

## ■ IB SL Mathematical Studies

### **Introduction**

The Mathematical Studies course is designed for students with a wide range of backgrounds in mathematics. The course caters specifically for those students who do not anticipate a need for mathematics in their future studies. Students commencing the Mathematical Studies SL course should have achieved a standard of mathematics equivalent ideally to at least a B grade at GCSE level.

The aims of Mathematical Studies course are to enable candidates to:

- appreciate the international aspects of mathematics;
- develop an understanding of the usefulness of mathematics;
- develop logical and critical thinking to solve problems in pure and applied mathematics;
- develop mathematical knowledge and skills;
- understand the use of technology to support mathematics;
- communicate mathematically, in writing and orally.

### **Content**

#### *Topics*

1. Introduction to the graphic display calculator
2. Number and algebra
3. Sets, logic and probability
4. Functions
5. Geometry and trigonometry
6. Statistics
7. Introductory differential calculus
8. Financial mathematics

#### *Project*

This is an individual piece of work involving collection or generation of data, and analysis and evaluation of the results.

### **Assessment**

The external assessment (80%) is two written papers, one with short response questions and the other with extended responses questions. The coursework (20%) is the individual project that is assigned and marked by the teacher.

Students on this course are expected to have a TI-83+ calculator.