

The Further Mathematics Support Programme

Introduction to Mechanics 2017

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

Centre for Mathematical Sciences, Cambridge, CB3 0WA

Tuesday 18th July 2017, 9.30am-4.00pm



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 in 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 provide a basis of understanding of underpinning ideas for teachers to build upon
- To explore and discuss classroom activities including simple practical work

Timetable for the day:

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| 09.15 | Arrival and registration |
| 09:45 | Welcome and introductions |
| 10:00 | Motion-time graphs <i>Exploring kinematics and understanding and using associated language: position; displacement; distance travelled; velocity; speed; acceleration.</i> |
| 11:30 | Break |
| 11.45 | Modelling constant acceleration <i>Deriving equations associated with constant acceleration and making links</i> |
| 12.30 | Lunch |
| 13:15 | Vectors and Forces <i>Combining vectors</i> <i>Types of force, including weight</i> <i>Drawing force diagrams</i> |
| 14:30 | Break |
| 14.45 | Newton's Laws of Motion <i>A brief introduction to the three laws of motion</i> |
| 16.00 | Depart |

Venue: Centre for Mathematical Sciences, Cambridge, CB3 0WA

<http://www.cms.cam.ac.uk/visiting/>

Course fees and application:

Fees for this course are £50 for schools registered with the FMSP.

To apply, please complete the online form at: <http://bit.ly/2pE0yzZ>

Further information

More details about this course can be found at:

http://furthermaths.org.uk/EE_CPD

For more information email:

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