



Teaching Mechanics 1 (TM1)

13th January 2022

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 consists of:

- Nine live online tutorials, plus an optional extra session for complete beginners
- Two compulsory study days
- Access to our online Integral platform, including course-specific 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

Study days are face-to-face events that take place from 10:00 to 16:00, with lunch and refreshments provided. Attendance at both days is expected.

Please note that although it is our intention to run these study days face-to-face, all events are subject to government restrictions and may be moved online if required. We therefore advise against making non-cancellable travel arrangements.

Study day 1:

Central Manchester

Saturday 12 March 2022

or

Central London

Wednesday 16 March 2022

Study day 2:

Central London

Wednesday 8 June 2022

or

Central Manchester

Saturday 11 June 2022

Online sessions

Online sessions take place from 19:00 to 20:15. They are conducted live and recordings are available for playback.

| Date | Topic |
|-----------------------|--|
| Thu 13 Jan 2022 | Kinematics in one dimension |
| Thu 27 Jan 2022 | Introduction to forces and Newton's laws |
| <i>Tue 1 Feb 2022</i> | <i>Optional session for complete beginners</i> |
| Thu 10 Feb 2022 | Applications of forces and Newton's laws |
| Thu 3 Mar 2022 | Forces in two dimensions |
| Thu 24 Mar 2022 | Connected particles |
| Thu 28 Apr 2022 | Kinematics in two dimensions |
| Thu 12 May 2022 | Projectiles |
| Thu 26 May 2022 | Moments |
| Thu 16 Jun 2022 | Variable acceleration |

Assignment:

During the summer you will work towards completing an assignment. The deadline for this assignment is 9 September 2022.

Key Facts

| | |
|-------------------------------|---|
| Event ref: | #8813 |
| 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 Manchester |
| Next session: | Thu 27th Jan 2022 |
| 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/8813>