Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)

Aim / Objective

This is to invite secondary schools to participate in the captioned event.

Details

2. The Education Bureau (EDB), The Industry Training Advisory Committee for Testing and Certification Industry under Hong Kong Qualifications Framework (HKQF) and Hong Kong Council for Testing and Certification (HKCTC) jointly organise the "Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)". The activities aim to enhance students' understanding about the Testing and Certification (T&C) industry, potentially sparking their interest and aspiration in pursuing science study and considering further development in the T&C industry. Meanwhile, the activities also aim to facilitate teachers to better guide their students in life planning, in particular related to the articulation pathways in the T&C industry.

3. The activities include talks, visits, student workshops and science taster programmes. For details, please refer to Appendices 14a-f. Schools interested in arranging the activities for their students should complete and submit the respective application forms at Appendices 14b-d to the Science Education Section, EDB by email (cpsc@edb.gov.hk) on or before the respective deadlines.

Contact Person

4. For enquiries, please contact Ms NC TAM (Tel: 3698 3439) or Mr William LAU (Tel: 3698 3440) of the Science Education Section, Innovation Technology Education Division, EDB.

Appendix 14a

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)

Details of the Activities

Introduction

"Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)" is jointly organised by the Education Bureau (EDB), The Industry Training Advisory Committee for Testing and Certification Industry under Hong Kong Qualifications Framework (HKQF) and Hong Kong Council for Testing and Certification (HKCTC). With a key objective of introducing Testing and Certification (T&C) industry to secondary students and teachers, the activities are organised around the themes on food, clothing, housing and transport in relation to T&C and our daily living. These activities include (A) Student Workshop on Testing and Certification; (B) Student Activity: Visit to Laboratories / Organisations of Testing and Certification Industry; (C) Science Taster Programme: Exploring STEAM Pathways for S3 Students; (D) Student Seminar on University Pathways in Testing and Certification; and (E) Professional Development Programmes for Chemistry and Biology Teachers: (i) Visit to Laboratories / Organisations of Testing and Certification Industry, and (ii) Enriching Knowledge Series: Science behind Doping Control by Hong Kong Jockey Club (Web-based Course).

Aims

- To enhance teachers' and students' understanding about the latest development of the T&C industry, its career prospects and the articulation pathways;
- To facilitate teachers and students to appreciate the relevance of science study at secondary level to the T&C industry and thus our daily life and society;
- To encourage students to choose science subjects at senior secondary level; and
- To inspire students to commit to building solid basis of science knowledge and skills for further development in science-related career, especially in relation to the T&C industry.

Details of activities

Activity	Target Participants	Contents / Venue	Date
(A) Student Workshop on Testing and Certification	S5 students studying Biology and/or Chemistry	- Practical biology experiments related to microbiology - Practical chemistry experiments related to pharmaceuticals and nutrition supplements - Introduction to degree programmes	Dec 2026 & Jun – Jul 2027

Activity	Target Participants	Contents / Venue	Date
		and career paths in T&C - Venue: Laboratory of Hong Kong Metropolitan University	
(B) Student Activity: Visit to Laboratories / Organisations of Testing and Certification Industry	S4-S6 students studying Biology and/or Chemistry	- Guided tour to T&C related laboratories / organisations - Venue: • Lee Kum Kee Company Limited – Testing Laboratory • Government Chinese Medicines Testing Institute • Intertek Testing Services HK Limited • Sha Tin Sewage Treatment Works • TÜV Rheinland HK Limited • The Food and Beverage Operations of The Hong Kong Jockey Club	Jan – May 2027
(C) Science Taster Programme: Exploring STEAM Pathways for S3 Students	S3 students	- Introduction to sub-degree and/or degree programmes and career paths in T&C - Practical activities and/or demonstrations related to Biology, Physics, Chemistry and STEAM education - Venue: Hong Kong Institute of Vocational Education (Sha Tin) / Hong Kong Metropolitan University	Jan & Apr 2027
(D) Student Seminar on University Pathways in Testing and Certification	S4-S6 students studying Biology and/or Chemistry	- Talks by representatives from local universities to introduce degree programmes related to T&C, along with the articulation pathways and career prospects of these programmes - Venue: EDB Kowloon Tong Education Services Centre	Apr 2027
(E) (i) Professional Development Programme for	Biology/ Chemistry teachers	- Guided tour to T&C related laboratories / Organisations - Venue:	Mar – May 2027

