

Subject: MATHEMATICS WITH MECHANICS Exam board: AQA
Continued

Course Information:

The ADVANCED LEVEL (A2) Specification

This is the second half of the full A level course and will commence immediately after the AS exam period finishes.

The course is made up of three modules:

Pure Core 3 (PC3)

16²/₃% of the A2 level

Topics covered are: Proof, algebra and functions, trigonometry, differentiation, integration, numerical methods.

Assessment: One 1 hour 30 minute examination.

Pure Core 4 (PC4)

16²/₃% of the A2 level

Topics covered are: Algebra and functions, co-ordinate geometry in the (x,y) plane, sequences and series, trigonometry exponentials and logarithms, differentiation, integration, vectors.

Assessment: One 1 hour 30 minute examination.

Mechanics 2 (M2 A/B)

16²/₃% of the A2 level

Topics covered are: Moments and Centres of Mass, kinematics, Newton's Laws of Motion, application of differential equations, uniform circular motion, work and energy, vertical circular motion, modelling.

*** How could I develop Key Skills by doing this course?**

As well as covering the study of Mathematics with Mechanics, the AS/A2 courses will enable you to develop key skills.

*** What I could go on to do after the course.**

An A-level in **Mathematics & Mechanics** can lead to a wide range of degree courses. **Mechanics** is particularly useful for anyone wanting to study Engineering or Physics to a higher level.