


Gifted Education Fund: Off-school Advanced Learning Programmes

Programme No. 2022-05 (For primary students)

Title of Programme	Developing Primary Students' STEAM Career Interest
Programme Provider	Department of Science and Environmental Studies, The Education University of Hong Kong
Theme	STEAM-related Mentorship Programme; Humanities and Social Science Research Programme
Maximum No. of Participants and Class Level in the 2022/23 School Year	40 students (Primary 4-5)
Pre-requisite	Applicants should demonstrate outstanding performance in Chinese/ English/ Mathematics/ General Studies in school and possess basic MS Office skills.
Programme Delivery Period	From June 2023 to April 2024 (11 months) (tentative)
Medium of Instruction	Course Material: Chinese supplemented with English Class teaching/ Discussion: Cantonese supplemented with Putonghua and English
Objectives	<ul style="list-style-type: none">• To expose gifted students at upper primary level to various STEAM-related careers and develop their interest in relevant fields at early age;• To introduce the knowledge and skills essential for students to further their study and pursue their preferred STEAM-related careers in future;• To enhance gifted students' knowledge and skills in self-regulated interdisciplinary inquiries so that they can solve real-world problems proficiently and creatively like professionals in various STEAM-related fields; and• To nurture positive values and attitudes among gifted students such as responsibility, perseverance, care for others, diligence, etc.
Programme Outline	<p>This programme introduces various STEAM-related careers to facilitate the gifted students' early planning of their study and future careers. Students will master the knowledge and skills of interdisciplinary inquiry through a range of carefully-planned learning and teaching activities and learn how to solve authentic problems like professionals in relevant fields. Elements of positive values and attitudes will be infused in the programme to foster personal growth and whole-person development of the students.</p> <p>The programme consists of four phases.</p>

	<p>Phase 1: General understanding of STEAM-related careers and interdisciplinary inquiry (6 hours in total)</p> <ul style="list-style-type: none"> • 2 face-to-face/online core lessons for all students (3 hours each) • A general introduction of various STEAM-related careers is provided in this phase to motivate the students and promote their interest in different STEAM-related fields. • Students will also acquire the knowledge and skills related to the process of interdisciplinary inquiry in the context of STEAM-related careers. <p>Phase 2: Understanding of my preferred STEAM-related careers (20 hours in total)</p> <ul style="list-style-type: none"> • 8 STEAM-related careers# led by academics of different expertise are selected for students' more in-depth inquiry in this programme. • Each student will choose and study at most 2 STEAM-related careers for his/ her study in this phase. • 4 face-to-face/online workshops for each STEAM-related careers (2.5 hours each). <p>Phase 3: Guided Inquiry of my favourite STEAM-related career (12 hours in total)</p> <ul style="list-style-type: none"> • Students will choose 1 STEAM-related career that they have studied in Phase 2. In groups of 5 to 6, they will engage in in-depth inquiry of the chosen STEAM-related career under guidance by academics through exploration, discovery and invention activities. • 8 face-to-face/online guidance/ consultations in small groups will be arranged for students in this phase. Academics and/ or university student(s) will supervise and offer mentorship support to the students during the inquiry process. • 1 lesson on communication/ presentation skills will be arranged to help students prepare for the exhibition/ showcase event in Phase 4. • By the end of this phase, students will consolidate their findings and submit inquiry reports in forms of drawings/ posters/ video clips/ presentation slides and propose innovative suggestions for solving some real-world problems of challenge like professionals in relevant fields. <p>Phase 4: Exhibition/ showcase event (4 hours in total)</p> <ul style="list-style-type: none"> • Students will present the inquiry results of their favourite STEAM-related careers in written and verbal forms to the audience during exhibition/ showcase event to be held at the Education University of Hong Kong. <p>For details, please refer to the poster below: https://www.eduhk.hk/cesd/view.php?secid=55084 </p>
Admission Fee	Free of charge

Application Method	<p>Application form can be downloaded from the following webpage:</p> <p>https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/ge_fund/gef/programme/current.html</p>  <p>Please complete the application form and send it by post <u>on or before 21 April 2023</u> to the following address:</p> <p>D3 - G/F - 08 The Education University of Hong Kong 10 Lo Ping Road Tai Po (Attn: Prof Winnie SO Wing-mui)</p>
Documents to be Submitted along with the Application	<ul style="list-style-type: none"> • Please write about the following in the section of Student's Self-introduction in the application form (approximately 300 words in Chinese or English): <ul style="list-style-type: none"> - self-introduction; - choose 2 STEAM careers# of interest and explain the reasons; - expectations of the programme
Enquiry	<p>Mr TSE Hin-fung (The Education University of Hong Kong)</p> <p>Tel No.: 2948 8701 Email: hftse@eduhk.hk</p>
Date of Announcement of Result	By early May 2023 (tentative)

Preliminary inquiry topics of STEAM-related careers for students:

<ol style="list-style-type: none"> 1. Air quality scientist 2. Architectural historian 3. Astrophysicists 4. Chemist (inorganic chemistry / photochemistry) 5. Agriculturist 6. Environmental scientists 7. Physicist (theoretical physics, computational science, computational social science, computer science and artificial intelligence) 8. Wastewater engineer
