

Learn from the Best Minds Be Inspired by our Science Masters

Incubating the next generation of scientists

New Double Degree Programme Bachelor of Science & Master of Research

6688 SCIENCE MASTER CLASS

Bachelor of Science

Master of Research

SCIENCE CREATES KNOWLEDGE

Is the Programme for You

Why this Programme



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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, which a standard pedagogical routine might not be an ideal option for them.

Professor Matthew Evans Dean of Science and Professor of Ecology

This elite programme:

- Provides a fast-track of study for talented students: completing 2 degrees at an accelerated pace
- caters specifically to the needs of science-inclined students, with more learning opportunities, intensive training and inspirations
- allows research-aspired students to immerse themselves in an authentic research environment and learn from researchers from diverse backgrounds
- incubates the next generation of dynamic scientists who are able to translate scientific knowledge into practical applications with far- and wide-reaching impacts

World-class Rankings of HKU WORLD UNIVERSITY RANKINGS **Times Higher** Quacquarelli Education (THE) Symonds (QS) **#2** Most international universities in the world 2020 **#25** World University Rankings 2020 **#35** World University Rankings 2020 **#3** Asia University Rankings 2020 #4 Asia University Rankings 2020 **Eminent Subject Rankings** WORLD UNIVERSITY RANKINGS QS World University Rankings by Subject 2020 **#51** Biological Sciences #42 Chemistry #51 Environmental Sciences **#50** Earth & Marine Sciences **#51** Materials Science #43 Mathematics **#51** Physics & Astronomy **#50** Statistics & Operational Research **Top-notch Scientists in the Faculty** Clarivate Analytics' Essential Science Indicators 2020 **16.5%** of our professoriate staff are the world's Top 1% Highly Cited Researchers

International Environment

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

What the Programme Covers

Fast-track for completing 2 degrees Bachelor of Science 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 Learning from Science Masters Grand Masters through special tutorials Catering the needs of elite students disciplinary-based intensive study for research-aspired students **Research-oriented** knowledge and research skills



What You will Learn



Programme Information	BSc	MRes
Study load 303 credits for 2 degrees	240 credits	63 credits
Class schedule	Full-time	
Academic advising	 Students in the programme will be given proper advice in planning their study Each student will be assigned an academic adviser at the start of the study to guide them through the whole study 	
Tuition fees	HKD 42,100 per year (local) HKD 171,000 per year (non-local)	HKD 120.000*

*Scholarships will be provided to cover at least 50% of the tuition fee of the MRes programme

Where this Programme will lead you to



Career development & network

- Nurtures students who intend to pursue research in science
- After completing the BSc and the MRes, 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 and study in the Faculty of Science
- take courses across different science disciplines
- go onto higher degrees either in HKU or elsewhere
- obtain a diversity of experience by learning from the Grand Masters of the Faculty of Science rather than simply focusing entirely on one discipline
- conduct research and are interested in doing so during both their undergraduate and master level studies
- complete 2 degrees at an accelerated pace

ROYAL SOCIETY ACCREDITED DEGREE

Chemistry (Intensive)



Your Programme Experts

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.

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 Foreign Member of Academia Europaea;
- awardees of International/National Awards/Prizes; and
- a number of highly cited scientists

Get to know our Grand Masters:



Professor Chi Ming CHE

Head and Chair Professor of Department of Chemistry

As an Elected Member of the Chinese Academy of Sciences, the first Hongkonger to receive a Firstclass Prize of the State Natural Science Award and recipient of numerous awards in international academic arena including Foreign Associate 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 Ngai Ming MOK

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





Professor Michael NG

Director of Research Division for Mathematical and Statistical <u>Science</u> Chair Professor of Department of Mathematics

Professor Ng's research interests lie in artificial intelligence, data science and scientific computing, which are crucial for shaping the future of human life. He is a recipient of the Feng Kang Prize of Scientific Computing. Setting his vision far and wide, he is the pilot for the development of research in Mathematical and Statistical Science in the Faculty. Nonetheless, Professor Ng is no ordinary scholar he is among the inspiring ones who would share thoughts and experiences beyond academic knowledge.

Professor Sun is a forerunner in geochemistry who strives to utilise chemical and isotope data to solve intriguing scientific problems in earth sciences. His contributions earn him prestigious honours including the National Natural Science Award (First-class, co-winner) and State Natural Science Award (Secondclass, co-winner). As the Hong Kong Director of the Joint Chemical Geodynamics Laboratory with Chinese Academy of Sciences, his experiences in fostering collaborations across territories are definitely inspiring. Professor Sun has also been named by Clarivate Analytics as "Highly Cited Researcher" for 6 years in a row.



Professor Alice Sze Tsai WONG

Associate Dean of Science (Teaching & Learning) 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 Croucher Foundation Senior Research Fellowship. While her work provides important insights into the nature of ovarian carcinogenesis and informs the best practices of identifying new targets in cancer diagnosis and therapy, her experiences at laboratory are equally inspiring.

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 guality and excellence. Despite the many recognitions she has received, such as State Natural Science Award, Elected Member of Chinese Academy of Sciences and Foreign Associate of the US National Academy of Sciences, 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 Wang YAO

Professor Yao is a condensed matter physicist. He has been named by Clarivate Analytics in the list of "Highly Cited Researchers" among the world's eminent researchers in 2018 and 2019. 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 an Elected Fellow of American Physical Society, and Founding Member of Hong Kong Young Academy of 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, cowinner), State Natural Science Award (Second-class, co-winner), and named by Clarivate Analytics as "Highly Cited Researcher" for 6 years in a row.

Professor Min SUN Professor of Department of Earth Sciences



Professor Guochun ZHAO *Chair Professor of Department of Earth Sciences*



Admissions Requirements & Applications

JUPAS Applicants

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



[†]Candidates with level 4 in English Language but excellent results in Science subjects/ Mathematics will be exceptionally considered on a case-by-case basis [#]Science elective subjects: Biology, Chemistry, Physics, Combined Science and Integrated Science

Non-JUPAS Applicants

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.

Quota: 15-20

Remarks

This is a new programme for offer from September 2021 and there may still be fine tuning to the programme. Prospective students will be informed of any updates of the programme in due course.

Further Information

Programme link:





HKU Undergraduate Admissions

Useful Information:

