

Space Weather and Energy 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 Space and Aviation Industry contributes to our lives and for pupils to gain an insight into a range of related careers.

Breakdown of Sessions for the Space Weather Workshops:

Session 1: Introduction to Energy

Learning opportunities include:

- What are shapes of energy?
- Energy sources
- Technologies for usage of renewable energy
- Careers in energy

Session 2: Aviation and Airports

Learning opportunities include:

- Air Traffic Controller
- Airfields
- Forces of flight
- Aero plane motion

Session 3: Air Traffic Control and Flights

Learning opportunities include:

- Runways
- Heliport
- Forces of flight
- Aerial refueling
- Helicopter

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