

Gifted Education Fund: Off-school Advanced Learning Programmes

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| Title of Programme | Scientific Training and Mentoring for STEM Talents (STEM 英才科學訓練及培育) |
| Programme Provider | Science Academy for Young Talent, Faculty of Science, The Chinese University of Hong Kong |
| Themes | <ul style="list-style-type: none"> • STEM-related Mentorship Programme • Self-initiated Research Study supervised by academics of the post-secondary institution |
| Maximum No. of Participants and Class Level in the 2019/20 school year | Students are streamed into 3 tiers. Maximum number of gifted student participants (Secondary 4 – 6) are set out below: Tier 1: 150 students Tier 2: 60 students Tier 3: 25 students |
| Pre-requisite | Students should be currently studying one or more STEM-related electives at senior secondary levels (e.g. Physics, Chemistry, Biology, Integrated Science, Combined Science, Mathematics Extended Part Module 1 [Calculus and Statistics], Mathematics Extended Part Module 2 [Algebra and Calculus], etc.) |
| Programme Duration | About 18 months |
| Medium of Instruction | Course Material: English Class teaching/Discussion: English supplemented with Cantonese |
| Objectives | To provide gifted students with off-school science and mathematics training, so that they could: <ul style="list-style-type: none"> • increase their awareness of the knowledge and skills related to STEM programmes at university level; • have a taste of the advanced knowledge and methods for conducting STEM-related research in a post-secondary institution; and • acquire first-hand experience in STEM-related research under mentors' guidance and pave ways for students to further their pursuit in STEM-related fields in future. |
| Programme Outline* | The programme consists of the following three tiers: <ul style="list-style-type: none"> • Tier 1 (about 2 months, during summer vacation): Students can choose 4 out of 6 STEM courses in summer vacation (modified lecture courses of University Year 1 level). • Tier 2 (about 8 months, in weekends): Students with good performance in Tier 1 are invited to attend an intensive programme (select 3 STEM courses plus laboratory sessions of University Year 2 level). • Tier 3 (about 8 months, during summer vacation and weekends): Students with good performance in specialised STEM courses consistently are invited to participate in their |

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| | <p>mentors' research project related to their interest and have consent from professors. Students will conduct laboratory research at the university during the summer holidays and also on Saturdays from September to November in 2021. A local STEM young talents symposium will be organised in December for students to showcase their achievement and learning experiences in research work.</p> |
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