

Skills Acquired

Research
Analysis
Some ICT

Investigation
Problem Solving

Logical Reasoning
Decision Making

Assessment Procedure

AS - 3 papers all 90 minutes
A2 - 3 papers all 90 minutes
There is no coursework.

Career Opportunities

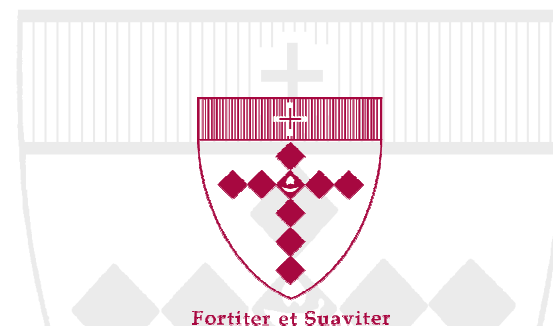
Careers opportunities for mathematicians are plentiful. Many end up working in the City, where numerical understanding and analytical ability are highly sought after. Mathematics and Statistics also support careers in Medicine, Engineering, IT, Insurance, Banking, Economics, Industry, Management, Marketing, Electronics, Accountancy and Actuarial work as well as teaching and research.

Present Students' Comments

"Being interested in working with numbers, but not algebra or trigonometry, I was pleased to have the choice of Statistics for A-Level"

"The Pure mathematics course is making me think more logically and this is having a positive effect on my other subjects".

Mathematics at Brigidine School Windsor



The Department lies within the Science and Mathematics Faculty headed by a Leader of Learning, Mrs Gillian Slater.

Mathematics Department Staff:

Mr James Fitzpatrick* BSc Glasgow, PGCE

Mrs Jianping Pratt BSc (Hons) OU; PGCE; BEd China

*Subject Co-ordinator

Overview

In an increasingly technical world, Mathematics, the Queen of Sciences and the Prince of Arts, is the subject that underpins our understanding of the world we live in and numerical skills and critical thinking are increasingly prized.

In the Mathematics Department at Brigidine, we aim to encourage all the girls to enjoy being taught topics in this subject, to achieve as full an understanding as they are individually able to and to gain the best exam results they can. There are 3 Mathematics classrooms with data projectors enabling the use of ICT to support learning and software is used to help bring Mathematics and Statistics to life. Otherwise teaching is traditional using whiteboards and there is class practice and homework together with assessments at the end of each topic as well as annual exams.

The Five Years to GCSE

Key Stage 3 and Key Stage 4

All pupils sit a Mathematics GCSE at Brigidine. We aim to achieve a pass Grade C or higher for all pupils. The more able pupils may take the GCSE early. Coursework has now been phased out.

Girls are given an initial diagnostic test and put into one of two or three sets depending on the size of that year's intake. The sets have about 10 pupils in each and follow the Framework National Curriculum Mathematics syllabus at support, core or extension levels dependent on the level of pupil ability. Intervention lessons and one to one tutoring may also be available for those who require them. Girls are also encouraged to problem solve using puzzles and games.

At the end of year 7, or earlier if it is apparent that a girl is not in the appropriate set for her, girls may be moved between sets

to ensure that they are reaching their maximum potential and are moving at a pace comfortable for them.

AS and A Level

Key Stage 5

What is maths about? Are you interested in thinking? Do you like solving problems? Are you good at using numbers? Then you should think seriously about AS and A'Level mathematics.

Most universities view an applicant with A'Level in Mathematics as one of the most rigorous and analytical preparations for a degree in any academic subject. Of course it is a pre requisite of some degree courses such as Engineering and Physics and even for courses such as some Psychology degrees. Overall Mathematics AS and A2 are qualifications in thinking.

Diversity of course options

Both AS and A2 are based on a modular system with 3 modules required for an AS and a further 3 for A2. There are 6 modules available for Mathematics of which 2 are Statistics, 6 modules available for Statistics and 6 modules for Pure Mathematics.

We are thus able to offer a choice of 3 AS and 3 A2 course (Mathematics, Statistics and Pure Mathematics). An AS and A2 in Further Mathematics is also on offer, depending on needs and ability.

Pre requisites

5 GCSEs at A-C

GCSE A*, A or B (rarely a C) in Mathematics or Statistics

Pupils require an enthusiasm for the subject and an expectation that there will be quite a jump in understanding required from GCSE to AS and then to A2.