

Teacher Information Pack

Drone STEM Workshops for Schools Across Northern Ireland

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Website: <https://www.dronepilotdeploy.com/drones-stem-workshops-for-schools-Northern-Ireland>

1. Workshop Overview

Our drone workshops bring STEM learning to life through engaging demonstrations, hands-on exploration, and real-world applications. Designed for KS2, KS3, and youth groups, each session blends science, technology, engineering, and safety awareness in a way that is exciting, memorable, and curriculum-aligned.

Core Learning Outcomes

- Understanding the forces of flight
- Identifying drone components and sensors
- Learning the UK Drone Code
- Exploring real-world drone applications
- Developing risk awareness and safety thinking
- Asking questions in an open Q&A session
- Watching a live flight demonstration (location dependent)

Workshops can be tailored to suit age groups, curriculum goals, and school timetables.

2. Safeguarding Statement

The safety and wellbeing of pupils is the highest priority. All school visits are delivered in full compliance with safeguarding expectations.

Safeguarding Commitments

- Enhanced AccessNI and DBS vetted
- Fully insured for school operations
- All activities risk-assessed and age-appropriate
- No student is permitted to handle equipment unsupervised

- All demonstrations follow strict safety protocols
- Clear communication with staff before, during, and after the session
- Respectful, professional conduct at all times

Schools may request safeguarding documentation in advance.

3. Full RAMS (Risk Assessment & Method Statement)

A complete RAMS document is available for schools, but the key operational elements are summarised below.

Risk Assessment Summary

- **Environment:** Assessment of indoor/outdoor space, obstacles, weather (if outdoors), and safe distances
- **People:** Student positioning, staff supervision, crowd management, and emergency access
- **Equipment:** Pre-flight checks, battery safety, propeller guards, and secure storage
- **Operational Risks:** Loss of signal, unexpected movement, environmental hazards
- **Emergency Procedures:** Controlled landing, equipment shutdown, evacuation of demonstration area

Method Statement Summary

1. Arrival and setup
2. Safety briefing for staff and pupils
3. Introduction to drones and STEM concepts
4. Demonstration of equipment
5. Controlled flight demonstration
6. Q&A Quiz and learning recap
7. Pack-down and site check

A full RAMS PDF can be provided upon request.

4. What to Expect on the Day

Before the Visit

- School receives confirmation, RAMS, and safeguarding documents
- Staff identify a suitable hall or outdoor space
- Students are grouped appropriately

During the Workshop

- Instructor arrival 20–30 minutes before start time
- Setup of equipment and safety perimeter
- Welcome and introduction & Presentation
- STEM teaching session
- Live drone demonstration
- Q&A & Quiz and wrap-up

After the Workshop

- Safe pack-down
- Staff debrief if required
- Optional aerial photography discussion (if arranged)

Workshops typically last approximately 90 minutes, but can be adapted to suit school schedules.

5. Equipment List

Workshops may include the following equipment:

Training & Demonstration Equipment

- Indoor-safe training drones
- Commercial-grade drones for outdoor demonstrations
- PPE & Hard Hats
- Safety cones
- Crossword (optional)

Safety Equipment

- Propellers

- Battery safety cases
- First-aid kit
- Protective storage cases

All equipment is maintained to commercial standards and operated in compliance with CAA regulations.

6. Tailored Information for Principals

Principals often focus on safety, professionalism, and educational value. This workshop supports:

- Curriculum-linked STEM learning
- Safe, fully insured operations
- A vetted, qualified instructor
- High engagement for pupils
- A positive school experience with minimal disruption
- Optional fundraising opportunities through aerial photography

This workshop is designed to be low-effort for staff and high-impact for pupils.

7. Tailored Information for STEM Coordinators

STEM coordinators typically look for curriculum alignment and hands-on learning opportunities. This workshop provides:

- Real-world applications of physics, engineering, and digital literacy
- Clear links to KS2/KS3 STEM objectives
- Opportunities for follow-up classroom activities
- A memorable introduction to aviation and emerging technologies

This is an ideal enrichment activity for STEM weeks, science days, or technology projects.

Method Statement Summary

1. Arrival and Setup

The instructor arrives 20–30 minutes before the session to assess the space, set up equipment, establish safety boundaries, and prepare for the workshop.

2. Safety Briefing for Staff and Pupils

A clear, age-appropriate safety briefing is delivered to ensure everyone understands how to behave around the equipment, where to stand, and what to expect during the demonstration.

3. Introduction to Drones and STEM Concepts

Students are introduced to drones, their components, and the STEM principles behind flight, sensors, and real-world applications.

4. Demonstration of Equipment

The instructor explains the drone's features, safety systems, and controls, showing pupils how the technology works before any flying begins.

5. Controlled Flight Demonstration

A safe, carefully managed flight demonstration is carried out indoors or outdoors (location dependent), following all CAA and school safety requirements.

6. Q&A, Quiz, and Learning Recap

Students take part in a short interactive quiz, followed by a Q&A session to reinforce learning and encourage curiosity.

7. Pack-Down and Site Check

All equipment is safely powered down, packed away, and the area is checked to ensure it is left clean, tidy, and hazard-free.