

DATE: Please check for availability

TIME: 9:30AM – 3:30PM

LOCATION: In school

Lunch is not included

For more information, or to book a masterclass session, please contact Lisa Colford, National Space Academy Administrator: lisac@spacecentre.co.uk or 0116 2582 147

Course Overview

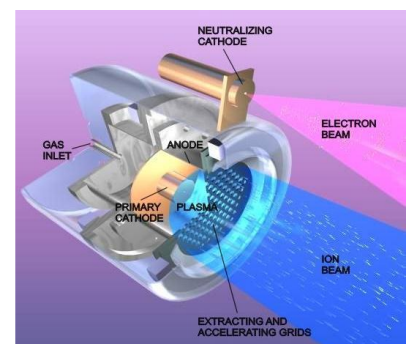
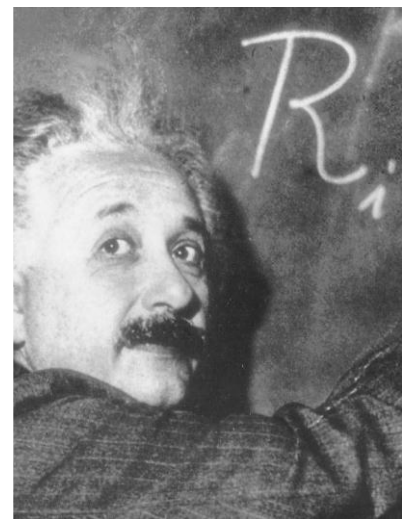
The AS/A2 Mathematics masterclass uses the challenges of making money in the space sector as the basis of an intensive day-long course designed to support sixth-form Mathematics students in their curriculum studies.

The topics that form the body of the narrative are:

- Looking at how banks work – compound interest and rules that govern lending and investing.
- Valuing planets
- Special relativity and time dilation
- Fuelling space travel
- Curvature of space-time in application to GPS satellites
- Using the Fibonacci sequence and the golden ratio to predict the Stock Market

This analysis is used to look at curriculum topics including

- Basic integration and differentiation
- Logarithms and exponentials
- Angular motion
- Radians
- Limits of sequences



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“Excellently delivered – the programme really enthused the students in a way that carried over into their lessons”

David Lomar, Head of Physics WQEC

Course Details

- Full- day masterclasses are hosted 'in school' from 9.30am to 3.30pm. Half-day from 9.30am – 12.30pm or 12.30pm – 3.30pm
- Lunch is not provided
- Maximum group size 30 students

During the day a mixture of theory, practical and modelling is used, with a heavy emphasis on hands-on activities for students, including the use of items not available to students in the usual school environment such as the examination of space-flown hardware, meteorites from Mars and thermal imaging equipment.

The courses can be individually tailored for a given cohort of students depending on their Year group (Year 12, 13) and specific Programme of Study (AS, A2, IB or Cambridge Pre-U).

Masterclass Options and Pricing

Half – day masterclass at your school*	£195.00 + VAT
Full – day masterclass at your school*	£295.00 + VAT

*There will be an additional charge for travel expenses

Other National Space Academy Programmes

Through the National Space Academy Partnership we can offer intensive study support sessions focused on specific areas covered in the masterclasses or on targeted examination revision for specified GCSE/AS/A2 specifications.

For further information please contact the National Space Academy Administrator, Lisa Colford:

lisac@spacecentre.co.uk

www.nationalspaceacademy.org