

Graduate sharing

Mr WONG Wai Keung (2020/21 Dean's Honour List)

Given the rise of the digital economy, STEM has recently become a hot topic in education. As a curriculum leader, I need to foster my students the 21st-century skills. In the course of exploration, I always ask myself what STEM means to both teachers and students. Different labels have been tagged onto the ambiguous acronym, suggesting a change in focus of the rationale itself. What, for example, is STEAM? Is it similar to or different from STEM? Where lies the boundary? This has motivated me to take a course in STEM education such that I may explore its meaning and applications better. During the study, I have acquired abundant STEM-related knowledge and skills. The STEM frameworks like design thinking, engineering design process and failure-based learning are fascinating to me. Some other educational theories about knowledge construction, pedagogies and ways of thinking strengthen my teaching profession in STEM as well. The approach is unsurprisingly interdisciplinary. The all-rounded training encourages me to try out the STEM technologies in various disciplines. For example, 3D printing, coding with python, and micro:bit-driven devices, etc. I was inspired by the challenging design-and-make activities. Some of these creative works were implemented in the integrative STEM curricula with my colleagues, which is one of the objectives of this MA programme. I have benefited from the community of practice formed in this course. The professors and the classmates offered opportunities for us to share our knowledge and experiences in STEM teaching and learning. Now, I am a STEM literate not in terms of advanced technologies but thorough understanding of STEM education. I have the confidence to lead my students in a successful pathway of integrative learning within STEM.

Enquiries

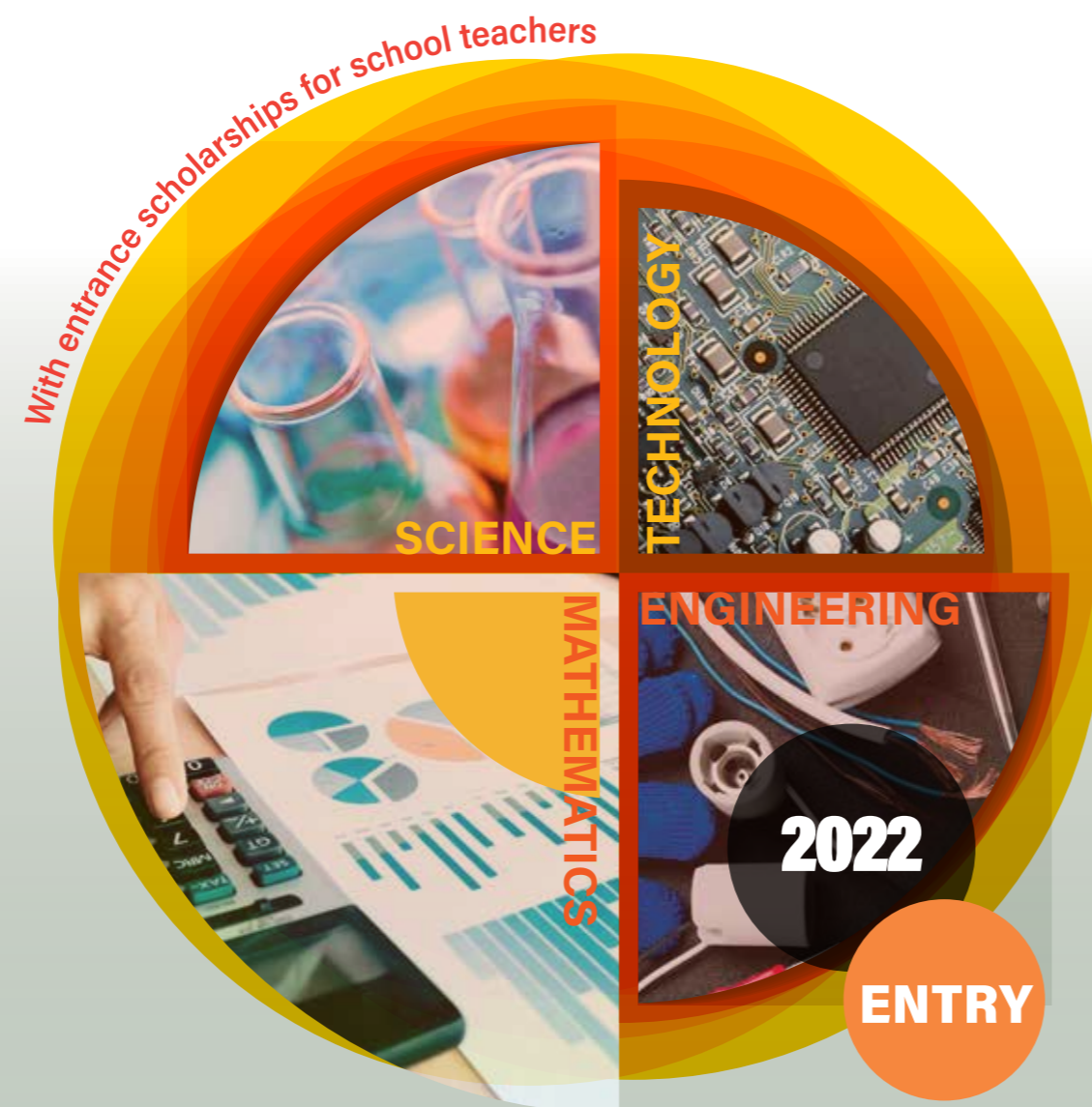
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Any aspect of the course and course offerings (including, without limitation, the content of the course and the manner in which the course is taught) may be subject to change at any time at the sole discretion of the University. Without limiting the right of the University to amend the course and its course offerings, it is envisaged that changes may be required due to factors such as staffing, enrolment levels, logistical arrangements and curriculum changes.