Activity	Target Participants	Contents / Venue	Date
Chemistry and Biology Teachers – Visit to Laboratories / Organisations of Testing and Certification Industry		• Sha Tin Sewage Treatment Works • Hong Kong Standards and Testing Centre • Government Laboratory • Racing Laboratory, the Hong Kong Jockey Club	
(E) (ii) Professional Development Programme for Chemistry and Biology Teachers – Enriching Knowledge Series: Science behind Doping Control by Hong Kong Jockey Club (Web-based Course)	Chemistry / Biology teachers	- Talks on the latest developments on doping control from the representative of Hong Kong Jockey Club Racing Laboratory	May 2027

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)

(A) Student Workshop on Testing and Certification

Application Form
(Deadline for application: 20 November 2026 (Fri))

Please return the completed application form on or before **20 Nov 2026 (Fri)** to Science Education Section, Education Bureau by email (cpsc@edb.gov.hk).

The information of our school participating in the **Student Workshop on Testing and Certification** is as follows:

No. of participating Biology students (S5) [applicable for Time Slots A and B] #: _____

No. of participating Chemistry students (S5) [applicable for Time Slots C to F] #: _____

Workshop Schedule#

(Please ☑ as appropriate)	Time Slot	Date	Time	Priority (If more than one time slot are chosen, please indicate order of preference.) [1 – most preferred]
☐	A (Biology)	14 Dec 2026 (Mon)	2:30 p.m. – 5:00 p.m.	
☐	B (Biology)	16 Dec 2026 (Wed)		
☐	C (Chemistry)	22 June 2027 (Tue)		
☐	D (Chemistry)	24 June 2027 (Thu)		
☐	E (Chemistry)	12 July 2027 (Mon)		
☐	F (Chemistry)	13 July 2027 (Tue)		

(A) Student Workshop on Testing and Certification – Application Form (Cont'd)

Remarks:

- The target participants of Time Slots A and B are **S5 students** studying **Biology** (particularly those who will study the elective topic "Microorganisms and Humans"), and the target participants of Time Slots from C to F are **S5 students** studying **Chemistry**.
- Time Slots A and B are repeating sessions on Biology-related content, while Time Slots from C to F are repeating sessions on Chemistry-related content.
- Schools may nominate up to **25 students** to participate in a workshop.
- Applications will be processed on a first-come, first-served basis.
- The student workshops are free of charge. However, schools are responsible for arranging and covering the cost of transportation for students.
- All students and teachers must adhere to the safety guidelines provided by the laboratory staff during the workshop.
- The application results of Time Slots A and B will be confirmed via email on or before **23 Nov 2026 (Mon)**, while those of Time Slots C to F will be confirmed via email on or before **8 Jan 2027 (Fri)**.

Name of School : _____

School Address : _____

School Tel. No. : _____ Fax No. : _____

Name of Teacher-in-charge : _____(English)_____(Chinese)

Contact No. of Teacher-in-charge : _____

E-mail Address of Teacher-in-charge : _____

School Chop

Name of Principal : _____

Signature of Principal : _____

Date : _____

Appendix 14c

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)

(B) Visit to Laboratories / Organisations of Testing and Certification Industry for Students

Application Form
(Deadline for application: 11 December 2026 (Fri))

Please return the completed application form on or before **11 Dec 2026 (Fri)** to Science Education Section, Education Bureau by email (cpsc@edb.gov.hk).

Our school would like to join the following visit(s):
(Please ☑ as appropriate; you can select more than one.)

A. Visits targeted at S4-S6 students studying Chemistry

☐ (a) Visit to Lee Kum Kee Company Limited – Testing Laboratory (Location: Tai Po)

About the visit:
Lee Kum Kee Group, founded in 1888, has a history of over 130 years and is a renowned food enterprise in both local and international markets.
During this visit, students will learn about their development and corporate culture, gain an understanding of its food production processes and quality management systems, and explore how advanced testing technologies and professional testing services are used to monitor raw materials, production processes, and finished products to ensure the highest standards of food safety and quality.

