

ONLINE MATHEMATICS COURSE OUTLINE

Secondary School & IGCSE Mathematics Programme

Course Description

This course provides a comprehensive foundation in Mathematics for secondary school students and learners preparing for IGCSE Mathematics examinations. It focuses on conceptual understanding, logical reasoning, and problem-solving skills through interactive online lessons, guided practice, and structured assessments.

Course Objectives

- 1 Develop strong numerical and algebraic skills
- 2 Apply mathematical reasoning to real-life problems
- 3 Interpret mathematical data and graphs
- 4 Improve analytical and logical thinking
- 5 Build confidence in solving examination questions
- 6 Prepare effectively for IGCSE examinations

Target Learners

- 1 Secondary school students (JS3 – SS3 / Grade 7–11)
- 2 IGCSE Mathematics 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 Numbers and Basic Operations
- 2 Fractions, Decimals and Percentages
- 3 Ratio and Proportion

- 4 Algebraic Expressions and Equations
- 5 Indices and Surds
- 6 Linear and Quadratic Functions
- 7 Graphs and Coordinate Geometry
- 8 Geometry and Mensuration
- 9 Trigonometry
- 10 Vectors and Transformations
- 11 Statistics
- 12 Probability
- 13 Sequences and Series
- 14 Mathematical Problem Solving

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 Step-by-step Problem Solving
- 3 Digital Whiteboard Explanations
- 4 Exam Question Practice
- 5 Past Paper Discussions
- 6 Personalized Feedback

Learning Resources

- 1 IGCSE Mathematics Past Questions
- 2 Worksheets and Practice Sets
- 3 Recorded Lessons
- 4 Revision Notes
- 5 Interactive Problem Solving Activities

Expected Outcomes

- 1 Strong mathematical foundation
- 2 Improved logical reasoning
- 3 High examination confidence
- 4 Excellent performance in school and IGCSE Mathematics exams