Master of Arts in STEM Education
(1-Year Full-time (A1M095) / 2-Year Part-time (C2M028))

STEM教育文學碩士
(一年全日制 (A1M095) / 兩年兼讀制 (C2M028))



The Master of Arts in STEM Education Programme

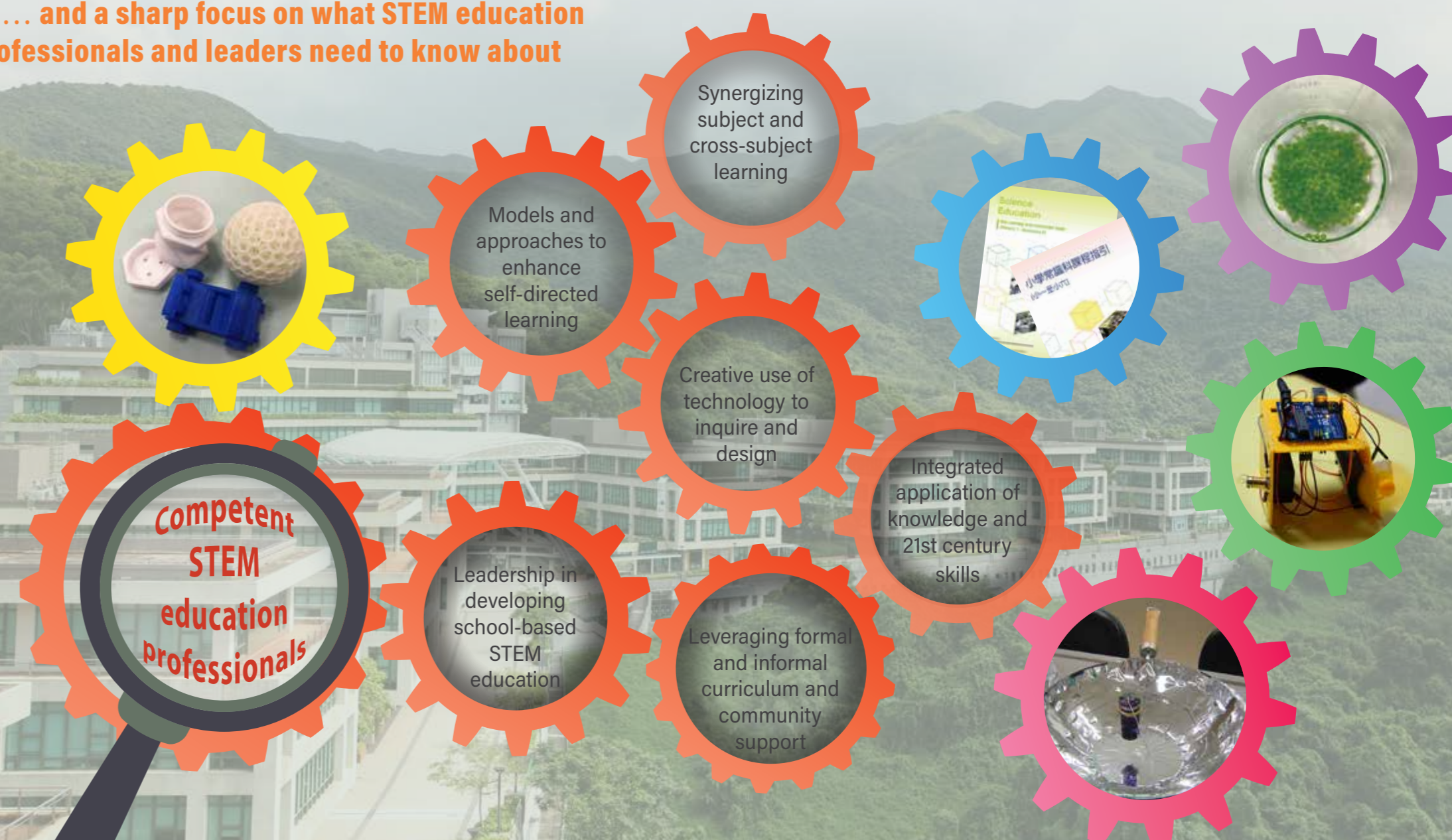
will lead you to an exciting and rewarding experience of professional development in STEM education

The programme has

..... distinctive aims to

- promote a holistic and comprehensive understanding of STEM education;
- develop competence in promoting STEM education through curriculum integration and integrated learning;
- equip participants with the knowledge and skills for applying technology and engineering design in solving problems;
- develop participants' pedagogical content knowledge for designing instructions and assessment for integrated STEM education;
- develop leadership and cultivate a spirit of innovation in promoting school-based STEM education.

