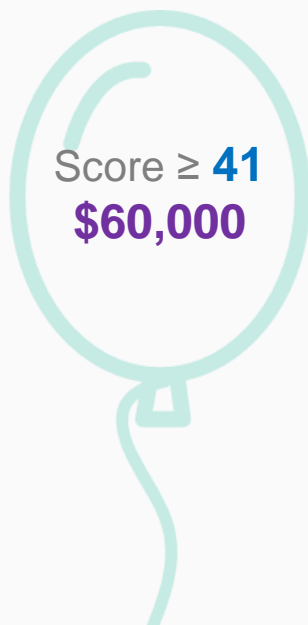
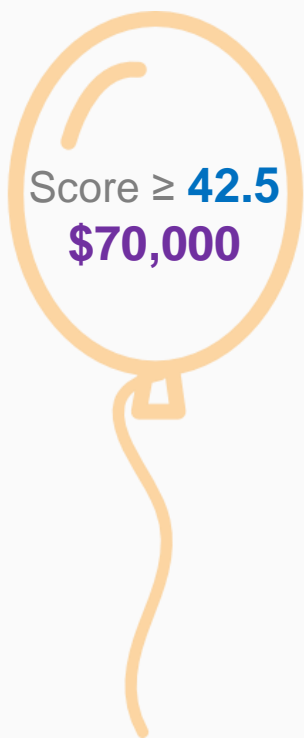
22 ~ 35



Science Entrance Scholarships for 6901 BSc Students

HKDSE Results

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



HKU's HKDSE 'level to score' conversion introduced in 2019

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

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



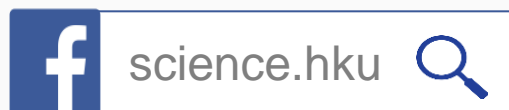
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