

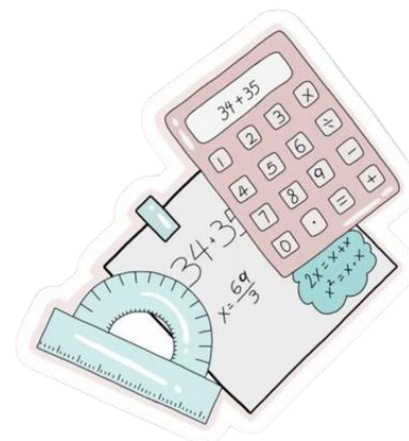
# School Subjects Introduction

## Mathematics Module 1 (Calculus and Statistics) & Module 2 (Algebra and Calculus)

### I. Curriculum Structure

The curriculum comprises a Compulsory Part and an Extended Part. In order to broaden students' opportunities for further study and work, two modules in the Extended Part are provided to achieve the purpose. These two modules are designed for students who wish to:

- ✓ further their studies in areas which require more mathematics; or
- ✓ engage in fields such as natural sciences, computer sciences, technology or engineering.



**Module 1 (Calculus and Statistics)** focuses on statistics and the application of mathematics. It is designed for students who will participate in study and work which require a wider and deeper knowledge of the application of mathematics, in particular, statistics.

**Module 2 (Algebra and Calculus)** focuses on more advanced mathematics concepts. It aims to prepare students for career in a mathematics-related discipline.

Extended Part (Module 1)	Extended Part (Module 2)
<ul style="list-style-type: none"> <li>• Foundation knowledge</li> <li>• Differentiation and its applications</li> <li>• Integration and its applications</li> <li>• Further probability</li> <li>• Binomial, Poisson and Geometric distributions and their applications</li> <li>• Normal distribution and its applications</li> <li>• Point and interval Estimation</li> <li>• Further learning unit</li> </ul>	<ul style="list-style-type: none"> <li>• Foundation knowledge</li> <li>• More about Trigonometry</li> <li>• Limits and Differentiation</li> <li>• Application of Differentiation</li> <li>• Indefinite Integration and its application</li> <li>• Definite Integration and its application</li> <li>• Matrices and Determinants</li> <li>• Systems of linear equations</li> <li>• Vectors and its application</li> <li>• Further learning unit</li> </ul>

### II. Assessment Module 1 (Calculus and Statistics) / Module 2 (Algebra and Calculus)

Component		Weighting	Duration
Public Examination	Conventional questions	100%	2.5 hours