..... and a sharp focus on what STEM education professionals and leaders need to know about



The programme will benefit

- School STEM coordinators and STEM teachers
- STEM graduates
- STEM education practitioners from different sectors
- Other STEM professionals



.....with the full support of a strong teaching and technical team, specializing in

- STEM Education
- Sciences
- Information and Communication Technology
- Mathematics
- Engineering
- Environmental Studies
- Creativity Education

The programme offers **6+2 courses**, covering major STEM education themes.

6 core courses:

- STEM education: theoretical and curricular perspectives (3 cps)
- Scientific inquiry and engineering design (3 cps)
- Technology in STEM education (3 cps)
- Developing creativity and innovation in STEM (3 cps)
- Coding and computational thinking (3 cps)
- Principles and methods in STEM education research (3 cps)

2 elective courses:

Participants could choose ONE out of the TWO courses in each Elective Group:

Elective Group I (3 cps):

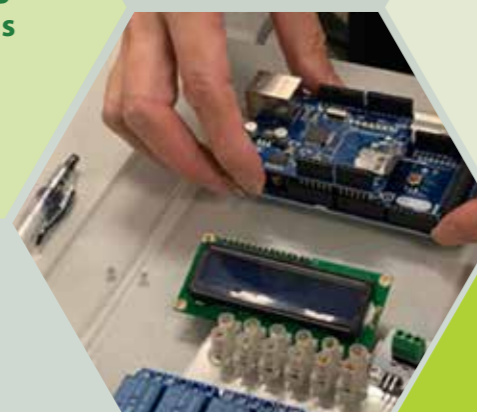
- Curriculum, teaching and assessment in STEM for primary schools
- OR
- Curriculum, teaching and assessment in STEM for secondary schools

Elective Group II (3 cps):

- Research project
- OR
- Internship

.....delivered through creative and diverse learning modes:

Blended learning using e-platforms



Laboratory experimentation

School-based support
Case studies and lesson analysis



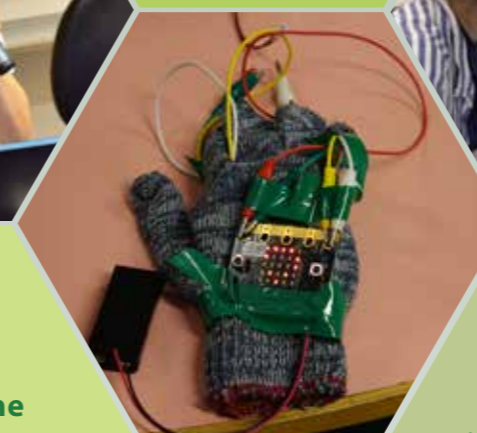
Talks and seminars by experts in STEM fields



Lectures and group discussion



Workshops on the use of technological tools



Research projects to inform school practice

Visits to STEM schools and organizations



Medium of Instructions

The medium of instruction is English.

Tuition Fee

Tuition fee for the whole programme is \$120,000 (\$5,000 per cp)*

*Tuition fee is subject to adjustment

Scholarship

The University Grants Committee (UGC) launched a "Targeted Taught Postgraduate Programmes Fellowships Scheme" in 2022 to subsidize local students to study taught postgraduate programmes. The fellowship students are only required to pay a minimum tuition fee of HK\$42,100 to study the entire programme (part-time or full-time), with the remainder covered by the Fellowships Scheme with maximum of 10 quota. Please refer to the UGC's website for detail.

Besides, successful applicants may be granted a scholarship of HK\$10,000 by The Education University of Hong Kong. The Education Bureau (EDB) also offers a scholarship of HK80,000 to local school teachers on a competitive basis. Please refer to the EDB's website for the Scholarship for Teachers (Pursuit of Master's Degree Programmes*).

*The scholarships are subject to approval

Entrance Requirements

- Applicants should normally hold a recognized Bachelor's degree or equivalent.
- Applicants whose entrance qualification is obtained from an institution in a non-English speaking system should normally fulfil one of the following minimum English proficiency requirements:
 - IELTS 6.0; or
 - Grade C or above in GCSE / GCE OL English; or
 - A TOEFL score of 80 (internet-based test); or
 - Band 6 in the Chinese Mainland's College English Test (CET) (a total score of 430 or above and the test result should be valid within two years); or
 - Other equivalent qualifications.
- Shortlisted applicants may be required to attend an interview.

Application

For programme information and application, please visit:

www.eduhk.hk/mastem

.....Join the programme by applying now.

