



IMAGING PARTNERSHIP

Exploring Education Through Imaging

Aviation 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 Aviation Industry contributes to our lives, through the medium of Photography/Imaging and for pupils to gain an insight into a range of related careers.

Breakdown of Sessions for the Aviation Workshops:

Session 1: Introduction to Aviation

Learning opportunities include:

- What is Aviation?
- Looking at Aviation in science, engineering and business
- Careers in Aviation

Session 2: History of Flight

Learning opportunities include:

- A brief History of Flight
- How do planes fly?
- Aerodynamics
- Wind tunnel testing of wing profiles

Session 3: 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
- Using examples of how Nature works to inform our own designs – symmetry, spirals

Session 4: Structures

Learning opportunities include:

- What is a structure?
- What is Triangulation?
- Working together to produce a structure based on those recorded from Nature
- Recording the process: Documentary Photography

Session 5: Aerospace Manufacturing

Learning opportunities include:

- Aviation Manufacturing techniques
- Working together to produce quality products
- Designing and modelling our own planes in competition

Session 6: Testing and Evaluation

Learning opportunities include:

- Testing our planes
- Looking at how they could be improved
- How Aviation developments benefit other areas of life eg endoscopes