



Learn from the Best Minds • Be Inspired by Our Science Masters

6688

# Bachelor of Science (BSc) & Master of Research (MRes)

Incubating the next generation of scientists

2025 - 26 (September 2025 intake)

Double degree programme

## Is the Programme for You



We understand the learning pace and needs of highly able students might be different – they are quick learners who can usually accomplish more than expected, and therefore a standard pedagogical routine might not be an ideal option for them.

#### This Elite Programme:

Provides a fast-track of study for talented students: completing 2 degrees at an accelerated pace



## Why this **Programme**



Allows research-aspired students to immerse themselves in an authentic research environment and learn from researchers with diverse backgrounds

Caters specifically to the needs of science-inclined students, with more learning opportunities, intensive training and inspirations



Incubates the next generation of dynamic scientists who are able to translate scientific knowledge into practical applications with far- and wide-reaching impacts



#### **Eminent Subject Rankings**





#45
Life Sciences











## Top-notch Scientists in the Faculty

20.8%

of the professoriate staff in our Science departments are classified Top 1% scholars in average over the past decade (Clarivate Analytics' Essential Science Indicators)

## International Environment

About **40%** of academic staff in the Faculty are from overseas

#### World Rankings of HKU



#6

Most international universities in the world 2024

#6

Asia University Rankings 2024

#35

World University Rankings 2025



#2

Asia University Rankings 2025

**#17** 

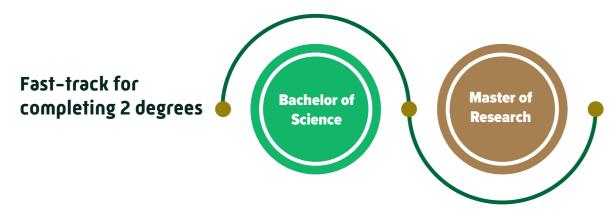
World University Rankings 2025

**#10** 

World Graduate Employability
Ranking 2022



#### WHAT the Programme Covers



Remarks: Students in the programme have to maintain a high CGPA in order to remain in this double degree programme or else they have to switch to the 6901 BSc programme



Grand Masters through special tutorials



Masters as academic advisers

#### Catering the needs of elite students



disciplinary-based intensive study for researchaspired students



## ample opportunities available in our flagship Young Scientist Scheme (YSS) including

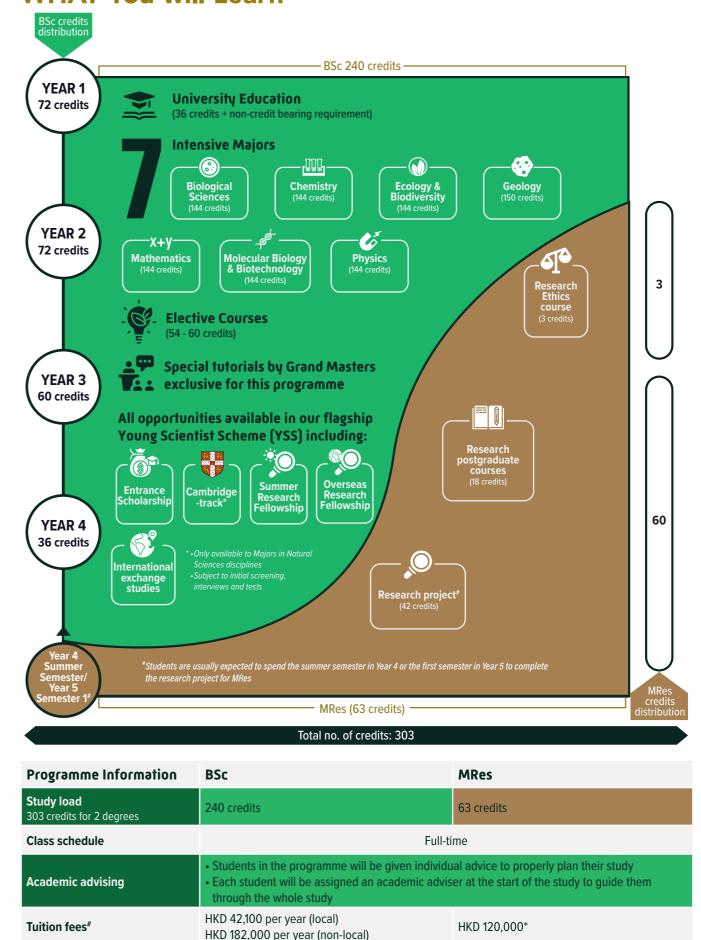
- Summer Research Fellowship Entrance Scholarship
- Overseas Research Fellowship Exchange Study
- A chance to join the Cambridge-track\*
- \* Only available to Majors in Natural Sciences disciplines
- Subject to initial screening, interviews and tests
- Candidates admitted to the Track will go through further screening by Cambridge

