HKUer or Cantab?

SPECIAL FEATURE

HKU-Cambridge Undergraduate Recruitment Scheme (Natural Sciences)

Cambridge-Track for Selected YSS Participants in Natural Sciences Disciplines

Why not BOTH?

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

Selected students can follow either of the paths below and attain degrees from both HKU & Cambridge in 4-5 years:

2 years at HKU + 2 + 1 years at Cambridge = BSc(HKU) + BA(Cantab) + MSci(Cantab) + MA(Cantab)*

or

2 years at HKU + 2 years at Cambridge = BSc(HKU) + BA(Cantab) + MA(Cantab)*

**The MA is conferred by right on holders of the BA degree at Cambridge, upon application after certain years' seniority as members of Cambridge.*

THE TRACK

A joint recruitment scheme that allows selected YSS students in 6901 BSc programme to pursue studies in two renowned universities

Allows students to study abroad and experience life and culture overseas

Nurtures future science professionals to develop innovative solutions for global challenges

Ample learning opportunities in YSS:

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

Curriculum

Selected students will study a broad range of Science courses in Years 1 and 2, in order to best prepare themselves for their Cambridge studies.

		Students taking Master's degree at Cambridge	Students *NOT* taking Master's degree at Cambridge
CREDITS SUMMARY AT HKU	4 Common Core Courses + 2 English language enhancement requirements + 1 Chinese language enhancement requirement	42	42
	Disciplinary courses in the BSc Major	48	48
	3-4 Mathematics courses to align with Cambridge#	18 or 24	18 or 24
	Free electives#	36 or 30	36 or 30
	Research internships	0	24
	Sub-total	144	168
CREDITS TRANSFERRED FROM CAMBRIDGE	2 Years of undergraduate study	120	120
	1 Year of taught postgraduate study	24	nil
	Sub-total	144	120
	Total	288	

Remarks: #The total number of credits of Mathematics courses plus free electives is 54.

Science in Cambridge pioneering in the world:

- **#1** *Life Sciences (THE, 2020)*
- **#3** *Physical Sciences (THE, 2020)*
- **#3** *Life Sciences & Medicine (QS, 2020)*
- **#3** *Earth & Marine Sciences (QS, 2020)*
- **#4** *Natural Sciences (QS, 2020)*
- **#3** *Chemistry (QS, 2020)*
- **#4** *Physics & Astronomy (QS, 2020)*

Study Path for YSS Students in the Cambridge Scheme (2+2+1)

HKU

YEAR 1 → YEAR 2

HKU Undergraduate Degree

Available for students in the 6901 BSc Programme majoring in:

- Biochemistry
- Biological Sciences
- Chemistry
- Earth System Science
- Ecology & Biodiversity
- Environmental Science
- Geology
- Molecular Biology & Biotechnology
- Physics

CAMBRIDGE

YEAR 3 → YEAR 4 → YEAR 5

Cambridge Undergraduate Degree

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

- Astrophysics
- Biochemistry
- Chemistry
- Earth Sciences
- Genetics
- Materials Science
- Pathology
- Physics
- Physiology, Development & Neuroscience
- Plant Sciences
- Zoology

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

Remarks:
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 more 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.*

How to Enroll in the Cambridge-track

Requirements for JUPAS students:

JUPAS Band A applicants of 6901 BSc Programme will be invited to indicate their interest in the Cambridge-track by January 2021. Shortlisted applicants will be invited to an admissions test and an interview in May/June 2021.

Extended Modules 1 or 2 in Mathematics (M1/M2), and level 5 or above in English are required. Students who perform well in the interview and achieve a HKDSE score of 35 or above in their best 5 HKDSE subjects (Category A subjects, M1/M2 must be included)# will be placed on the track.

#The HKDSE 'level to score' conversion table:

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

Requirements for non-JUPAS students:

Non-JUPAS applicants will be considered on a case-by-case basis. Higher level Mathematics is required for IB students. For GCEAL students, Mathematics and Further Mathematics are required. Excellent results in Mathematics are required for students with other qualifications. Selected applicants will be invited to enroll in YSS/Cambridge-track. No application is necessary.

Admissions of Students on the Cambridge-track to Cambridge

Students on the Track will be assessed by Cambridge academics in their first semester of study through admissions test and interview.

After the interview, students selected will be given a conditional offer. They will study a broad range of Science courses in Year 1 and Year 2, to best equip themselves for their studies at Cambridge. Upon satisfying the requirements as stipulated in the conditional offer letter by the end of the student's second year of studies, he or she will be given a firm offer to study at Cambridge.

As the Cambridge-track is a competitive scheme for high calibre students with excellent academic credentials, it is expected that the number of students selected for each cohort will not normally exceed 60% of the YSS population.

Cambridge-track at YSS

qrgo.page.link/C8cec

Natural Sciences Tripos at Cambridge

qrgo.page.link/HnmPR

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

Young Scientist Scheme (YSS)

for Outstanding Students in 6901 BSc

HKU-Cambridge Undergraduate Recruitment Scheme (Natural Sciences)

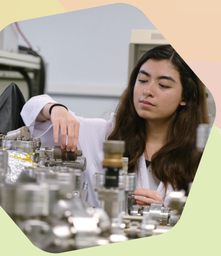
Cambridge-Track for Selected YSS Participants in Natural Sciences Disciplines

Entrance
- 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

What is Young Scientist Scheme (YSS) all about?

