

# **ONLINE PHYSICS COURSE OUTLINE Secondary School & IGCSE Physics Programme**

## **Course Description**

This course provides a comprehensive foundation in Physics for secondary school students and learners preparing for IGCSE Physics examinations. It develops conceptual understanding, analytical thinking, and problem-solving skills through interactive online lessons, demonstrations, simulations, and structured assessments.

## **Course Objectives**

- 1 Understand fundamental physical principles
- 2 Apply physics concepts to real-life situations
- 3 Solve numerical physics problems confidently
- 4 Interpret graphs and experimental data
- 5 Develop scientific reasoning skills
- 6 Prepare effectively for IGCSE examinations

## **Target Learners**

- 1 Secondary school students (JS3 – SS3 / Grade 7–11)
- 2 IGCSE Physics candidates
- 3 Students needing foundation or exam revision
- 4 Homeschool and international learners

## **Course Duration**

- 1 24 – 36 Weeks (Flexible Online Schedule)
- 2 2–3 Classes per Week
- 3 60–90 minutes per session

## **Course Modules**

- 1 General Physics and Measurement
- 2 Motion (Kinematics)
- 3 Forces and Dynamics
- 4 Work, Energy and Power

- 5 Pressure
- 6 Thermal Physics
- 7 Waves
- 8 Light
- 9 Sound
- 10 Electricity
- 11 Magnetism
- 12 Electromagnetism
- 13 Electronics
- 14 Atomic Physics
- 15 Space Physics

## **Assessment Structure**

- 1 Weekly Quizzes
- 2 Homework Assignments
- 3 Topic Tests
- 4 Mid-Course Assessment
- 5 Mock IGCSE Examination
- 6 Final Examination

## **Teaching Methodology**

- 1 Live Interactive Lessons
- 2 Digital Whiteboard Explanations
- 3 Simulations and Demonstrations
- 4 Step-by-step Numerical Problem Solving
- 5 Past Paper Discussions
- 6 Personalized Feedback

## **Learning Resources**

- 1 IGCSE Physics Past Questions
- 2 Worksheets and Practice Sets
- 3 Recorded Lessons
- 4 Virtual Lab Simulations
- 5 Revision Notes

## **Expected Outcomes**

- 1 Strong physics foundation
- 2 Improved analytical thinking
- 3 High examination confidence
- 4 Excellent performance in school and IGCSE Physics exams