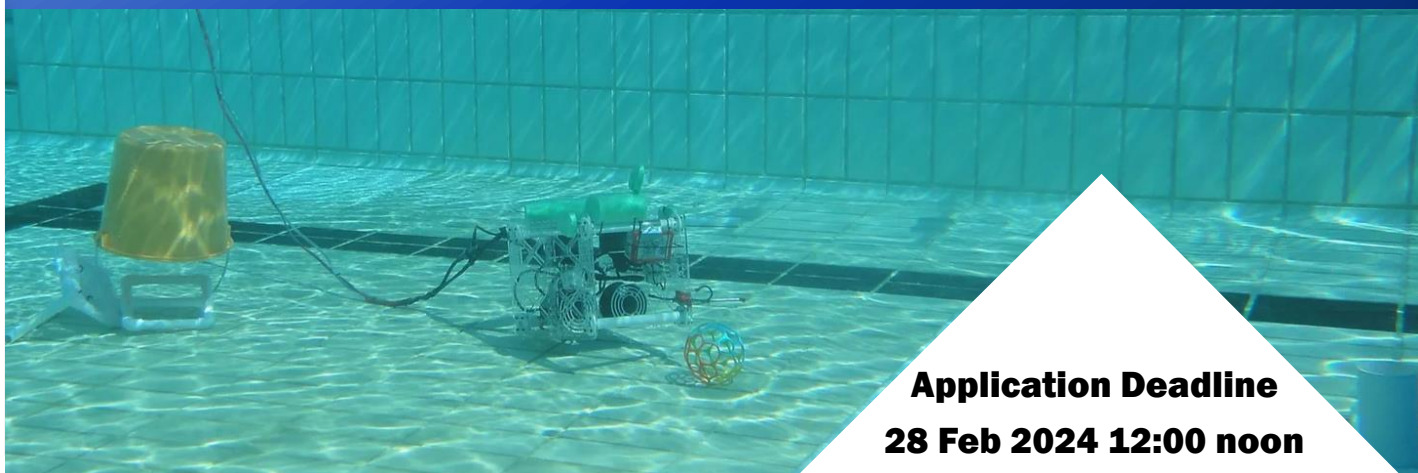E1ROB001C
(Token- required)

Robotics Course (Level I)

Deep Sea Detectives - Exploring with ROV

The IEEE Hong Kong Consumer Technology Society/
Oceanic Engineer Society Joint Chapter

Application Deadline
28 Feb 2024 12:00 noon

Result Release
5 Mar 2024

Intended Learning Outcomes

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

1. explain the mechanism of a remotely operated vehicle;

2. perform the skills in the construction and operation of a Basic ROV (electrical wiring, simple construction, and buoyancy);

3. develop the awareness of how science technology can be applied to address problems in our (especially marine) environment.

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

◆ Introduction

The Course is to build a marine-grade basic-remotely operated vehicle (ROV). Students will work in teams of 4 individuals. Students will be instructed on the working principles of the ROV. A number of design templates are provided and the students may choose one of the templates to make, based upon their intended purpose. The ROV unit is quite capable but complex to operate, with an operating range of 12m distance and up to 10m depth and rated for marine environments. Students will learn to pilot this ROV and explore the ability of the unit in a portable pool with set-up challenges. The completed ROV may be applied in the future in the exploration in a marine environment.

◆ Schedule

Session	Date	Time	Venue
1	16 Mar	8:30 a.m. – 12:30 p.m. 1:30 p.m. – 5:30 p.m.	RM 302 CBCC Building (Next to CIHE Bldg) St Francis University (CIHE) 2 Chui Ling Lane, Tseung Kwan O, New Territories
2			
3	23 Mar		RM 304 CBCC Building (Next to CIHE Bldg) St Francis University (CIHE) 2 Chui Ling Lane, Tseung Kwan O, New Territories
4			

◆ Target Participants

- S1 to S3 HKAGE student members in 2023/24 school year
- Class size: 32

◆ 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

◆ 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 mathematics/ probability in the screening question can be enrolled in the programme

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