



# Remote Laboratory on Specific Heat Capacity

(SCIS1022)

## Introduction

This workshop aims at teaching students to build a remote experiment on their own. In this workshop, students will build a specific heat capacity experiment by using Arduino and Raspberry Pi to control the equipment and collect the experimental data. The experiment will then be performed via a webpage. Students could analyse the data generated, explain the scientific theory behind the specific heat capacity experiment, and experience and apply the technology of remote controlling hardware in the course.

## Programme Type / Level

Introductory Workshop in Physics (Level 1) ([Token-required](#))

## Instructor(s)

WONG Wang Cheung, YUNG Fai Ho Tony  
(Labwork Technology Limited)

## Pre-requisites

No special prerequisites are needed

## Target Participants



- S1 – S3 HKAGE student members
- Class size: 35
- \*First-come, first-served

## Medium of Instruction



English with English handouts

## Certificate



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

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

## Intended Learning Outcomes



- Upon completion of the programme, participants should be able to:
1. explain the scientific theory of specific heat capacity with experimental data;
  2. explain the technology of remote controlling over real experimental equipment;
  3. use Arduino and Raspberry Pi to control the experimental equipment for performing the specific heat capacity experiment.

## Application Deadline **11 May 2020, 12:00 n.n.**

Student members may withdraw from the programme on or before the deadline. Otherwise, the token will be deducted.

## Schedule



Session	Date	Time	Venue (HKAGE)
1	31 Jul	9:30 a.m. – 12:30 p.m.	Room-403
2	31 Jul	2:00 p.m. – 5:00 p.m.	Online Lecture

## Enquiries



For enquiries, please contact us at 3940 0101 after language selection, press "1".