

IB Mathematics: Applications and Interpretation Level 3



Qualification Aims and Objectives

This course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics.

The course makes extensive use of technology to allow students to explore and construct mathematical models. Mathematics: applications and interpretation will develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures.

Candidates who will be accepted on the IB maths course need to have a GDC calculator. We recommend the Texas Instruments T1-84 Plus.

The aims of this course are:

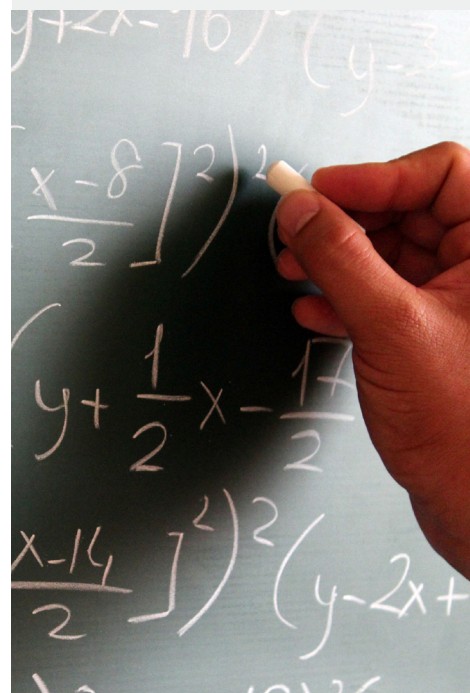
- To enable students to enjoy and develop an appreciation of the power of maths and to understand the principles and nature of maths.
- To employ and refine their skills to alternative situations.

Course Outline

- Topic 1: Number & Algebra
- Topic 2: Functions
- Topic 3: Geometry & Trigonometry
- Topic 4: Statistics & Probability
- Topic 5: Calculus
- Mathematical Exploration: An individual piece of work involving the collection of information or the generation of measurements, and subsequent analysis and evaluation.

The majority of employers and universities hold Mathematics qualifications in high regard because of the skills they develop, and the dedication required by learners to complete the full course. Employers will consider problem solving, thinking logically and high level quantitative and numerical skills as obvious acquisitions on a maths qualification. There is also specific knowledge attached to the particular modules such as statistical methods, applied mathematics and actuarial technical skills.

Combining Mathematics with Physics and Chemistry or other Science courses expands the range of career options further.



Entry Requirements

Minimum of 5 9-5 grades in GCSE examinations including grade 7 standard or grade 8 for higher level in GCSE Maths.

Future courses & possible careers

- Accounting
- Teaching
- Banking
- Investment
- Trader

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