Date and time of visit:
12 January 2027 (Tue), 2:30 pm – 4:30 pm

☐ (b) Visit to TÜV Rheinland Hong Kong Limited (Location: Tsuen Wan)

About the visit:
TÜV Rheinland is a German company with a history of over 150 years and is one of the world's leading testing and certification service providers.
Through this visit, students will have the opportunity to learn about the real-life working environment and daily operations of a commercial laboratory. They will also gain insights into the various chemical testing techniques used to assess the safety and quality of consumer products, and understand how testing and certification services help safeguard product quality and protect consumer interests.

Date and time of visit:
17 February 2027 (Wed), 2:30 pm – 4:30 pm

☐ (c) Visit to Intertek Testing Services Hong Kong Limited (Location: Lai Chi Kok)

About the visit:
Intertek, established over 130 years ago, provides assurance, testing, inspection and certificatio services to clients worldwide.
During the visit, students will have the opportunity to learn more about the real environment of commercial laboratory, and the adoption of different testing techniques for a range of consume products.

Date and time of visit:
25 February 2027 (Thu), 2:30 pm – 4:30 pm

B. Visits targeted at S4-S6 students studying <u>Biology</u>

☐ (d) Visit to Government Chinese Medicines Testing Institute (Location: Tseung Kwan O)

About the visit:
The Government Chinese Medicines Testing Institute (GCMTI) was established in 2017 to develop internationally recognized testing standards and methods for Chinese medicines.
During the visit, students will have the opportunity to learn more about the daily operations of the Government Chinese Medicines Testing Institute. They will also learn how scientific techniques such as microscopic identification, chemical analysis, and DNA testing are used to authenticate Chinese medicinal materials and assess their quality. They will also gain insights into the role of modern technology in ensuring the safety and quality of Chinese medicines.

Date and time of visit:
23 February 2027 (Tue), 2:30pm – 4:30pm

☐ (e) Visit to Sha Tin Sewage Treatment Works (Location: Sha Tin)

About the visit:
Sha Tin Sewage Treatment Works was established in 1982, covers an area of 28 hectares and is the largest sewage treatment plant in Hong Kong. It serves residents of the Sha Tin and Ma On Shan districts, with a daily treatment capacity of 250,000 cubic metres of sewage.
During the visit, students will learn how the plant uses different biological treatment technologies, including microorganisms, to break down pollutants and purify wastewater. They will also gain insights into environmental engineering and biotechnology, and discover how science and technology contribute to environmental protection and sustainable development.

Date and time of visit:
17 March 2027 (Wed), 2:30 pm – 4:30 pm

(B) Visit to Laboratories / Organisations of Testing and Certification Industry for Students – Application Form (Cont'd)

☐ (f) The Food and Beverage Operations of The Hong Kong Jockey Club (Location: Sha Tin)

About the visit:
The Food and Beverage Operations of The Hong Kong Jockey Club serves a large number of customers every day and strictly implements the HACCP (Hazard Analysis and Critical Control Point) Food Safety Management System to ensure food safety and quality.
During the visit, students will learn how the Food and Beverage Operations apply stringent food safety measures throughout the entire food supply chain, from ingredient sourcing and storage to production and service. They will also gain insights into the practical applications of food testing, hygiene management, and quality control, and understand how food safety practices help protect public health.

Date and time of visit:
17 May 2027 (Mon), 2:30pm – 4:30pm

(B) Visit to Laboratories / Organisations of Testing and Certification Industry for Students – Application Form (Cont'd)

No. of participating students: _____ Level of students: _____

No. of participating teachers: _____

Remarks:

- A visit will normally last for **1.5 to 2 hours**
- Schools may nominate up to **23 students** and **2 teachers** to participate in each visit.
- Applications will be processed on a first-come, first-served basis.
- The visits are free of charge. However, schools are responsible for arranging and covering the cost of transportation for students.
- All students and teachers must adhere to the safety guidelines provided by the laboratory staff during the visit.
- The application results will be confirmed via email on or before **4 Jan 2027 (Mon)**.

Name of School : _____

School Address : _____

School Tel. No. : _____ Fax No. : _____

Name of Teacher-in-charge : _____(English)_____(Chinese)

Contact No. of Teacher-in-charge : _____

E-mail Address of Teacher-in-charge : _____

School Chop

Name of Principal : _____

Signature of Principal : _____

Date : _____

Appendix 14d

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)

(C) Science Taster Programme: Exploring STEAM Pathways for S3 Students

(Deadline for application: 11 December 2026 (Fri))

Please return the completed application form on or before **11 Dec 2026 (Fri)** to Science Education Section, Education Bureau by email (cpsc@edb.gov.hk).