As a strong and research-oriented faculty, the Faculty of Science is committed to providing our students with the best science education and incubating future scientists. YSS provides outstanding students with ample early research experiences in 6901 BSc Programme.



YEAR 1
Guidance from Research Mentor
Summer Research Fellowship

YEAR 2
2nd Summer Research Fellowship or Overseas Research Fellowship

YEAR 3
International Exchange, Visiting or Summer Study

YEAR 4
Final Year Project
International Conference
Frontier of Science Honours Seminar

Students in YSS are guaranteed with:

- Enrolment in our flagship **Summer Research Fellowship (SRF) Scheme** to conduct research under the supervision of our professors in the first summer
- A further **SRF** or **Overseas Research Fellowship (ORF) Scheme** in a foreign institution in subsequent years
- **International exchange, visiting or summer study**
- Attendance in **international scientific conference** on frontier research
- Individual guidance from a **research mentor** from the start of the undergraduate study
- Enrolment in our **Frontiers of Science Honours Seminar** to learn how our award-winning professors solve their research problems
- **Stipends** for research programmes
- An **entrance scholarship** ranging from HKD 20,000 to HKD 70,000#

 # For JUPAS students with a total score of 35 or above in their best 5 HKDSE subjects (Category A subjects / M1 / M2). Scholarship for Non-JUPAS students are considered on a case-by-case basis.

A wide spectrum of scientific research areas:

- Chemistry
- Earth and Planetary Science
- Ecology and Biodiversity
- Mathematical and Statistical Science
- Molecular and Cell Biology
- Physics and Astronomy

Examples of institutions for Overseas Research Fellowship

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

Europe
- CERN
- University of Cambridge
- University College London

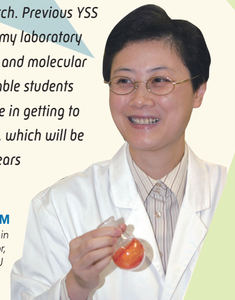
Examples of universities for international exchange, visiting or summer study

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

Europe
- University of Cambridge
- Imperial College London
- King's College London
- University of Oxford

What our YSS research mentor says:

"The YSS provides a great opportunity for undergraduate students to have hands-on experience and training in research. Previous YSS students have enjoyed working in my laboratory on projects related to luminescence and molecular functional materials. The YSS will enable students to have first-hand and early experience in getting to know what frontier research is all about, which will be extremely rewarding to them for the years to come."



Professor Vivian W W YAM
Philip Wong Wilson Wong Professor in Chemistry and Energy & Chair Professor, Department of Chemistry, HKU

How to join YSS:

JUPAS students admitted to 6901 BSc programme with a total score of 35 or above in their best 5 HKDSE subjects (Category A subjects / M1 / M2) are automatically accepted to YSS. No interview is required.

The HKDSE 'level to score'

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

Selected Non-JUPAS applicants will be invited to enrol in YSS. No application is necessary.

17 YSS participants have gone on overseas exchange study at world-class institutes in the academic year 2019–20.

Eye-opening Exchange Study Opportunities

"I was very fortunate to join the full-year Yale Visiting International Student Programme via the Young Scientist Scheme.

Yale, as a world-class institution, provided numerous academic and non-academic opportunities and challenges. My learning experience at HKU and of the constant support from the Faculty equipped me and encouraged me to continuously push myself outside my comfort zone. I took non-science courses out of pure interest, talked with people from diverse cultural backgrounds, and participated in sports and events that I never thought about joining before.

Every new decision I made prompted me to understand myself deeper, and every piece of new information I learnt enabled me to build my future better."

Lily Zhiyi LI
Year 3 BSc student (Double major in Statistics & Finance)
Visiting student at Yale University in 2019-20

Kewell Nap Hei LAW
Year 4 BSc student (Major in Mathematics and minor in Physics)
Exchange study at the Australian National University (ANU) in 2019-20

"Through YSS, I went to ANU for a semester exchange. It was a genuinely unusual exchange experience.

Everything switched to online in the middle of the semester and that indeed incurred more unforeseeable challenges, including drastic change in assessment methods. Being alone overseas drove me to be independent enough to tackle obstacles.

Despite the challenging situation, I still got to meet people from all around the world, to learn about different cultures and to experience a variety of teaching styles. I was able to walk around to appreciate the scenery and the wildlife of the city. Canberra is a beautiful place, and I would like to visit Australia again."

Engaging in Research Early

"The SRF scheme was a delightful experience to me. Although there were some difficulties encountered, it helped me appreciate and get to know how research is conducted.

I realised that research is not merely in the lab; a lot of reading has to be done outside the lab. Problems may appear unexpectedly during research – experimental procedures and results may not always go the way as it was planned or hypothesised. It is therefore essential to learn to adapt to these problems and look for possible explanations, and to seek for improvement in future experiments.

I was also glad to meet very kind and helpful people in the lab, to acquire technical and time-management skills, making the experience amazing.

By having spent more than two months in the lab, I found that I enjoy working in the lab, and that pursuing research in the future is something I would highly consider. The experience helped me to explore more possibilities of my future."

FELICIANNA
Year 4 BSc student (Major in Food & Nutritional Science and minor in Molecular Biology & Biotechnology)
Summer Research Fellowship (SRF) participant in School of Biological Sciences

3917 2683 www.scifac.hku.hk/ science@hku.hk @hku.science @hku_science @hku_science