



Teaching Mechanics 1 (TM1)

23rd September 2021

Overview

Teaching Mechanics 1 (TM1) is a [sustained professional development course](#) for teachers wishing to build their confidence in teaching mechanics. TM1 covers the mechanics content from all major specifications for AS/A level Mathematics.

TM1 features:

- Nine live online tutorials, plus an optional extra session for complete beginners
- Two study days
- Access to online teaching and learning resources
- Email support from a tutor and access to an online group forum

Towards the end of the course a short assignment is issued, for which support and guidance are provided. Course certificates will be available for those participants completing the assignment.

After TM1, participants have the opportunity to continue to [TM2](#), which will further expand understanding of mechanics teaching and cover the mechanics content from AS/A level Further Mathematics.

Aims

- Gain a deeper understanding of the principles of mechanics
- Develop skills with mathematical modelling and problem solving
- Develop confidence with incorporating practical work into maths teaching
- Improve subject knowledge and build on pedagogical skills
- Link topics in mechanics with other areas of maths

Who will benefit from attending?

TM1 is designed for teachers who are currently teaching AS/A level Mathematics, or who wish to teach it at some point in the near future.

Our sustained courses enable teachers to broaden and deepen their subject, pedagogical and pedagogical content knowledge. Teachers, with enhanced subject knowledge, are therefore better equipped to make links between topics, address students' misconceptions and confidently challenge learners at all attainment levels. Our course aims and intended outcomes are consistent with the principles set out in the Education Inspection Framework.

Content

TM1 covers the mechanics content for AS/A level Mathematics.

Materials and Equipment

A computer with a reliable internet connection will be required to attend the online tutorials. In addition, a headset with a microphone is suggested to get the best experience.

Frequently Asked Questions

Do I need to have taught A level Mathematics before doing the TM1 course?

There is no requirement that applicants have taught A level Mathematics before undertaking TM1.

How much time will I need to devote to studying?

It is difficult to be specific as this will depend on previous experience. In the past, delegates have reported spending between 1 and 4 hours studying each week. Ideally, delegates should aim to study regularly for a few hours each week however, in reality many working teachers have weeks when this is difficult and they use out-of-term time to catch up.

It is not our usual policy to allow teachers to enrol on more than one sustained course (TAM, PALM, TFM, TM, TS, TD) at the same time. Please contact us at cpd@mei.org.uk before making multiple course applications.

Do I have to hand in any work during the course?

The TM1 assignment is the only work that delegates hand in. To receive a certificate at the end of your TM1 course you will need to submit and pass the TM1 assignment. Certification is optional but we strongly encourage you to submit an assignment anyway to help you consolidate what you have learnt. In the past most teachers have chosen to submit an assignment.

Where do study days take place?

We vary face-to-face study day locations. Recently study day locations have included London, Coventry, Manchester or Leeds.

Cost

This course is free of charge to teachers working in state-funded schools and colleges in England. For others the course fee is £300.

Schools and colleges located within [Priority Areas](#) are eligible to receive a subsidy of £250 per study day.

Study Schedule

Study days

We are offering a choice of virtual or face-to-face study days.

Please note that all arrangements are subject to public health guidelines. If there are travel restrictions in place face-to-face study days may be moved online.

Study day 1:

Online (fully booked)

Saturday 6 November 2021
09:30 to 13:00

or

Central London

Wednesday 17 November 2021
10:00 to 16:00

Study day 2:

Online (fully booked)

Saturday 22 January 2022
09:30 to 13:00

or

Central London

Wednesday 26 January 2022
10:00 to 16:00

The face-to-face study days are longer as they include time to work with practical equipment. Teachers who attend the virtual study days will have the option of attending an additional practical day at the end of the course, which is planned to take place in Central London on Saturday 5th February. Further details will be provided at the start of the course.

Online sessions

Online sessions are conducted live and recordings are available for playback.

| Evening online tutorials (19:00-20:15) | Study content |
|--|--|
| Thursday 23 September 2021 | Kinematics in one dimension |
| Thursday 7 October 2021 | Introduction to forces and Newton's laws |
| <i>Thursday 14 October 2021</i> | <i>Optional session for complete beginners</i> |
| Thursday 21 October 2021 | Applications of forces and Newton's laws |
| Thursday 11 November 2021 | Forces in two dimensions |
| Thursday 25 November 2021 | Connected particles |
| Thursday 9 December 2021 | Kinematics in two dimensions |
| Thursday 6 January 2022 | Projectiles |
| Thursday 20 January 2022 | Moments |
| Thursday 3 February 2022 | Variable acceleration |

Assignment:

Following the online sessions you will work towards completing an assignment. The deadline for this assignment is 31 March 2022.

Unit certification: 31 March 2022 (or before)

Key Facts

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| Event ref: | #8391 |
| Audience: | Teachers |
| Curriculum focus: | A level Mathematics |
| Mathematical focus: | Mechanics |
| Event format: | Sustained Professional Development |
| Event length: | 6 months |
| Study days: | 2 |
| Online sessions: | 9 |
| Region: | National |
| Venue: | Online classroom and study days in London or online |
| Start date: | Thu 23rd Sep 2021 |
| Fee: | Free for state-funded schools; £300 otherwise |
| Priority Area subsidy: | 2 x £250 |

Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/8391>