



Teaching Statistics 1 (TS1)

3rd March 2022

Overview

Teaching Statistics 1 (TS1) is a [sustained professional development course](#) for teachers wishing to build their confidence in teaching statistics. TS1 covers the statistics content from all major specifications for AS/A level Mathematics.

TS1 consists of:

- 12 live online tutorials
- Two compulsory study days
- A reference book to support your studies
- Access to our online Integral platform, including course-specific teaching and learning resources
- Email support from a tutor and access to an online group forum

Towards the end of the course a short assignment is issued, for which support and guidance are provided. Course certificates will be available for those participants completing the assignment.

After TS1, participants have the opportunity to continue to [TS2](#), which will further expand understanding of statistics teaching.

Between them, the TS1 and TS2 courses cover the majority of the content of A level Statistics.

Aims

- Gain a deep understanding of statistics as a problem-solving discipline
- Develop statistical modelling skills
- Develop confidence in working with real data using technology
- Improve statistical subject knowledge
- Build on existing pedagogical skills

Who will benefit from attending?

TS1 is designed for teachers who are currently teaching A level Mathematics or Further Mathematics, or who wish to teach it at some point in the near future.

Our sustained courses enable teachers to broaden and deepen their subject, pedagogical and pedagogical content knowledge. Teachers, with enhanced subject knowledge, are therefore better equipped to make links between topics, address students' misconceptions and confidently challenge learners at all attainment levels. Our course aims and intended outcomes are consistent with the principles set out in the Education Inspection Framework.

Content

TS1 covers the statistics content for AS/A level Mathematics. This includes the following topics:

- Statistical sampling and using large data sets
- Data presentation and interpretation
- Summary statistics
- Bivariate data
- Probability
- Statistical distributions
- Statistical hypothesis testing

Materials and Equipment

A computer with a reliable internet connection will be required to attend the online tutorials. In addition, a headset or earphones with a microphone is suggested to get the best experience of the online tutorials.

Frequently Asked Questions

Do I need to have taught A level Mathematics before doing the TS1 course?

There is no requirement that applicants have taught A level Mathematics before undertaking TS1. A basic familiarity with the statistical content of GCSE is assumed.

How much time will I need to devote to studying?

It is difficult to be specific as this will depend on previous experience. In the past, delegates have reported spending between 1 and 4 hours studying each week. Ideally, delegates should aim to study regularly for a few hours each week however, in reality many working teachers have weeks when this is difficult and they use out-of-term time to catch up.

It is not our usual policy to allow teachers to enrol on more than one sustained course (TAM, PALM, TFM, TM, TS, TD) at the same time. Please contact us at cpd@mei.org.uk before making multiple course applications.

Do I have to hand in any work during the course?

The TS1 assignment is the only work that delegates hand in. The assignment requires you to answer questions based around data sets and probability. Use of technology is encouraged and an explanation of how the topics could be introduced and taught in the classroom is expected. To receive a certificate at the end of your TS1 course you will need to submit and pass the TS1 assignment. Certification is optional but we strongly encourage you to submit an assignment anyway to help you consolidate what you have learnt. In the past most teachers have chosen to submit an assignment.

Where do study days take place?

We vary face-to-face study day locations. Recently study day locations have included London, Coventry, Manchester and Leeds.

Cost

This course is free of charge to teachers working in state-funded schools and colleges in England.

For others the course fee is £300.

Schools and colleges located within [Priority Areas](#) are eligible to receive a subsidy of £250 per study day.

Study Schedule

This study commitment for this course is 12 live online evening tutorials and 2 face to face study days.

Study days

You must be able to attend both study days. For each study day we offer a choice of two locations. You can select your preferred location for each day when you apply.

Study day 1:

Coventry

Wednesday 4 May 2022
10:00 to 16:00

or

Central London (Fully booked)

Saturday 7 May 2022
10:00 to 16:00

Study day 2:

Coventry

Wednesday 22 June 2022
10:00 to 16:00

or

Central London (Fully booked)

Saturday 25 June 2022
10:00 to 16:00

Please note that all arrangements are subject to public health guidelines. If there are travel restrictions in place face-to-face study days may be moved online.

Online sessions

Online sessions are conducted live from 19:00-20:10 and recordings are available for playback.

Evening online tutorials (19:00-20:10)	Study content
Thursday 3 March 2022	Introduction; Definitions of probability
Thursday 10 March 2022	Conditional Probability
Thursday 24 March 2022	Sampling techniques
Thursday 31 March 2022	Using graphical summaries
Thursday 28 April 2022	Using numerical summaries
Thursday 19 May 2022	Bivariate data
Thursday 26 May 2022	Discrete probability distributions
Thursday 9 June 2022	Introduction to the binomial distribution
Thursday 16 June 2022	Introduction to the normal distribution
Thursday 30 June 2022	Applications of the normal distribution
Thursday 14 July 2022	Hypothesis testing 1
Thursday 21 July 2022	Hypothesis testing 2

Assignment

During July and August, you will work towards completing an assignment. The deadline for this assignment is 31 August 2022.

Unit certification: 30 September 2022 (or before).

Key Facts

Event ref:	#8932
Audience:	Teachers
Curriculum focus:	A level Mathematics
Mathematical focus:	Statistics
Event format:	Sustained Professional Development
Event length:	6 months
Study days:	2
Online sessions:	12
Region:	National
Venue:	Online classroom and study days in London or Coventry
Start date:	Thu 3rd Mar 2022
Fee:	Free for state-funded schools; £300 otherwise
Priority Area subsidy:	2 x £250

Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/8932>