E1STM008C
(Token- required)

STEM Course (Level I)

Energy is Omnipresent

Prof. Marshal Liu

Application Deadline
21 Oct 2022 12:00 noon

Result Release
28 Oct 2022

Intended Learning Outcomes

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

1. describe the indispensability and current status of energy utilization in the world;

2. explain energy generation, transfer, storage, and efficiency;

3. evaluate various renewable energy for the pros and cons, especially in HK ;

4. develop an awareness of the necessity of energy conservation and the development of renewable energy for sustainability.

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

◆ Introduction

Energy is omnipresent. Human beings are using more and more energy, mainly from fossil fuel. However, fossil fuel is not sustainable, which may run out in this century. Meanwhile, wide use of fossil fuels generates tremendous environmental pollutants and global warming gases. This course will introduce the fundamentals on energy generation, conversion, utilization, transfer and storage, and discuss the incurred environmental problems. Renewable energy provides a promising yet challenging solution for future energy utilization in order to achieve carbon neutrality. Students will also have an opportunity to conduct experiments (making battery and solar car) in the labs of university to obtain first-hand information.

◆ Schedule

Session	Date	Time	Venue
1	10 Dec	9:00 a.m. – 12:00 noon 1:00 p.m. – 4:00 p.m.	*Physics Lab, Buddhist Kok Kwong Secondary School
2			
3	17 Dec	9:00 a.m. – 12:00 noon	
4			
5	29 Dec	9:00 a.m. – 12:00 noon 1:00 p.m. – 4:00 p.m.	*Room 4504, Lift 25/26, Academic building, HKUST

*HKUST is scheduled premises under the Cap. 599F, all persons entering the base, except for exempted persons, are required to scan the "LeaveHomeSafe" QR code and comply with the requirement of the Vaccine Pass. For details, please refer to the latest Government announcement in a timely manner.

◆ Target Participants

- P4 to P6 HKAGE student members only in 2022/23 school year
- Class size: 30

◆ Pre-requisite

No special prerequisites are needed

◆ Medium of Instruction

Putonghua with Chinese handouts

◆ Certificate

E-Certificate will be awarded to participants who have:

- attended at least 4 sessions; AND
- completed all the assignments with satisfactory performance

◆ Enquiries 📞 3940 0101 ✉ programme@hkage.org.hk

◆ Application Procedure

This programme is Programmes with No Screening.

There are no screening questions, written test or other screening methods for this type of programmes.

- Student members can select up to 5 programmes from a list of selection. Applicants have to state the priority when submitting the application. (1st priority, 2nd priority, 3rd priority, etc). 1 token is required for each programme

  (For programme list, please refer to the latest Programme Schedule here;

- The application can only be submitted once. After submission of the application, the programme selection and the priority cannot be changed;

- If a student member removes a programme from the application before the application deadline by withdrawal, the choice priority will remain unchanged. (For example: A student has selected three programmes and removed the programme with the 1st priority from the application. The choices of 2nd and 3rd priority will remain unchanged with no promotion in priority);

- We will select the students based on the student's choice of priorities and a randomly generated selection by the computer system. If there is time clash between the applied programme and other programmes with offer, HKAGE will consider if the application will be accepted;

- Student members should avoid applying programmes with time clash;

- The decision of HKAGE on the result of selection should be final.