



C2ROB001C

(Token- required

Robotics Course (Level II)

Robotics for amputees - Developing and Inspiring

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Intended Learning Outcomes

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

- 1. apply basic understanding of 3D modelling, 3D printing, and CAD software;
- 2. design prosthetic tools to enhance the quality of life for the upper-limb amputees;
- 3. present and test their final work with an amputee;
- 4. enhance their empathy toward amputees.

17 August 2023



Introduction

This course provides an in-depth syllabus with skills, techniques, and knowledge needed to design prosthetic tools. Students will learn about the difficulties of amputees during their daily living through the introduction and sharing session. After brainstorming and discussion, 3D design and modelling will be taught and students will practise how to use the CAD software. 3D printing will be used to fabricate their 3D models into actual physical parts so that they can test out their concept and design in the real world. At the end of the programme, we will invite an amputee to try out the prosthetic tools designed by the students and provide feedback after testing.

This course is under collaboration of HKAGE and the Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong.

Schedule

Session	Date	Time	Venue
1	22 August 2023	10:30 a.m 5:00 p.m.	
2	23 August 2023	10:30 a.m 5:00 p.m.	CUHK
3	24 August 2023	10:30 a.m 5:00 p.m.	(to be confirmed)
4	25 August 2023	10:30 a.m 5:00 p.m.	

Target Participants

- S1 S6 HKAGE student members in 2022/23 school year only
- 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