

Press release

For immediate release

HKU Launches New Programme MSc in the field of Space Science Establishing opportunities for space lovers to pursue space exploration and employment goals

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Modern Space Science is a highly multi-disciplinary field that encompasses a broad range of sub-disciplines, from astrophysics, to aerospace engineering, electronics, remote sensing, and space exploration. In light of the massive expansion and shift in focus to major science missions in space in the Mainland, engagement of talents in these projects will be increasing in Hong Kong, Macau and the Greater Bay Area (GBA). To answer the call for experts in the rapidly expanding space industries, the Department of Physics at The University of Hong Kong (HKU) is offering a new exciting Taught Postgraduate Programme – Master of Science in the field of Space Science from 2020-21.

The programme, the first of its kind in Hong Kong, aims at equipping the next generation of space scientists, engineers with a sound knowledge of space science, associated technologies and related issues that are essential to sustain careers in space industry and research. "It is truly an inspiring programme for young researchers who would like to establish links with the Mainland and international space research institutes and participate in large-scale space research projects, and for space lovers of all ages who would like to increase their literacy in space science or pursue a career in the field," said Professor Zidan Wang, Head of HKU Physics.

Accordingly to *Morgan Stanley Report* published in 2017, the revenue generated by the global space industry is estimated to increase to \$1.4 trillion in 2040, up from \$350 billion in 2016. The boost of space industry in the Mainland is reflected by its heavy investment in the field. "China had launched 39 satellites in 2018 alone, over twice as many as 2017 and more than any other country in the world," said Professor Quentin Parker, Programme Director and Director of Laboratory for Space Research (LSR). "Given its status as a global metropolis, its strong international links, and its location in the GBA, Hong Kong is ideally placed to capitalise on the growth of Space Science in the Mainland and globally. The establishment of the LSR under the Faculty of Science in 2016 also helped us build strong ties and agreements with leading space institutes across the world, making HKU an ideal place for a Taught Master Programme in Space Science."

Co-Programme Director Dr Pablo Saz Parkinson added that the MSc programme taps into our strengths in high-energy astrophysics and planetary sciences. "Our MSc will provide a foundation to enter this exciting field, with promising employment opportunities, both in the public and private sectors, in China, and worldwide. Leveraging our wide-established connections, we will also invite elite guest speakers to our classes and create networking opportunities with leading experts in the field."

While placing a strong focus on the Chinese Space Science programme and on practical knowledge such as space flight propulsion, introduction to space weather, remote sensing, radiation detection and measurement, and small satellite design, this highly multi-disciplinary degree will also expose students to a broad range of areas interwoven to the study, such as space science entrepreneurship, earth science, data science, statistics and engineering, with the contributions from Departments of Earth Sciences, Statistics & Actuarial Science and Electrical & Electronic Engineering forming an important part of our overall programme.



"We have also developed a robust internship programme. Apart from our own LSR internships we have also negotiated excellent internship opportunities with some of our key partners such as with the Beijing Institute of Space Mechanics and Electricity (BISME), the Shanghai Academy of Space Flight Technology (SAST), the Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences (CSU, CAS), the DFH Satellite Company Ltd., as well as at Zhejiang University (ZJU) in the Mainland, Padova-CISAS in Italy and the National History Museum (NHM) it the UK. These internships give students an immersive experience in an authentic working environment and prepares them to respond to a myriad of challenges in the industry. Indeed, many of the top companies and institutes offering our internships will also be looking to recruit in the future." stated Professor Parker.

Another excellent feature of our TPG is our scholarship scheme. The LSR has allocated funds for two \$50,000 scholarships while CSU offers a further two \$50,000 scholarships with more likely from BISME and other partners.

The Programme is now open for application. Details can be viewed via <u>https://www.scifac.hku.hk/prospective/tpg/SpaceScience</u>

For media enquiries, please contact Ms Cindy Chan, Assistant Communications Director of Faculty of Science (Tel: 3917-5286; email: <u>cindycst@hku.hk</u>).

Images download: https://www.scifac.hku.hk/press

Captions:



Image 1: Global space industry has been expanding in the last decade; photo description and courtesy: Satellite Space X by NASA.



Image 2: HKU has negotiated excellent internship opportunities with some of our key partners including the Beijing Institute of Space Mechanics and Electricity (BISME).