Gifted Education Fund: Off-school Advanced Learning Programmes

Programme No. 2023-10 (For secondary students)

Title of programme	Nurturing Visionary Leaders and Researchers in Economics and Quantitative Finance
Programme provider	Department of Decisions, Operations and Technology, CUHK Business School, The Chinese University of Hong Kong Supporting organisation(s): The Hong Kong Academy for Gifted Education Undergraduate Office, CUHK Business School, The Chinese University of Hong Kong
Theme(s)	 STEAM-related mentorship programme Humanities and social science research programme Self-initiated research study
Intake	50 students (Secondary 4-5 in the 2023/24 school year)
Prerequisite	Nil
Programme delivery period	from May 2024 to Jan 2025 (around 9 months)
Medium of instruction	Course material: English Class teaching/ discussion: Cantonese supplemented with English
Objectives	 to cultivate future leaders in finance, economics and technology for realising Hong Kong's positions as the "eight centres" by equipping gifted students with the quantitative and qualitative analytical skills in economics and quantitative finance; to equip gifted students with the strategic and flexible mind-set to deal with real-world complex issues without single answers, and enhance their abilities to incorporate theoretical knowledge to practical use through simulations, research and presentations; to empower gifted students with the confidence to present their ideas via realistic simulations, hands-on research opportunities, and interactive Q&A so as to prepare them to become future leaders in their interested fields; and to develop the values and attitudes for the whole-person development of the gifted students such as perseverance, responsibility, integrity and adherence to business ethics and to promote affective education among the students so that they become empathetic and responsible leaders in the future
Programme outline	This programme aims to nurture gifted students to be ethical and responsible leaders of tomorrow by unleashing their potentials in economics and quantitative finance through providing gifted

students with analytical skills, a strategic mind-set, practical experience, confidence in presenting ideas, awareness of career paths, and a focus on ethical and responsible leadership.

The programme consists of four phases.

Phase 1 (2 months)

Exploring our world through quantitative financial and economic models, frameworks, and simulations (60 hours)

- Introductory quantitative financial analysis and macroeconomics with interactive simulations, special topics in social values and skills training, affective education workshops, and mentoring for phase challenge of Model World Trade Organisation.
- Major topics and learning and teaching activities are as follows:
 - An opening ceremony (2 hours)
 - Quantitative Financial Analysis with Interactive Simulations (4 lessons, 3 hours each; 12 hours in total);
 - Macroeconomic Analysis with Interactive Simulations (6 lessons, 3 hours each; 18 hours in total) on Economic Indicator, Macroeconomic models 1 and 2, Macroeconomic Policies 1 and 2 and Hong Kong Economy;
 - Special topics for gifted student development (3 lessons, 3 hours each; 9 hours in total) on Social Values of Business, Economics, and Finance, Analysis, Writing, and Presentation Workshop 1 and 2;
 - Affective Education Workshops (2 lessons, 2 hours each; 4 hours in total); and
 - Mentoring and Tutorial Hours (at least 9 hours for each student) and self-study hours (online learning)
- Phase challenge (2 lessons, 3 hours each; 6 hours in total) on Model World Trade Organisation consisting written assessment, verbal presentation and a written summary report.

Phase 2 (2 months)

Projecting the future through quantitative financial and economic modelling and trends (at least 42 hours)

- Major topics and learning and teaching activities are as follows:
 - Quantitative Economic and Financial Modelling (4 lessons, 3 hours each; 12 hours in total);
 - Financial Technologies (3 lessons, 3 hours each; 9 hours in total);
 - Financial institution visit (1 session of 2 hours);
 - Life and career planning workshop (4 sessions and 2 hours each; 8 hours in total);
 - Special Topics for Gifted Student Development (1 lesson of 3 hours); and

- Mentoring and Tutorial Hours (at least 8 hours for each student) and self-study hours (online learning) Phase challenge: Forward-looking analysis on a self-selected STEAM venture with quantitative financial and economic modelling and trends. Phase 3 (4 months) Research on Economic and Finance under Faculty's supervisions (at least 23 hours) Introduction to Research (1 lesson of 3 hours) In this phase, students, working in groups of five, select and conduct research (at least 20 hours) on one of the following three categories: - Category 1: Macroeconomic/financial systems and policies research (e.g. comparison of currency systems); - Category 2: Quantitative macroeconomic/financial research (e.g. intraday trading patterns) - Category 3: Industrial macroeconomic/financial research (e.g. potential applications of e-HKD) Students will conduct research under the guidance and supervision of faculty members and the instructors of the programme. In mentorship meetings, students will discuss research direction with their mentors and obtain professional feedback from them. Phase 4: Conference to showcase students' achievements (4 hours) By the end of the programme, students will set booths in a conference to showcase their research results and individually present their ideas/innovations. Visitors/ guests may visit the booths and ask about their research in an interactive discourse. Teachers, parents, alumni and academics of the CUHK, and representatives of the supporting organisation will be invited to join the conference. Admission fee Free of charge Application method Application form can be downloaded from the following webpage: https://www.edb.gov.hk/en/curriculum-development/ curriculum-area/gifted/ge fund/gef/osalp.html Please complete the application form and send it by post on or before 19 April 2024 to the following address: Department of Decisions, Operations and Technology 9/F, CYT Building CUHK Business School, The Chinese University of Hong Kong Shatin, New Territories (Attn: Mr Sonam Wangchuk)

Document(s) to be	• a completed application form*;
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submitted	• evidence of applicant's other learning experience (if any); and
	a copy of applicant's certificate(s) of award/ participation in courses/ competitions related to finance and economics
	* In the section of student's self-introduction in the application
	from, applicants should write 300 words in English or 360 words
	in Chinese demonstrating their interests in finance and economics.
Enquiry	If you have any questions about this programme, please contact:
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	Technology, The Chinese University of Hong Kong)
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Announcement of	by late May 2024
results	