

Pre Sixth Form Intensive Mathematics Course



Course Objectives

This Pre Sixth Form Intensive Mathematics course has been specifically designed by Rossall School for students who intend to study mathematics at Sixth Form level either within the International Baccalaureate Diploma or A-Level programme.

Our aim is to ensure that students have a solid foundation in the key mathematical areas of Numeracy, Algebra and Statistics. The intention is not necessarily to introduce new material, but more to enable students to consolidate and refresh their skills prior to starting their demanding Sixth Form courses.

Numeracy

Numeracy is the corner stone of mathematics. Without solid numeracy skills, students will struggle with all other aspects of the mathematics curriculum.

- Fractions
- Directed Numbers
- Rounding to Significant Figures
- Rounding to Decimal Places
- Differences in UK Maths Notation and Terminology
- Order of Operation
- Surds and Indices
- Trigonometry
- Pythagoras

Algebra

Confidence with manipulating equations and formulae is essential if students are to succeed with any Sixth Form course. This course aims to give students extra practice with many of the fundamental algebraic techniques.

- Linear Equations
- Substituting into Formula
- Changing the Subject of Equations
- Graphing Functions
- Factorising Quadratics
- Expanding Quadratics
- Completing the Square

Statistics

From experience we have found that many overseas mathematics syllabuses have no statistical content. This course aims to give students a basic introduction to statistical techniques.

- Mean, Median and Mode
- Range
- Interquartile Range
- Cumulative Frequency
- Frequency Polygons
- Bar Charts
- Histograms
- Stem and Leaf Diagrams
- Box and Whisker
- Stem and Leaf
- Probability

Evening Sessions:

- Autograph Session
- Practice Coursework
- Use of Calculator

- Maths Trail
- Maths Team Challenge
- Software Packages eg: Excel and Autograph

- Practical Statistics
- Experimental Probability
- Data Survey



Course Schedule 2008

Date	Module	Day Session 1	Day Sessions 2	Evening Sessions
Sun 24th Aug	-	Arrive	-	-
Mon 25th Aug	Numeracy	2pm - 4pm	7pm - 9pm	-
Tues 26th Aug	Numeracy	10am - 12pm	2pm - 4pm	7pm - 9pm
Wed 27th Aug	Numeracy/Algebra	10am - 12pm	2pm - 4pm	7pm - 9pm
Thurs 28th Aug	Numeracy/Algebra	10am - 12pm	2pm - 4pm	7pm - 9pm
Fri 29th Aug	Numeracy/Algebra	-	2pm - 4pm	7pm - 9pm
Sat 30th Aug	Numeracy/Algebra	10am - 12pm	2pm - 4pm	-
Sun 31st Aug	Excursion	Excursion	Excursion	Excursion
Mon 1st Sept	Statistics	10am - 12pm	2pm - 4pm	7pm - 9pm
Tues 2nd Sept	Statistics	10am - 12pm	2pm - 4pm	-

Class Sizes

There will be a maximum number of 8 pupils per class.

Extra - Curricular Activities

Whilst we will not be providing any specific extra-curricular activities outside of the teaching sessions outlined, students may attend our on-campus international restaurant, Mondo Café, during their free time in the afternoons and evenings and make use of our indoor and outdoor sports facilities on campus. Sport equipment may be purchased from the School shop. In addition, the local town of Cleveleys is a 20 minute walk or 5 minute tram or taxi ride away and is home to a good range of clothes, music, food and entertainment shops, restaurants and cinema.

Course Options and Fees

Course Length	Start Date	Subjects Covered	Boarding	Day
10 Day Boarding Course / 9 Day, Day Course:	Starting Sun 24th Aug	Numeracy, Algebra and Statistics	£800	£500
7 Day Boarding Course / 6 Day, Day Course:	Starting Wed 27th Aug	Numeracy, Algebra and Statistics	£560	£350
4 Day Boarding Course / 3 Day, Day Course:	Starting Fri 29th Aug	Algebra and Statistics	£320	£200
3 Day Boarding Course / 2 Day, Day Course:	Starting Sun 31st Aug	Statistics	£260	£150

The boarding option fee includes all meals and accommodation costs. Airport transfer costs are not included and this must be arranged separately. The day option fee includes lunch and dinner only and does not include participating in the Excursion planned for Sunday 31st August. Students may purchase snacks and drinks from the School shop or from our on-campus restaurant, Mondo Café.

Admission Requirement

Students must be accepted onto either the International Baccalaureate Diploma programme or the A-Level Mathematics course at Sixth Form at a British School in the UK.

How to Apply

Places on the Pre Sixth Form Intensive Mathematics course are limited, therefore, early application is advised. To apply for a place on either the 10 day course, the 7 day course, or the 3 day course, please contact the Registrar, Lynda Smith:

Tel: +44 (0)1253 774260 E: lyndas@rossallcorporation.co.uk

