

The Further Mathematics Support Programme

# A level Mathematics: What's New in Statistics?

**A one-day course for current and prospective teachers of A level Mathematics**

**Hosted at the Thurston Community College, IP30 9AA  
Thursday 29<sup>th</sup> June 2017, 9:30am - 4:30pm**



Statistics is probably the area of mathematics undergoing the most significant change in the new Mathematics AS and A levels from September 2017.

Not only is there prescribed statistics content for all students, the requirement that students be familiar with a large data set is new as is the emphasis on interpretation over calculation.

Come along to this day to find out about the most important changes to statistics content and teaching in the new A level.

**Find out about the new prescribed statistics content in the Mathematics A level from September and how you might go about teaching it**

## **Choice of dates and venues**

The same course will also be running at the University of Essex on Friday 23<sup>rd</sup> June, so please choose the date and venue that suits you best and ensure you have selected carefully on the online booking form.

## **Course aims:**

- To meet the major topics at AS and A level Mathematics
- To understand how teaching may need to change to meet the change in examining ethos
- To try some activities which can be used in the classroom

### Timetable for the day:

0900	Registration
0930	Introduction
0945	Large data sets and sampling <ul style="list-style-type: none"><li>■ Understand why Large Data Sets (LDS) have been introduced at A level and consider ways to use LDS as a teaching tool</li><li>■ Understand why samples are used; know some sampling methods and their limitations</li></ul>
1100	Break
1115	Conditional probability <ul style="list-style-type: none"><li>■ Understand different ways of representing probability, including two-way tables, Venn diagrams and tree diagrams</li><li>■ Calculate conditional probabilities and investigate real-life scenarios</li></ul>
1230	Lunch
1315	Significance and hypothesis testing with the binomial distribution <ul style="list-style-type: none"><li>■ Appreciate that statistics is not always right or wrong and how differences in inference can occur</li><li>■ Decide whether a result is statistically significant</li><li>■ Use the binomial distribution as a model and set up hypothesis tests using the binomial distribution</li></ul>
1430	Break
1445	Normal distribution <ul style="list-style-type: none"><li>■ Use the Normal distribution as a model</li><li>■ Standardise a Normal variable and use the Normal distribution tables</li><li>■ Solve problems that relate to the Normal distribution</li></ul>
1615	Next Steps
1630	Close

**Venue:** **Thurston Sixth Beyton Campus,**  
**[Drinkstone Road, Beyton, Bury St Edmunds IP30 9AA](#)**  
**(please click hyperlink for a map)**

### Course fees and application:

Fees for this course are £50 for teachers from FMSP-registered schools

To apply, please complete the online form at: <https://goo.gl/forms/6TdnIXMgKXqZswWr1>

Please ensure you choose the correct date and venue.

### Further information

More details about this course can be found at: [http://furthermaths.org.uk/EE\\_CPD](http://furthermaths.org.uk/EE_CPD)

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