



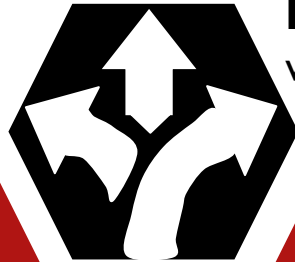
St George's School  
*Aim Higher*

# Sixth Form Options

Mathematics and Further Mathematics  
A Level Course - Edexcel

# Why study Maths?

**Develop key employability skills**  
e.g. problem-solving, communication,  
logical reasoning and resilience



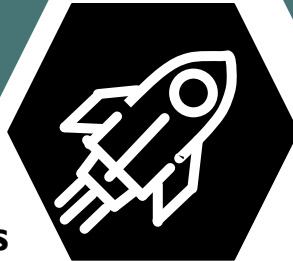
**Leads to versatile qualifications**  
well-respected by employers and higher education



**Increase knowledge and understanding**  
of mathematical techniques and their applications



**Support the study of other A levels**



**Stimulating and challenging courses**



**Excellent preparation**  
for a wide range of university courses

# Career Opportunities



# University Courses

- ▶ Accountancy
- ▶ Actuarial Science/Studies
- ▶ Aeronautical Engineering
- ▶ Archaeology (useful not essential)
- ▶ Architecture
- ▶ Banking
- ▶ Biochemistry
- ▶ Biology (very useful not essential)
- ▶ Biomedical Sciences
- ▶ Business Studies
- ▶ Chemical Engineering
- ▶ Chemistry
- ▶ Computing
- ▶ Dentistry
- ▶ Dietetics (useful not essential)
- ▶ Economics
- ▶ Electrical Engineering
- ▶ Engineering (General)
- ▶ Environmental Science/Studies
- ▶ Finance
- ▶ Geography (useful not essential)
- ▶ Geology/Earth Sciences
- ▶ Insurance
- ▶ Management Studies

# University Courses

- ▶ Materials Sciences
- ▶ Mathematics
- ▶ Mechanical Engineering
- ▶ Medicine
- ▶ Optometry
- ▶ Orthoptics
- ▶ Pharmacy
- ▶ Philosophy (useful not essential)
- ▶ Physics
- ▶ Physiotherapy (useful not essential)
- ▶ Psychology
- ▶ Speech Therapy (useful not essential)
- ▶ Sports Science (useful not essential)
- ▶ Surveying (useful not essential)
- ▶ Veterinary Science

# Entry Criteria – Mathematics

- ▶ Minimum of five full GCSEs or equivalent at grades 9-5, including English (Language or Literature), with a minimum **grade 7 in Mathematics** and two other passes at grade 6 or above.
- ▶ A passion for Mathematics

# What is studied in Mathematics?

- ▶ Pure Mathematics
  - ▶ Two thirds of the course
  - ▶ Algebra, geometry, trigonometry, vectors, etc.
- ▶ Statistics
  - ▶ One sixth of the course
  - ▶ Data collection and analysis, distributions and probability
- ▶ Mechanics
  - ▶ One sixth of the course
  - ▶ Forces, vectors, motion, etc.

# How is it examined?

- ▶ Edexcel exam board
- ▶ Three 2-hour written papers
  - ▶ Paper 1 assesses content from Pure Mathematics
  - ▶ Paper 2 assesses content from Pure Mathematics
  - ▶ Paper 3 assesses content from Statistics and Mechanics
- ▶ All papers are sat during the June sessions at the end of Year 13



# Entry Criteria – Further Mathematics

For those that wish to study Mathematics to a greater depth.

- ▶ Taking the Mathematics A-Level
- ▶ A minimum of **grade 8 in GCSE Mathematics**
- ▶ Must be selected as a fourth option

# What is studied in Further Mathematics?

- ▶ Core Pure Mathematics
  - ▶ One half of the course
  - ▶ Complex numbers, matrices, polar coordinates, etc.
- ▶ Option Courses: Decision, Mechanics and Statistics
  - ▶ Each worth one quarter of the course; only two required.
  - ▶ Students are given the opportunity of studying and sitting all three options, with the best two being used towards their overall A-level result.
  - ▶ Students may choose to only study and sit two options.

# How is it examined?

- ▶ Edexcel exam board
- ▶ An additional four 90-minute written papers as follows:
  - ▶ Pure Core 1
  - ▶ Pure Core 2
  - ▶ Two (or three) of Decision, Further Mechanics or Further Statistics
- ▶ Mathematics A-Levels are sat in the June session at the end of Year 12 and Further Mathematics A-Levels are sat in the June sessions at the end of Year 13.

# Mathematics Results (Aug 2024)


- ▶ 55% of students achieved A\*/A
  - ▶ National average: 42%
- ▶ 74% of students achieved A\* – B
  - ▶ National average: 61%

# Further Mathematics Results (Aug 2024)

- ▶ 71% of students achieved A\*/A
  - ▶ National average: 58%
- ▶ 93% of students achieved A\* – B
  - ▶ National average: 79%

# Cocurricular Opportunities

- ▶ Mathsfest
- ▶ Maths Extension
- ▶ UKMT
  - ▶ Senior Maths Challenge
  - ▶ Senior Kangaroo
  - ▶ British Mathematics Olympiad
  - ▶ Maths Olympiad for Girls
- ▶ Maths Clinic



“ A level Maths has been a challenging step up from GCSE, but I have enjoyed every lesson. With all the great teachers and interactive lessons, A level Maths feels fun and even enjoyable! I always feel able to ask questions if I don't understand, and feel the teachers push me to reach my full potential. ”

A-LEVEL MATHEMATICS STUDENT

Around 40% of all sixth form students at St George's are studying either Mathematics or Further Mathematics

“ I found Further Maths to be very challenging, fast paced and requiring a lot of hard work. But with dedication, determination and discipline you can do it, and it has pushed me to do more than I ever thought I could. ”

A-LEVEL FURTHER MATHEMATICS STUDENT

Around 40% of all sixth form students at St George's are studying either Mathematics or Further Mathematics