

COURSE DETAIL

INTELLIGENT INTERACTIVE ROBOT PRACTICE

Country

Hong Kong

Host Institution

Chinese University of Hong Kong

Program(s)

Chinese University of Hong Kong

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Electrical Engineering

UCEAP Course Number

147

UCEAP Course Suffix**UCEAP Official Title**

INTELLIGENT INTERACTIVE ROBOT PRACTICE

UCEAP Transcript Title

INTERACTIVE ROBOT

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This is a project-based course that offers a hands-on learning experience of the subject topics of robotics, perception and AI with applications in human-robot interaction. Students are required to first put together a workable mobile robotic manipulation platform using the provided mobile base and robotic arm, customized with perception sensing devices. Subsequently students use the mobile robotic manipulation system and the sensing devices to achieve perception and AI empowered real-world human-robot interaction with prescribed task objectives and scopes. Students work in small groups to study the hardware and learn the required ROS (Robot Operating System) software platform, understand the task requirements, work out feasible solutions, and accomplish the course project objectives. During the process, students acquire basic knowledge and practical skills of robotics, perception and AI.

Language(s) of Instruction

English

Host Institution Course Number

ELEG4701

Host Institution Course Title

INTELLIGENT INTERACTIVE ROBOT PRACTICE

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Electronic Engineering

Course Last Reviewed

[Print](#)