

賽馬會「知情達意育優才」計劃  
Jockey Club "Gifted in Bloom-Harmony in Heart & Mind" ProgrammeBe an Energy Hero – To Formulate the Optimal & Sustainable Energy Plan  
(J2ENV001C)

## Introduction

This is a fun course where students learn about conventional energy technologies and various clean sustainable and renewable energy. They will examine the environmental impact, the social, economic, and political issues in relation to energy technologies and energy control. Students also design their own sustainable energy plan for a community and become **Energy Heroes!**

In the programme, the students will explore the environmental impact of conventional energies (fossil fuel-based, nuclear, hydro energy), how to conserve and make energy more efficient. They will examine various clean sustainable and renewable energy technologies and analyse the scheme of control and deregulation in electricity supply and how the energy industry impacts the social, economic, and political issues and policies. Students will apply what they have learned to design their sustainable energy plan for a community.

Programme  
Type / Level

Environmental Science Course (Level 2) ([Token-required](#))

## Instructor(s)

Mr Felix Tse (Academic Director) Science World

Target  
Participants

- S1 to S6 HKAGE student members
- Class size: 25
- Participants should be able to make commitment, be responsible to oneself as well as to the world, and be willing to discuss, elaborate and present their in-depth thoughts.

## Medium of Instruction

Cantonese with Chinese handouts

## Certificate



**Certificate** will be awarded to participants who have:

- ❖ Attended **at least 5 sessions; AND**
- ❖ Completed all the assignments with satisfactory performance

Intended Learning  
Outcomes

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

1. Assess the social benefits and environmental impacts of the fossil fuel economy and present their own views.
2. Describe and explain various energy conversion technologies in terms of challenges and potential for development.
3. Demonstrate an understanding of the way energy was discovered and used in human history.
4. Formulate informed arguments in responding to energy-related environmental issues.
5. Create an optimal renewable energy plan for a community that meets specific constraints and criteria.



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### Screening



~~Please answer the screening question in the online application form.  
\*The screening question is designed to help the applicants understand the course level and the course content. The question must be answered by the student applicants 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 applicants who can demonstrate motivation and interest in the screening questions can be enrolled in the programme.**~~  
**On the first come first serve basis**

### Application Deadline

~~8 March 2021 (12 noon)~~ **13 Apr 2021 (12 noon)**

### Application Result Release Date

~~15 March~~ **14 Apr 2021** (Accepted applicants will be informed by the HKAGE via email. Please complete the confirmation slip and return it to the HKAGE by fax / email ([jc@hkage.org.hk](mailto:jc@hkage.org.hk)) / post, within **3 1** working days of the application result release. Late reply will be considered as withdrawal.)  
If student members fail to return the confirmation slip on time or withdraw from the programme after submitting the confirmation slip, one token will be deducted.

### Schedule



The sessions may be rescheduled and/or conducted online subject to the development of the coronavirus epidemic and EDB's latest announcement on face to face programmes. Please pay close attention to email notifications and announcements on the HKAGE website.

Session	Date	Time	Content	Venue
1	17 April 2021	9:30am-12:30pm	● Smart, grid, review of different renewable energy (video, discussion, quiz)	Shatin/Shek Mun (TBC) Conference Hall 1, G/F, Building 1E, Core Building 1, Science Park
2	24 April 2021	9:30am-12:30pm	● Advance technology of using solar and wind energy (experiment, video)	Shatin/Shek Mun (TBC) Conference Hall 2, G/F, Building 1E, Core Building 1, Science Park
3	8 May 2021	9:30am-12:30pm	● Concepts of fission and fusion and basic knowledge of modern nuclear power plant (video)	Shatin/Shek Mun (TBC) Conference Hall 7, 2/F, Building 10W, Lakeside 2, Science Park
4	15 May 2021	9:30am-12:30pm	● Different kinds of energy other than conventional renewable energy (experiment, video)	Shatin/Shek Mun (TBC) <b>Zoom</b> <b>HKAGE Room 405&amp;406</b>


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	5	22 May 2021	9:30am-12:30pm	<ul style="list-style-type: none"> <li>Different newly developed ways of transportation (experiment, video)</li> </ul>	Shatin/Shek Mun (TBC) Conference Hall 4, 2/F, Building 10W, Lakeside 2, Science Park
	6	29 May 2021	9:30am-12:30pm	<ul style="list-style-type: none"> <li>Different ideas of deal with global warming (presentation and open discussion)</li> </ul>	Shatin/Shek Mun (TBC) Conference Hall 5, 2/F, Building 10W, Lakeside 2, Science Park
	Back-up date	5 June 2021	9:30am-12:30pm		Shatin/Shek Mun (TBC)


\* Science Park will arrange staff at some assembly points and bring students to the venue. If student member has not shown up on time at the assembly point, they should go to the venue by themselves .

**Assembly Point**

Date	Time	Assembly Point
17 April 2021	9:15 a.m.	Starbucks at Building 1E, Core Building 1, Science Park
24 April 2021	9:15 a.m.	
8 May 2021	9:15 a.m.	Big TV wall @ G/F, Building 10W
22 May 2021	9:15 a.m.	
29 May 2021	9:15 a.m.	

Reference: [How to get to Science Park](#) ; [Science Park Map](#)

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**Enquiries**  For enquiries, please contact us at 3940 0513 / 3940 0518 or email to [jc@hkage.org.hk](mailto:jc@hkage.org.hk).