## **Gifted Education Fund: Off-school Advanced Learning Programmes**

## **Programme No. 2020-02 (For secondary students)**

Title of Programme	Tomorrow's Leaders in Hong Kong Testing and Certification (T&C) Industry
Programme Provider	Department of Chemistry, Hong Kong Baptist University
Theme	<ul> <li>STEM-related Mentorship Programme</li> <li>Self-initiated Research Study</li> </ul>
Maximum No. of Participants and Class Level in the 2020/21 School Year	18 students (Secondary 4-5)
Pre-requisite	Applicants should be studying Chemistry at HKDSE level or equivalent.
Programme Duration	About 12 months
Medium of Instruction	Course Material: English Class teaching/ Discussion: English supplemented with Cantonese
Objectives	<ul> <li>To promote the gifted students' interest in and enrich their knowledge of analytical sciences as well as the operation and latest developments of the testing and certification (T&amp;C) industry in Hong Kong;</li> <li>To equip students with essential skills in sample pre-treatment and analytical sciences;</li> <li>To enhance students' capability of solving authentic problems related to analytical sciences; and</li> <li>To nurture positive values and attitudes of the gifted students with an emphasis on integrity and ethics in their study and workplace</li> </ul>
Programme Outline*	This programme aims to enhance the gifted students' knowledge and skills related to analytical sciences and increase their awareness and understanding of the T&C industry in Hong Kong. It also develops the integrity and ethics of the students to facilitate their growth and development. The programme consists of three phases.  Phase I  12 lectures (2 hours each) on analytical sciences;  4 laboratory sessions (3 hours each) different sample pre-treatment and analytical methods;
	<ul> <li>A half-day visit to a relevant government body/ organisation/ testing laboratory; and</li> <li>A one-hour seminar about the T&amp;C industry by a guest speaker</li> </ul>

	<ul> <li>Phase II</li> <li>4 laboratory sessions (3 hours each) on different sample pre-treatment and analytical methods;</li> <li>A half-day visit to a relevant government body/ organisation/ testing laboratory;</li> <li>A one-hour seminar about the T&amp;C industry by a guest speaker; and</li> <li>Literature research on a topic chosen by the students with biweekly meetings with their mentors</li> <li>Phase III</li> <li>A half-day visit to a relevant government body/ organisation/ testing laboratory;</li> <li>A one-hour seminar about the T&amp;C industry by a guest speaker;</li> <li>A two-day day camp at HKBU with activities including a campus tour, science talks, demonstrations, workshops, values education activities, viz. "Trails of Integrity and Ethics" and reflective sharing sessions; and</li> <li>A one-month internship/ research placement for 6 students with outstanding performance in a testing laboratory for practical experience or in a research laboratory for scientific research experience in analytical sciences</li> </ul>
	* In view of the COVID-19 epidemic, some sessions of the programme may be conducted online.
Admission Fee	
Admission Fee	Free of charge
Application Method	Application form can be downloaded from the following webpage: <a href="https://www.edb.gov.hk/en/curriculum-developme">https://www.edb.gov.hk/en/curriculum-developme</a> Please complete the application form and send it by post on or
	before 15 April 2021 (now extended to 30 April) to the following address:
	Department of Chemistry 8/F Sir Run Run Shaw Building Ho Sin Hang Campus Hong Kong Baptist University 224 Waterloo Road
	Kowloon Tong (Attn: Dr HO koon-sing)
Documents to be Submitted along with the Application	Nil
Enquiry	Dr HO Koon-sing (Department of Chemistry, Hong Kong Baptist

University)
Tel No.: 3411 6603 Email: grayhks@hkbu.edu.hk
By May 2021 (tentative)