



Advanced Mathematics  
Support Programme®

Continuing Professional  
Development  
Standard

National Centre  
for Excellence in the  
Teaching of Mathematics



# Mechanics: Practicals, Pictures, Problems and Preparation

## Birmingham

11th January 2022

### Overview

One day event to support teachers delivering the Mechanics element of the Mathematics A Level.

### Aims

- To engage with apparatus in order to deepen understanding of the theory.
- To be aware of how video and dynamic geometry can be used to support the learning.
- To consider techniques to aid with the process of solving problems on context.
- To think about how students can tackle examination questions.

### Who will benefit from attending?

Any teacher delivering the Mechanics element of the Mathematics AS or A Level. Those attending should have a basic understanding of the mechanics content as the main focus is not subject knowledge enhancement.

### Content

The day focuses on good practise of delivering mechanics in the classroom. Although there is not a specific focus on certain areas of the content, there will be more use of year 2 mechanics than the AS topics. We start with looking at some simple practicals using apparatus that most science departments will have that can be done with students to help embed their basic understanding of the associated concept. We then look at how video can be used to create some mathematical models with and the use of GeoGebra to support the learning. You will then tackle some paper-based problems, again with modelling in mind, and discuss the best way to tackle these problems. To finish, we will analyse some new specification exam questions, identifying the best way to help our students tackle them.

## Key Facts

<b>Event ref:</b>	#9244
<b>Audience:</b>	Teachers
<b>Curriculum focus:</b>	A level Mathematics
<b>Mathematical focus:</b>	Mechanics
<b>Event format:</b>	Face-to-face Professional Development
<b>Event length:</b>	6 hours
<b>Region:</b>	West Midlands
<b>Venue:</b>	Bishop Challoner Catholic College, Institute Road, Kings Heath, B14 7EG
<b>Date:</b>	Tue 11th Jan 2022
<b>Course times:</b>	09:30 - 15:30
<b>Fee:</b>	Free
<b>Priority Area subsidy:</b>	Sandwell

## Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/9244>