



# Introduction to Physics (SCIO1002)

## Introduction

Mechanics, electricity and heat are the three major disciplines in physics. Many daily life examples can be explained from the knowledge in these areas. In this online programme, students learn about concepts such as Newton's Laws of Motion, circuit, electromagnetism and heat transfer in four modules. This programme provides students enough physics knowledge to enable them to further study other physics disciplines in the future.

<p><b>Module 1: Newton's Law of Motion 1</b></p> <ul style="list-style-type: none"> <li>• Examples of contact forces and non-contact forces</li> <li>• Idea of Newton's First Law of motion and its application</li> <li>• Properties of friction</li> </ul>	<p><b>Module 3: Electricity &amp; Magnetism</b></p> <ul style="list-style-type: none"> <li>• Open circuit and closed circuit</li> <li>• Simple circuit diagrams</li> <li>• Series circuit and parallel circuits</li> <li>• Relationship between electricity and magnetism, e.g. electromagnet</li> </ul>
<p><b>Module 2: Newton's Law of Motion 2</b></p> <ul style="list-style-type: none"> <li>• Idea of Newton's Second Law of motion and its application</li> <li>• Properties of gravity</li> <li>• Idea of Newton's Third Law of motion and its application</li> </ul>	<p><b>Module 4: Heat</b></p> <ul style="list-style-type: none"> <li>• Heat and Energy</li> <li>• Conduction, convection and radiation</li> <li>• Daily life examples in heat transfer</li> </ul>

## Programme Type / Level

Online Learning Programme (Level 1) ([Non Token-required](#))

## Writer

Mr. Cheung Chak Man (Secondary School Physics Teacher)

## Target Participants

➤ P4 to P6 HKAGE student members

\* Students who fail the online programme can enrol in it again in the next quarter.  
(Quarter ONE : 2 April – 30 June; Quarter TWO: 2 July – 30 Sep;  
Quarter THREE: 2 Oct – 30 Dec; Quarter FOUR: 2 Jan – 30 Mar).

## Medium of Instruction



English supplemented with English Voice Over

## Intended Learning Outcomes



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

1. Critically reflect the concepts in mechanics;
2. Analyze electricity concepts via circuit investigation;
3. Illustrate the relationship between electricity and magnetism;
4. Compare different types of heat transfer.

## Duration

12 hours

## System Requirement

Browser: IE 8 OR above; Firefox 6 OR above; Safari  
Screen resolution: 1024x768

## Application Procedure



1. Click "[HERE](#)" to go to online application platform
2. Complete and submit the online application form
3. You and your parent will receive the Online Application Confirmation email from our system
4. Click "[HERE](#)" to access to the moodle platform
5. Use the USERNAME and PASSWORD indicated in the email to login
6. You may start now!

## Remarks

- You have to pass the online test in order to complete the course by attempting **ONCE** only.
- A tick next to an activity name may be used to indicate when the activity is complete. If a box with a solid border is shown, please click it to tick the box when you think you have completed the activity. (Clicking it again removes the tick if you change your mind.)

## Enquiries



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