

The Further Mathematics Support Programme

Introduction to Mechanics for Beginners

A one day beginners' course for teachers who are new to teaching mechanics.

This course may also be suitable for teachers of the higher GCSE who wish to broaden their knowledge.

**Aspen Room
Telford Conference Centre
Telford Innovation Campus**

**Thursday 12th July 2018
9.30am – 3.45pm**



This course is for teachers who have not previously taught mechanics. It will cover the key topics of motion and force which underpin the mechanics content of the new Maths AS/A Level.

Prior knowledge

Knowledge of GCSE Higher Tier content and a working knowledge of AS pure mathematics is desirable, but not essential.

Course aims

- To introduce the fundamental concepts of motion and force
- To strengthen teachers' understanding of the content required in the linear AS and A level mathematics specifications
- To explore and discuss teaching ideas and resources which deepen students' understanding of these concepts

Sessions times for the day

9.15	Arrival and registration
9.45 – 12.45	Morning session An introduction to forces: understanding vectors and drawing force diagrams, Kinematics: motion-time graphs and the language of mechanics. 15 minute drinks break at a convenient point
12.45	Lunch
13.30 – 15.30	Afternoon session Newton's laws of motion: an introduction to the laws and their applications, Constant acceleration: deriving equations and making links. 15 minute drinks break at a convenient point
15.30	Plenary
15.45	Close

The course leader is Toby Rome

Toby is a Central Coordinator for the Further Mathematics Support Programme. From 2001 to 2017 he taught mathematics at a large comprehensive school near Bristol, where he specialised in A level teaching. His responsibilities with the FMSP include working as a tutor on the Teaching Mechanics sustained courses.

"I have always loved mechanics, as it is full of the sort of 'penny drop' moments that make teaching such a wonderful job. It seems to be an area of mathematics that students often approach apprehensively but then come to enjoy, and it is great to be part of that journey."

Course fees and application

There are no fees for these courses. However if a delegate fails to attend or cancels their booking with 5 working days of the event a charge of £50 will be made to the relevant school. To book for either or both courses please go to <https://goo.gl/forms/RBABz5wH8j805P2W2>.

Further information

Details about this course can also be found on the FMSP website at: http://furthermaths.org.uk/WM_CPD

For more information email: liz.price@wlv.ac.uk