#### Research-oriented



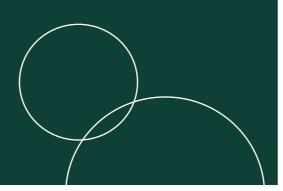
Research postgraduate courses and projects to enhance the students' frontier scientific knowledge and research skills

#### WHAT You will Learn



<sup>\*</sup>Tuition fee for the MRes programme: to be paid from Year 3 in 4 installments; scholarships will be provided to cover at least 50% of the tuition fee of the MRes programme \*Subject to review

## **WHERE** this Programme will Lead You to





#### **Professional recognition**

Some of the Intensive Majors fulfil the accreditation requirements of various societies in the UK



**Biological Sciences (Intensive) Ecology & Biodiversity (Intensive) Molecular Biology & Biotechnology (Intensive)** 







**Geology (Intensive)** 

**Chemistry (Intensive)** 

• Provides an accelerated route to achieve the professional qualification with completion of the programme and fulfilment of specific project requirement



#### Career development & network

- Nurtures students who intend to pursue research in science
- After completing the BSc and the MRes Programme, students will be fully equipped to further pursue graduate studies in prominent university overseas or in HKU
- Builds a consortium of young researchers for cross fertilisation of innovative ideas and facilitates possible multidisciplinary projects



#### Transferable skills

- Provides students with extensive subject knowledge and specialised training
- Nurtures a scientifically literate population to formulate solutions for research challenges

#### WHO should Join this Programme

#### Students who would like to:

be future

masters of

science





obtain a diversity of experience by learning from the Grand Masters of the Faculty of Science



and master level

studies

degrees at an accelerated pace conduct research during both their undergraduate



complete 2

**Hear from** 

**Our Students** 

enjoy all privileges YSS has to offer



## Jerry NG

BSc&MRes Year 4 student Summer Research Fellowship (SRF) participant

'HKU Science is the only Faculty offering an intensive major programme in Ecology & Biodiversity in Hong Kong, and this is why I am here! I am eager to learn directly from the Grand Masters and Masters — a precious opportunity exclusive to students of this Science Master Class programme, so that I can further enrich my knowledge and develop my practical skills in Ecology & Biodiversity. I hope this programme can equip me to conduct research about habitat studies of succulent plants in Mexico, South Africa and Madagascar in the future.'

> Chester GUO BSc&MRes Year 3 student SRF participant

'During my first two years at HKU, I assisted with research on ants and butterflies. After joining the Global Change and Tropical Conservation lab, I finished my SRF on spiders and have been working as a student Research Assistant on a light pollution project in the lab. Through all three research experiences, my understanding of ecology and biodiversity deepened, which made me one step closer to my dream to be a researcher. Besides, by learning from the Grand Masters in a series of master tutorials, I acquired fascinating transdisciplinary knowledge and methods of conducting research. I hope one day I can devote myself to ecology research and protect the beautiful yet delicate natural world."

### **Your Programme Experts**

#### We have renowned scientists including:

- Members of Chinese Academy of Sciences, Hong Kong Academy of Sciences, and Hong Kong Young Academy of Sciences
- International Members of National Academy of Sciences USA and a Foreign Member of Academia Europaea
- Awardees of International/National Awards/Prizes
- · A number of highly cited scientists

#### **Get to know our Grand Masters**



**Professor Chi Ming CHE**Zhou Guangzhao Professor in Natural Sciences
Chair Professor of Department of Chemistry

As an Elected Member of the Chinese Academy of Sciences, the first Hongkonger to receive a First-class Prize of the State Natural Science Award and recipient of numerous awards in international academic arena including International Member of the US National Academy of Sciences, Professor Che's pioneering study on synthetic chemistry shapes the culture of local research community. Steering the direction of profound research like Laboratory for Synthetic Chemistry & Chemical Biology and State Key Laboratory of Synthetic Chemistry, his wisdom can definitely inspire one's heart.



**Professor Hongjie DAI**Chair Professor of Department of Chemistry

Professor Dai's research spans chemistry, physics, and materials and biomedical sciences, leading to materials with properties useful in electronics, energy storage and biomedicine. Recent developments include near-infrared-II fluorescence imaging, ultra-sensitive diagnostic assays, a fast-charging aluminum battery, alkali metal/CI2 batteries and inexpensive electrocatalysts that split water into oxygen and hydrogen fuels. Among many awards, Professor Dai has been recognised with the ACS Pure Chemistry Award, APS McGroddy Prize for New Materials, Julius Springer Prize for Applied Physics and Materials Research Society Mid-Career Award. He has been elected to the American Academy of Arts and Sciences, National Academy of Sciences (NAS), National Academy of Medicine (NAM) and Foreign Member of Chinese Academy of Sciences.

