

Aerospace Engineering Club

Sessions Overview

Through a series of entertaining and educational workshops, based on practical hands-on experiences, this course is designed to give an appreciation of how the Aerospace Engineering contributes to our lives and for pupils to gain an insight into a range of related careers.

Breakdown of sessions for the Aerospace Engineering workshops:

Session 1: Introduction to Aerodynamics

Learning opportunities include:

- Air and Motion
- Climate Change
- Advanced Aerodynamics
- Velocity

Session 2: Carbon Cycle

Learning opportunities include:

- Carbon Dioxide
- Global Warming
- Fossil Fuels

Session 3: Climate Change

Learning opportunities include:

- Snow and ice changes
- Hurricanes
- Volcanoes

Session 4: Aurora and Space

Learning opportunities include:

- Origin of Aurora
- Solar Wind
- Storms in Space
- Astronomy and Aerodynamics

Session 5: Aerospace Manufacturing

Learning opportunities include:

- Storm Power
- Working together to produce quality products
- Designing and modelling our own planes in competition

Session 6: Biomimetics

Learning opportunities include:

- What is meant by Biomimetics and Reverse Engineering?
- How we use discoveries from Nature to help develop new products that help improve the quality of our lives
- Exploring flight – the study of how birds to enable human flight is one of the earliest examples of biomimicry