

DATE: Please check for availability

LOCATION: In school

TIME: 9:30AM – 3:30PM

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 GCSE Astronomy masterclass utilises the in-depth subject knowledge of our staff and unique learning environments, along with a range of interesting hands on activities, to bring a day of intensive curriculum based learning to your GCSE Astronomy students.

The challenges that form the body of the narrative are:

- How can we explore space?
- Multi-spectral eyes on the universe
- Stellar time machines – how the light from distant stars tells us a wealth of information.
- Why is space important for human society?
- Stars – from birth to death and everything in between.
- Great balls of fire – the life and dangers of near earth objects.
- What will happen to our Universe and where did it come from?
- Careers in the space science sector

These elements are used as contexts for curriculum topics including:

- Co-ordinate systems
- Multi-spectral astronomy
- The scale of the Universe
- Parallax
- Stellar evolution
- Comets and meteors
- Magnitudes, Cepheid variables and other light curves,
- Big Bang Theory
- Kepler's laws
- Exoplanets - the Drake equation and life in the Universe



Course Details

- Full-day masterclasses are hosted 'in school' from 9.30am to 3.30pm. Half day masterclasses can be either from 9.30am – 12.30pm or 12.30pm – 3.30pm
- Lunch is not provided
- Maximum number of students per masterclass is 30.

During the day a mixture of theory, practical work 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 given cohorts of students depending on their Year Group, ability range and specific programme of study.

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**](http://www.nationalspaceacademy.org)