



Advanced Mathematics  
Support Programme®

Continuing Professional  
Development  
Standard

National Centre  
for Excellence in the  
Teaching of Mathematics



## Teaching Statistics 1 (TS1) Online and London or Leeds

11th March 2020

### Overview

FOR THE NEWEST VERSION OF THIS COURSE PLEASE GO TO: <https://amsp.org.uk/events/details/7426>

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 features:

- 10 live online tutorials
- two study days
- a reference book to support your studies
- access to online 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.

### 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 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.

### **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.

### **When do the TS1 course fees have to be paid?**

An invoice for course unit fees is issued after enrolment at the start of the course unit. Invoices are issued no later than one month after a delegate has started their course.

### **How does the subsidy for teachers in state-funded schools/colleges work?**

The AMSP is supported by the Department for Education and therefore only course fees for teachers working in state-funded schools/colleges in England are eligible for a subsidy. If the course fee is paid by the applicants school /college then the same school/college will receive the subsidy when the course is completed by the applicant.

### **Can I pay my own course fee?**

Yes, you may choose to pay your own course fee. Applicants who are teachers working in state-funded schools/colleges in England are still eligible for a course fee subsidy. If the course fee is paid directly by the applicant then the applicant will receive the fee reimbursement on completion of the course. It is a requirement that the applicant submits an email address that has been issued by the state-funded school/college where they are employed and that the applicants email address is substantiated.

### **What happens if I can't attend one or more of the study days?**

Teachers on the course enjoy the study days and appreciate the chance to meet up with other teachers on the course. Study day materials are shared with all course delegates afterwards. If you are a teacher working at a state-funded school/college then to be eligible for a course subsidy you will need to demonstrate that you have engaged with the course, which includes the expectation that you will attend the face-to-face study days.

If you are unable to attend a study day and this is due to unforeseen or special circumstances then the course fee reimbursement may still be granted at the discretion of the Course Leader. You may be required to submit the TS1 assignment as additional evidence of engagement with the course. If you pass the end of unit assignment, you will still be eligible for a TS1 course certificate.

## Cost

The course fee for TS1 is £300.

If you are working in a state-funded school or college, participation in this course attracts a reimbursement of course fees, subject to engagement and completion of the course.

Schools and colleges located within [Priority Areas](#) are eligible to receive a further subsidy of £500 to support staff cover and travel costs.

# Study Schedule

## Study days

### Study day 1:

#### Leeds

Friday 27 March 2020

or

#### Central London

Saturday 28 March 2020

### Study day 2:

#### Leeds

Thursday 11 June 2020

or

#### Central London

Saturday 13 June 2020

### Venue details:

Venue	Address	Directions
London	NCVO, Society Building, 8 All Saints Street, London, N1 9RL	<a href="#">?</a>
Leeds	Well Met, Cloth Hall Court, Quebec Street, Leeds, LS1 2HA	<a href="#">?</a>

### Online sessions:

Online sessions are conducted live and recordings are available for playback.

The dates below are provisional:

Evening online tutorials (19:00-20:00)	Study content
Wednesday 11 March 2020	Introduction, definitions of probability
Wednesday 25 March 2020	Tree diagrams & venn diagrams
Wednesday 1 April 2020	Sampling techniques
Wednesday 22 April 2020	Using graphical summaries
Wednesday 6 May 2020	Using numerical summaries
Wednesday 20 May 2020 (note change)	Bivariate data
Wednesday 3 June 2020	The binomial distribution
Wednesday 24 June 2020	The normal distribution
Wednesday 1 July 2020	Hypothesis testing 1
Wednesday 15 July 2020	Hypothesis testing 2

### Assignment:

During July you will work toward completing an assignment. The deadline for this assignment is 30 August 2020.

Unit certification: 30 Sept 2020 (or before)

### Participant feedback

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*The study day was fantastic. Really useful and time to try out and reflect on new skills.*

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Really enjoyable with lots of useful classroom applications.

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Great sessions - good to get hands on with data sets!

## Key Facts

<b>Event ref:</b>	#6724
<b>Audience:</b>	Teachers
<b>Curriculum focus:</b>	A level Mathematics
<b>Mathematical focus:</b>	Statistics
<b>Event format:</b>	Sustained Professional Development
<b>Event length:</b>	6 months
<b>Study days:</b>	2
<b>Online sessions:</b>	10
<b>Region:</b>	National
<b>Venue:</b>	Online classroom with study days in London or Leeds
<b>Next session:</b>	Wed 25th Mar 2020
<b>Fee:</b>	£300
<b>State-sector subsidy:</b>	£300
<b>Priority Area subsidy:</b>	£800

## Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/6724>