

E1STM023C

<u>(Token- required)</u>

[Gifted Programme]
STEAM Course (Level I)

The Magic of Light Manipulation

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Intended Learning Outcomes

Result Release

14 Nov 2025

Upon completion of the programme, participants should be able to:

- 1. apply theoretical knowledge for light manipulation, including spectral light filtering, tracking natural light sources, and modulating light intensity for addressing practical challenges.
- 2. analyze the impact of light on daily life and sustainability, such as how light affects daily living and evaluate sustainable solutions involving light manipulation (e.g. spectral light filtering with window sun control films).
- 3. investigate and interpret light phenomena, where students will be able to design and conduct experiments to investigate light phenomena, analyze data, and interpret results to draw conclusions about light's properties and behavior
- 4. appreciate the importance of light in daily life and its potential for enhancing quality of life.

Gifted Programme Introduction

Light is a fascinating form of electromagnetic radiation that can be both visible and invisible. It plays a crucial role in our daily lives, and we can manipulate it to enhance our living quality. This programme will introduce the fundamentals of light manipulation, including methods such as measuring and filtering light, tracking natural light sources, and adjusting light intensity. Students will explore shadows, separate white light into its constituent colors, and measure the sun's angular diameter. These hands-on activities will allow you to interact with the properties of light in exciting ways.

Schedule

Session	Date	Time	Venue
1	20 Dec	9:30 a.m 12:30 p.m. 1:30 p.m 4:30 p.m.	OEE901, Oen Hall Building
2			Ho Sin Hang Campus Hong Kong Baptist University 224 Waterloo Road Kowloon Tong (Remark: please enter HKBU campus at Kam Shing Road Entrance)
3	27 Dec		
4			

Suitable for

- P4 P6 HKAGE student members in 2025/26 school year.
- Class size: 30
- Student members would be selected randomly by the computer system. The decision of HKAGE on the result of the selection should be final.

Pre-requisite

No special prerequisites are needed

Medium of Instruction

English with English handouts

Certificate

E-Certificate will be awarded to participants who have:

- attended at least 3 sessions; AND
- completed all the assignments with satisfactory performance