



E3CSC002C

[ Gifted Programme ] Quantum Physics Course (Level III)

# **Fun Quantum Physics**

## Prof. Wang Xin Sunny Physical Society of Hong Kong



## **Intended Learning Outcomes**

#### Result Release 15 Aug 2025

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

- 1. develop an understanding of key concepts of quantum physics, such as the structure of an atom, superposition, and measurement;
- 2. enhance problem-solving skills through interactive experiments and thought exercises inspired by quantum phenomena;
- 3. explore quantum physics through interactive Virtual Reality experiences;
- 4. gain practical insights into quantum research through lab tours and be inspired by awe and curiosity about the field's potential.

### Gifted Programme Introduction

Quantum physics is a captivating field that drives modern technology. This course will introduce essential concepts like atomic structure, superposition, and measurement, showcasing their realworld applications. Participants will engage in hands-on experiments and thought exercises to sharpen problem-solving skills. Interactive Virtual Reality experiences will vividly illustrate quantum principles, while lab tours offer practical insights into cutting-edge research.

Outstanding participants may be invited to share their learning experiences in "Physics Education" session of international academic conferences organized or co-organized by the Physical Society of Hong Kong.

## Schedule

| Session | Date   | Time                  | Venue (TBC)                  |
|---------|--------|-----------------------|------------------------------|
| 1       | 27 Sep | 2:00 p.m. – 5:00 p.m. | City University of Hong Kong |
| 2       | 4 Oct  |                       |                              |
| 3       | 11 Oct |                       |                              |
| 4       | 18 Oct |                       |                              |



- S1 S6 HKAGE student members in 2025/26 school year.
- Class size: 30

## Pre-requisite

Some basic understanding of probability and classical physics including energy, motion, atoms and light



English with English handouts

## Certificate

🕨 Enquiries 📞 3940 0101 📈 programme@hkage.org.hk

E-Certificate will be awarded to participants who have:

- attended at least 3 sessions; AND
- completed all the assignments with satisfactory performance