Skills alone would not make one succeed. It is the attitude, visions and efforts that set one's direction. Learn from the wise and broaden your horizon.



**Professor Ngaiming MOK**Edmund and Peggy Tse Professor of Mathematics
Director of Institute of Mathematical Research
Chair Professor of Department of Mathematics

As a top-notch mathematician who has resolved many classic math problems, Professor Mok has been the leading figure and the brain of HKU Institute of Mathematical Research for years. Among his recent professional accolades, Member of the Chinese Academy of Sciences, State Natural Science Award, Member of the Hong Kong Academy of Sciences, Future Science Prize, Tan Kah Kee Science Award and Chern Prize are some of the representative ones. He appreciates the aesthetics of mathematics, which young intellectuals will find his 'mathematics-as-life' attitude enlightening.



Professor Alice Sze Tsai WONG
Associate Vice-President (Research)
Chair Professor of School of Biological Sciences

Professor Wong is a knowledgeable biologist who leads a team of scientists studying cell adhesion and signal transduction in cancer. She is a recipient of the RGC Senior Research Fellowship and also the Croucher Foundation Senior Research Fellowship. Using new techniques and innovative methodologies, her recent research endeavour to unravel the precise mechanism of cell adhesion dynamics pertinent to cancer development and metastasis, aiming to provide insights for the development of new therapies for highly malignant and rapidly lethal human cancers.



**Professor Vivian Wing Wah YAM**Philip Wong Wilson Wong Professor in Chemistry and Energy
Chair Professor of Department of Chemistry

Not only can we learn from Professor Yam of her innovative and frontier research, her resilience and values also inspire us on how to stay focused and insist on quality and excellence. Despite the many recognitions she has received, such as State Natural Science Award, Elected Member of Chinese Academy of Sciences, International Member of the US National Academy of Sciences, Laureate of L'Oréal-UNESCO Awards For Women in Science, Bailar Medal, and Josef Michl American Chemical Society (ACS) Award in Photochemistry, etc., she remains committed in pursuing and passing on knowledge and does not let go of chances to inculcate values to the young ones. Professor Yam is also the President of The International Organization for Chemical Sciences in Development (IOCD).

## **Your Programme Experts**



Professor Wang YAO
Chair Professor of Department of Physics

Professor Yao is a condensed matter physicist. His current research interest lies in 2D materials, and has played a decisive role in creating an important new research direction — valley optoelectronics, which aims to exploit valley, a quantum degree of freedom of electron, in future optoelectronic devices. He is a New Cornerstone Investigator, fellow of American Physical Society and Optica. He has also received RGS Senior Research Fellowship, Croucher Senior Research Fellowship, Tencent Xplorer Prize, Huang Kun Prize, Nishina Asia Award, and has been named by Clarivate Analytics as 'Highly Cited Researchers' since 2018.



Professor Shuang ZHANG
Chair Professor of Department of Physics

Professor Zhang specialises in photonics, particularly in the area of metamaterials. His notable contributions include the first demonstration of geometric phase for harmonic generations, the pioneering of optical negative index materials, and the implementation of topological photonics using metamaterials. He has been recognised as a 'Highly Cited Researcher' by Clarivate Analytics from 2018 to 2023 and is a Fellow of the American Physical Society and Optica. Professor Zhang has received prestigious awards, including the New Cornerstone Investigator Program, Royal Society Research Merit Awards, and IUPAP Young Scientist in Optics.



Professor Guochun ZHAO
Chair Professor of Department of Earth Sciences

Professor Zhao has a clear mind in the face of challenges on his research of metamorphic petrology, Precambrian geology and supercontinents. His perseverance makes him the holder of many prestigious honours — Member of Chinese Academy of Sciences, National Natural Science Award (First-class, co-winner), State Natural Science Award (Second-class, co-winner), HKU Distinguished Research Achievement Award, and named by Clarivate Analytics as 'Highly Cited Researcher' for a decade in a row.



## **ADMISSIONS Requirements & Applications**

#### **JUPAS Applicants**

- Students in local secondary schools taking the Hong Kong Diploma of Secondary Education Examination (HKDSE) should apply through JUPAS.
- Minimum requirements:

English Language	CHI Chinese Language	(x+y)= Mathematics	Citizenship and Social Development	Elective Subjects
Level 3	Level 3	Level 4	Attained	Level 3 in 2 Sciences# or Level 3 in 1 Science# & M1/M2

<sup>\*</sup>Science elective subjects: Biology, Chemistry or Physics

#### Non-JUPAS Applicants

Non-JUPAS applicants will be considered on a case-by-case basis. In general, excellent results in Mathematics and Science subjects are required.





Programme website

HKU Undergraduate Admissions







