香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education
香港特別行政區政府教育局資助
Subvented by the Education Bureau, the Government of the HKSAR

Learn about Gigi & Yoyo

A3ENV001C
(Token- required)

[Gifted Programme]

Environmental Science Course (Level III)

Bat Echoes - Voices of the Night

Application Deadline 25 May 2026 12 noon
Result Release 28 May 2026

Intended Learning Outcomes

1. Build a solid conceptual understanding of bat ecology and echolocation, and explain how bat activity varies across different habitats in Hong Kong.
2. Develop practical research competence by planning and conducting acoustic field surveys.
3. Strengthen data literacy by analysing multi-site acoustic datasets and preparing evidence-based interpretations.
4. Strengthen collaboration and communication skills by conducting group research and presenting findings to peers and parents.

If student members withdraw from the programme after the Application Deadline, the token will be deducted.

Gifted Programme Introduction

Bats are common yet mysterious nocturnal mammals in Hong Kong, using echolocation to navigate and hunt in the dark, and serving as important indicators of the health of urban and natural environments. This course takes bat ecology and acoustic research as its main theme, guiding participants through indoor workshops and multiple field studies in different habitats in Hong Kong, where they can personally experience how scientists use ultrasonic detectors to record and analyse bat activity. The course adopts inquiry-based and project-based learning, enabling students to design their own research questions, collect and organise multi-site acoustic data, and in the process develop scientific thinking and data literacy. At the same time, students will build communication skills through group collaboration and presentations of their findings, while deepening their concern for and commitment to local biodiversity and environmental conservation.

Schedule

Session	Date	Time	Content	Venue
1	20 Jun (Sat)	2:00 p.m. – 5:00 p.m.	Introduction to bat ecology and acoustics	HKAGE
2	27 Jun (Sat)	2:00 p.m. – 5:00 p.m.	Research design and detector applications	HKAGE
3		5:30 p.m. – 8:30 p.m.	Night-time acoustic survey	Outdoor field study
4	11 Jul (Sat)	9:30 a.m. – 12:30 p.m.	Understanding and decorating bat house	HKAGE
5		2:00 p.m. – 5:00 p.m.	Installing bat houses	Outdoor field study
6	23 Jul (Thu)	5:30 p.m. – 7:30 p.m.	Field survey of bat activity	Outdoor field study
7	25 Jul (Sat)	2:00 p.m. – 5:00 p.m.	Acoustic data analysis	HKAGE
8	30 Jul (Thu)	5:30 p.m. – 7:30 p. m.	Field survey of bat activity	Outdoor field study
9	15 Aug (Sat)	2:00 p.m. - 5:00 p.m.	Pre-survey briefing and planning	HKAGE
10		5:30 p.m. - 8:30 p.m.	Night-time ecological survey	Outdoor field study
11	22 Aug (Sat)	9:30 a.m. - 12:30 p.m.	Data consolidation and presentation preparation	HKAGE
12		2:00 p.m. - 5:00 p.m.	Group presentation and reflection	HKAGE

Enquiries 3940 0101 programme@hkage.org.hk

Suitable for

- S1 to S4 HKAGE student members in 2025/26 school year
- Class size: 30

Medium of Instruction

Cantonese with Chinese Handouts

Certificate

E-Certificate will be awarded to gifted students who have:

- attended at least 9 sessions; and
- completed all the assignments with satisfactory performance

Screening

Please answer the screening question in the online application form.

*The screening question is designed to help the applicant understands the course level and the course content. The question must be answered by the student applicant and it can only be attempted once. The answer cannot be changed once the application is submitted. Selection is based on students' performance in answering the question. Only students who can demonstrate motivation and the knowledge of ecology in the screening question can be enrolled in the programme.

Technical Requirements

To participate fully in the bat ecology and acoustic analysis activities, students are recommended to have access to:

- One laptop or tablet device (e.g. iPad) with USB-C port
- Basic spreadsheet software (e.g. Microsoft Excel or equivalent)

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