ADVANCED HIGHER

Entrance Requirement
Higher Mathematics at Grade A or B.

Course Descriptor
The Advanced Higher Mathematics Course enables learners to select and apply complex mathematical techniques in a variety of mathematical situations. Learners interpret, analyse, communicate and manage information in mathematical form, while exploring more advanced techniques.

The course covers aspects of calculus, algebra, geometry and proof including:
- Differentiation
- Properties of functions
- Integration
- Differential equations
- Applications of calculus
- Binomial theorem
- Partial fractions
- Sequences and series
- Complex numbers
- Mathematical proof
- Number theory
- Matrices
- Systems of equations
- Vectors

The course is appropriate for anyone with a pass at A or B level in Higher, wishing to extend their knowledge and understanding of mathematics.

The Work of the Course
In class pupils discover, develop and practice ideas and examples from the course topics through class discussions, show-me boards, group work , textbooks exercises and IT.
At home daily revision and practice of work covered in class is essential. Formal homework at fortnightly intervals (at least) is required.

Assessment
Final Grade: Course Work 0%   **External Exam** 100%

Possible progression to university/college courses in Maths, Sciences, Engineering and Computing.