



# LOPD AS Further Maths: Pure common topics

## Online series

2nd October 2021

### Overview

*Live Online Professional Development (LOPD)* courses form a programme of innovative online courses, designed to enable teachers to develop their teaching with confidence in a convenient, stress-free way.

LOPD courses are delivered using a browser-based online classroom that allows participants to collaborate online in real time. The courses aim both to cover subject content common to all current specifications and to facilitate the exchange of teaching ideas. Rather than attending a one or two day course away from school or college, participants will use the internet to meet weekly online.

This course covers topics which are common to the AS Further Pure elements of specifications for AQA, Edexcel, MEI and OCR. Further topics to complete the content for each specification are available via the *On Demand Professional Development (ODPD)* course [AS and A level Further Maths: compulsory Pure top-ups](#).

This course comprises nine online sessions with an experienced tutor, each between 60 and 90 minutes in length and delivered in a small group of teachers allowing opportunities for interaction and discussion.

### Aims

- To provide teachers with an opportunity to improve or refresh their subject knowledge of the main topics which typically feature in AS Further Pure.
- To provide opportunities to interact with the course tutors and other delegates in a small group to discuss subject content, resources and teaching ideas.

### Who will benefit from attending?

Teachers who are new to offering the Further Pure element of AS Further Mathematics and those who are seeking to refresh their approach in this context.

### Content

- Complex numbers
- Matrices
- Vector geometry
- Roots & coefficients of polynomials
- Series
- Proof

## Materials and Equipment

You will need access to a good internet connection, using Chrome or Firefox as a browser. You will need a headset with a microphone to engage with the live sessions and most courses also require a means of sharing handwritten maths, such as a mini-whiteboard and webcam, a visualiser or a graphics tablet. Full details of how to set these up can be found on our [online classroom support page](#).

## Other Information

The order of topics may be subject to change.

## Eligibility

All teachers are eligible for this course, however free places are available only to teachers in state-funded schools, colleges and academies in England. Applications for free places will be checked to verify eligibility.

Teachers must ensure that they are able to attend the live sessions before applying for a place as our courses are subject to very high demand: please do not apply for a place if you will not be able to attend at least 75% of sessions. Further instances of our courses will be added to meet demand; if you are not able to attend 75% of the sessions in this course, you might like to consider completing our [register of interest form](#) (this is NOT an application form) and letting us know when would be better for you.

## Cost

This course is free of charge to teachers working in state-funded schools, colleges and academies in England, otherwise the fee is £195.

## Study Schedule

Dates	Session content
Sat 02 Oct	Complex numbers 1 - Introduction and equations
Sat 09 Oct	Matrices 1 - Introduction and transformations
Sat 16 Oct	Roots and coefficients of polynomials
Sat 06 Nov	Matrices 2 - Determinants and inverses
Sat 13 Nov	Complex numbers 2 - Argand diagrams and loci
Sat 20 Nov	Series
Sat 27 Nov	Vector geometry 1 - Lines and the scalar product
Sat 04 Dec	Proof
Sat 11 Dec	Vector geometry 2 - Planes

## Key Facts

Event ref:	#8553
Audience:	Teachers
Curriculum focus:	A level Further Mathematics
Mathematical focus:	Pure
Event format:	Live Online Professional Development
Online sessions:	9
Region:	National
Start date:	Sat 2nd Oct 2021
Course times:	09:00 - 10:30
Fee:	Free for state-funded schools; £195 otherwise

## Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/8553>