A Level Environmental Science

Ofsted Outstanding Provider

Course Level: Level 3 | **Campus: Stafford** | **Subject Type: Science & Maths**

Course Overview:

Gain the skills and knowledge to become a part of one of the UK's fastest growing and diverse sectors. To meet the government's target of net zero by 2050, all companies will need specialist green skills during your lifetime and this course will give you the foundations to develop a successful and rewarding career in this field. Learn about the new innovative methods and technologies being developed to combat energy demand, pollution levels and how we can sustainably manage biodiversity and biological resources to allow our planet to be sustainably managed for future generations.

What's Covered:

This interdisciplinary subject, combining biology, chemistry, physics, geography and maths will allow learners to delve into the scientific principles and practical solutions needed to address pressing environmental issues to combat the climate crisis. Students will learn about the modern methods and research to address the current issues of meeting energy demand, controlling pollution as well as learning about interactions between our planet, it's ecosystems and the importance of conserving biodiversity on a local and global scale. Studying this course will give you the foundations for further study in one of the fastest growing areas of employment.
During your studies, you will spend at least two days in the field alongside practical lab work, giving you the opportunity to explore modern, practical and analytical methods currently used by industry experts.

88%

A* - C in 2024

60.6%

A* - B in 2024

In the first year there are two main areas of study:

- The living environment: Including the importance of biodiversity conservation, habitat management and life processes in the biosphere and conservation planning.
- The physical environment: Including the impact of human activities on physical processes and how these can be managed, with a focus on climate change, the atmosphere, the hydrosphere, mineral resources and biogeochemical cycles. Life processes in the biosphere and conservation planning issues such as melting ice sheets, coral reef decline and the discovery of new water sources are also explored, with the emphasis on how to find solutions to these environmental problems through improved management and use of new technology.

Other units explored throughout the two-year course include:

- Energy resources: Evaluation of new extraction/harnessing technologies relating to fossil fuels, nuclear power/fission and fusion, renewable energy technologies, new energy storage systems and conservation technologies, vehicle design for use and end of life and building design.
- Pollution: The properties of pollutants, how environmental features affect pollution events and strategies to control pollutants based on their properties and features of the environment.
- Biological resources: Including agriculture, aquatic food production systems and forest resources.
- Sustainability: Covering topics on dynamic equilibria, energy, material cycles and The Circular Economy.

Entry Requirements:

You will need a minimum of five GCSEs at grade 5 or above including maths and English Language, in subjects relevant to your A Level or A+ Programme subject choices. To study this course you will also need to achieve a grade 6 in GCSE Biology, grade 5 in GCSE Chemistry or grade 6-6 in Combined Science.

Assessment Information:

Two 3 hour final exams, consisting of multiple choice, short answer and extended writing questions.

Paper 1 topics:

- The physical environment
- Energy resources
- Pollution
- Research methods

Paper 2 topics:

- The living environment
- Biological resources
- Sustainability
- Research methods

Fees and Financial Support:

This course is free for anyone aged 16 – 18.

College Maintenance Allowance (CMA):

Anyone with a gross household income under £30,000 can receive financial support to cover college related costs such as transport, meals, course equipment and uniform. Bursary support is based on individual circumstances and will be allocated to best suit your individual needs.

A range of other financial support is available depending on your personal circumstances. For more details visit nscg.ac.uk/finance

Progression:

When you have gained your A Level in Environmental Science, you can use it to progress into Higher Education, both locally and further afield. From Keele University to Liverpool Hope University, many offer degree courses linked with environmental science. This course is a great accompaniment to Biology, Chemistry, Geography, Physics and Maths. Jobs linked to Environmental Science range from Environmental Engineer, Nature conservation officer, Sustainability consultant to water quality scientist and many more.

What else do I need to know?

Think of what you're capable of. Then think beyond it.

Step up to a top university or move into a competitive programme like Medicine or Law with our Honours Programme. Perfect for ambitious and high-achieving students.

The Honours Programme is an additional pathway for students whose aspirations are to progress onto highly competitive courses at top universities, such as those in the Russell Group. Once accepted onto the programme, you'll be expected to commit extra time every week to this intensive support pathway.

Find out more **here**

How do I find out more?

Please contact Subject Lead John Griffiths by emailing john.griffiths@nscg.ac.uk.