



# FURTHER MATHEMATICS KEY STAGE 5 SCHEDULE 2023-2025

## COURSE

### Exam Board and Specification

We follow the MEI syllabus which is administered by the OCR examination board.

### Course Title

FURTHER MATHEMATICS B (MEI) H645

### Assessment

4 examination papers at the end of year 13

Paper 1 : Pure Mathematics, 144 marks, Calculator allowed. 2h 40mins.

Paper 2 : Mechanics Minor, 60 marks, Calculator allowed. 1h 15mins.

Paper 3 : Statistics Minor, 60 marks, Calculator allowed. 1h 15mins.

Paper 4 : Extra Pure Minor, 60 marks, Calculator allowed. 1h 15mins.

Paper 1 is split into two sections, with the first section being comprised of questions which involve minimal reading and interpretation and the second sections involve longer questions and more problem solving.

## COURSEWORK DEADLINES/EXAMS

## WHEN

PAPER 1 : PURE MATHEMATICS

JUNE 2025

PAPER 2 : MECHANICS ( MINOR )

JUNE 2025

PAPER 3 : STATISTICS ( MINOR )

JUNE 2025

PAPER 4 : EXTRA PURE ( MINOR )

JUNE 2025

IT SHOULD BE NOTED THAT THERE WILL BE INTERNAL TESTS AND EXAMS TO TRACK PROGRESS THROUGHOUT THE TWO YEARS.

## PROJECTS/SCHEME OF WORK/TOPICS

## DURING

MATRICES, SEQUENCES AND SERIES. MECHANICS : DIMENSIONAL ANALYSIS, FORCES, WORK, ENERGY AND POWER, MOMENTUM AND IMPULSE I, CENTRES OF MASS I

YEAR 12

COMPLEX NUMBERS, ROOTS OF POLYNOMIALS , VECTORS AND 3D SPACE, STATISTICS CONTENT : SAMPLING, DISCRETE RANDOM VARIABLES, BIVARIATE DATA, CHI SQUARED TESTS

YEAR 12

PROOF, CALCULUS, POLAR COORDINATES, HYPERBOLIC FUNCTIONS, DIFFERENTIAL EQUATIONS

YEAR 13

MECHANICS CONTENT : MOMENTUM AND IMPULSE II, CIRCULAR MOTION, HOOKE'S LAW, CENTRES OF MASS II, VECTORS AND VARIABLE FORCES.

YEAR 13

EXTRA PURE CONTENT : RECURRENCE RELATIONSHIPS, GROUPS, MATRICES AND MULTIVARIABLE CALCULUS

YEAR 13

## OTHER INFORMATION

### Textbooks

We use the MEI series of textbooks published by Hodder Education.

### Calculators

Students should have the same calculator they required for A Level Maths (Casio FX991-EX ). Graphical calculators may well help aspects of the course, but are not necessary.

### Homework and Revision

Homework tasks often involve completing exercises from the above textbooks as well as completing topic review sheets written by MEI. Pupils also have access to the resources on [www.mymaths.co.uk](http://www.mymaths.co.uk). Past papers are available to download from [www.mei.org.uk](http://www.mei.org.uk).

### Contacts

If you have any queries, please telephone the school or contact Mr Boxall via email using [ben.boxall@tbshs.org](mailto:ben.boxall@tbshs.org).