Welcome to A Level Mathematics and Further Mathematics!



You've probably been wondering how studying A Levels will compare to your previous studies so we have put together a quick guide and some activities to help you get ready for starting in September.

A Level Maths A Level Further Maths

Serving the community through education and training





An Introduction to A level Mathematics and Further Mathematics

Core Statistics

Mechanics Dealing with data

Decision (Further Mathematics only)





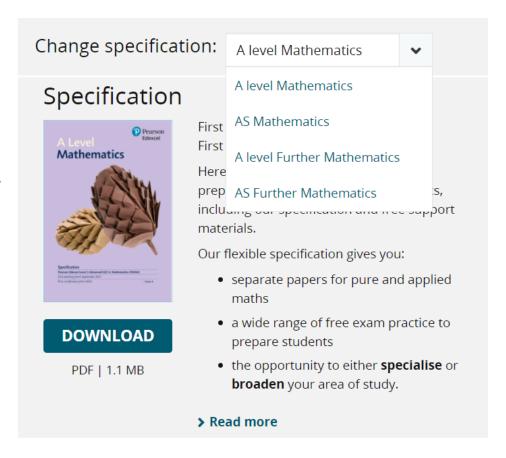
Exam Board and specification

The Exam board that we follow at Bury College is Edexcel.

You can find many useful resources on their Website <u>A Level Mathematics (2017)</u>

AS Mathematics is content for year 1.

Use the dropdown on their website to change specification for Further Mathematics.





What does A level maths consist of?

Linear A level Mathematics

- This is a 2 year course. It consists of 3 areas of study, pure/core maths, statistics and mechanics.
- There will be 3 externally set exams at the end of your 2nd year: 2 in core and 1 in Applied.
- At the end of your first year you will take an internally marked exam to assess your progress.



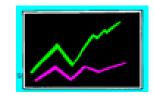
What is Further Mathematics?

Linear A level Further Mathematics

- Further Mathematics covers all areas of A level Mathematics but extends and introduces new concepts.
- It is a separate A level to the Mathematics A level. You can only study Further Mathematics if you are also studying A level Mathematics.
- It has a choice of options which include Decision Maths, Mechanics and Statistics. These options will be decided when the classes start in September. Currently we are studying Core 1, Further Core 1 and Decision.
- You will sit both the Mathematics and Further Mathematics exams at the end of your 2nd year.
- Similarly to Mathematics, at the end of your first year you will take an internally marked exam to assess your progress.



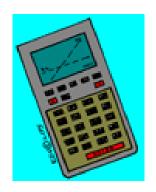
Mode of study



- You receive 5 hours a week tuition in classes.
- You are expected to spend at least as much time as this doing homework and in private study.
- If you want to speak with the staff during your study:
 - o email
 - o or direct messaging us using the VLE mail.
 - or simply call by the staffrooms located in Venture building.

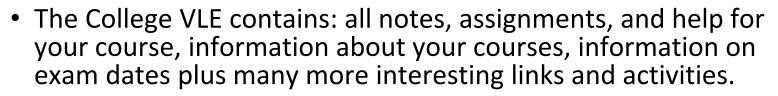








Recommended technology

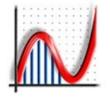






- Confident use of Microsoft Excel to study data. Display charts etc.
- Autograph for drawing graphs and studying data. Download for free at https://completemaths.com/autograph
- Desmos App. for drawing graphs we recommend that you download this App to your phone/tablet. However, you can access it directly from your PC on the website. http://www.desmos.com





GeoGebra



What will I need?

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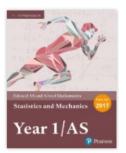
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- You supply your own writing paper.
- You supply a scientific calculator that has stored statistical tables in them. E.g. Casio FX-991EX. A graphical calculator is also very useful (but not essential) especially if you are studying further mathematics.
- We supply any specialist paper e.g. graph paper and an exercise book.
- We will provide access to the text books we use in eBook format.
 You will get your own account.
- We will provide you with a booklet of examples to complete in class so all your class notes are in one place.

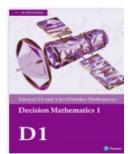


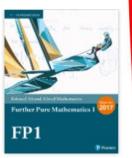




Further maths text books year 1









Recommended web sites

Whilst studying A level Mathematics or A level Further Mathematics you will need to use the internet to support your study. Some useful websites are below

TL Maths: website that offers videos on all of the topic areas that are covered in year 1 (AS) and then year 2 (A Level)

TL maths videos A level maths year 1

TL Maths videos for further maths, this is not as complete as the A level Maths videos but is being added to all the time.

<u>TL maths videos A level Further maths year 1</u>

Exam Solution Tutorials/Past papers (AS year 1) EdExcel tutorials/past papers

Should you want to brush up on your GCSE maths then you can use Exam solutions for that too. GCSE Maths Revision



Preparation materials for your first few weeks at Bury College

Here are some of the topics that we will start to cover in the first few weeks at Bury College.

A level Maths

<u>Introduction to coordinate geometry</u> (TL Maths)

Basic Algebraic Skills Booklet (available on the Bury College website) – This should be completed as preparation for the algebraic aspects of the A level maths course.

A level Further Mathematics

<u>Introduction to Matrices</u> (exam solutions)

Addition/subtraction and multiplication of a matrix by a scaler (exam solutions)

Matrix multiplication (exam solutions)

There is a worksheet (Quiz) with answers (available on the Bury College website) for you to have a go at.

Introduction to Decision Maths (mathigon maths)