



Advanced Mathematics
Support Programme®

Continuing Professional
Development
Standard

National Centre
for Excellence in the
Teaching of Mathematics



Mechanics: Practicals, Pictures, Problems and Preparation

Birmingham

28th March 2019

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.

Study Schedule

- 09:30 Registration and Welcome
- 09:45 Session One: Practicals
- 10:45 Break
- 11:00 Sessions Two: Pictures
- 12:00 Lunch
- 12:30 Session Three: Problems
- 13:30 Break
- 13:45 Sessions Four: Preparation
- 14:45 Final Thoughts and Close

Key Facts

Event ref:	#5750
Audience:	Teachers
Curriculum focus:	A level Mathematics
Mathematical focus:	Mechanics
Event format:	Face-to-face Professional Development
Event length:	5.5 hours
Region:	West Midlands
Venue:	Bishop Challoner Catholic College, Institute Road, Birmingham, B14 7EG
Date:	Thu 28th Mar 2019
Course times:	09:30 - 15:00
Fee:	20 per delegate

Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/5750>