Remarks:

- The taster programmes target S3 students who have strong interest and preference in studying science subjects at senior secondary level.
- Each taster programme will normally last for **2.5 to 3 hours** and will be delivered in a face-to-face mode in Cantonese.
- Applications will be processed on a first-come, first-served basis.
- Schools may nominate up to **30 students** and **2 teachers** to participate in each taster programme.
- The programmes are free of charge. However, schools are responsible for arranging and covering the cost of transportation for students.
- The application results will be confirmed via email on or before **4 Jan 2027 (Mon)**.

Our school would like to join the following taster programme:

(Please ☑ as appropriate; each school can select ONE time slot only.)

	Time Slot	Time	Date	Venue
☐	A	2:30 p.m. – 5:00 p.m.	28 Jan 2027 (Thu)	Hong Kong Institute of Vocational Education (Sha Tin)
☐	B	2:00 p.m. – 5:00 p.m.	7 Apr 2027 (Wed)	Hong Kong Metropolitan University

(C) Science Taster Programme: Exploring STEAM Pathways for S3 Students – Application Form (Cont'd)

The information of our school participating in the **Science Taster Programme: Exploring STEAM Pathways for S3 Students** is as follows:

No. of participating students (S3): _____

No. of participating teachers: _____

Name of School : _____

School Address : _____

School Tel. No. : _____ Fax No. : _____

Name of Teacher-in-charge : _____(English)_____(Chinese)

Contact No. of Teacher-in-charge : _____

E-mail Address of Teacher-in-charge : _____

School Chop

Name of Principal : _____

Signature of Principal : _____

Date : _____

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)

(D) Student Seminar on University Pathways in Testing and Certification

Date:	17 April 2027 (Saturday) & 24 April 2027 (Saturday)
Time:	10:00 a.m. – 12:00 noon
Venue:	Lecture Theatre, 4/F, West Block, EDB Kowloon Tong Education Services Centre, 19 Suffolk Road, Kowloon Tong
Language:	Cantonese
Target participants:	S4 – S6 students studying Chemistry and/or Biology
Contents:	• Introduction to local degree programmes related to T&C • Through the seminars, participating students will be able to explore articulation opportunities and alternative study pathways in science-related disciplines, while gaining a better understanding of the latest developments and career opportunities in the T&C industry.
Remarks:	• Details of the seminars and registration will be released via EDB Circular Memorandum in due course.

Science in Action: Experiential Learning Activities on Testing and Certification Industry for Secondary Students (2026/27)

(E) Professional Development Programme for Chemistry and Biology Teachers

Chemistry and Biology teachers of secondary schools can apply for the following professional development programme through Training Calendar System (TCS) [#]:

(i) Visit to Laboratories / Organisations of the Testing and Certification Industry

Course ID	Course content	Visiting venue	Target Participants	Date
ITED20270160	• Introduction to services of Testing and Certification (T&C) • Introduction to career prospects and articulation pathways of T&C industry • Guided tour to different laboratories	Sha Tin Sewage Treatment Works (Location: Sha Tin)	Biology teachers	10 March 2027 (Wed)
		Hong Kong Standards and Testing Centre – STC (Location: Tai Po)	Biology & Chemistry teachers	12 March 2027 (Fri)
		Government Laboratory (Location: Ho Man Tin)	Chemistry teachers	20 April 2027 (Tue)
		Racing Laboratory, the Hong Kong Jockey Club (Location: Sha Tin)	Biology & Chemistry teachers	4 May 2027 (Tue)

(ii) Enriching Knowledge Series: Science Behind Doping Control (Web-based Course)

Course ID	Course Content	Date
ITED20260580	The course will facilitate teachers to: • understand how science helps ensure fair play through doping control; • learn how prohibited substances are detected in the Racing Laboratory of Hong Kong Jockey Club; and • explore the real-world applications of chemistry and biology in the Racing Laboratory.	10 May 2027 (Mon)

The course will be posted onto TCS in due course.