

## Activity Overview

Students explore real-world drone applications before working in small groups to operate **Tello drones** using tablets and block-based coding. Activities include supervised drone flight challenges (e.g. hoop challenge), limited free-flight time, battery swapping, and structured reflection on careers and applications.

## Hazard Identification & Risk Controls

Hazard	Risk	Risk Level	Control Measures
Drone flight (indoor)	Impact injury from moving drone	Medium	<ul style="list-style-type: none"> <li>Indoor drones with propeller guards only</li> <li>Defined flight zones using mats</li> <li>Clear no-fly zones around faces and bodies</li> </ul>
Rotating propellers	Minor cuts or hair entanglement	Medium	<ul style="list-style-type: none"> <li>Safety briefing prior to flight</li> <li>Safety glasses provided and worn</li> <li>Hair tied back using hair bands where required</li> </ul>
Loss of control / crashes	Drone striking students or equipment	Medium	<ul style="list-style-type: none"> <li>Coding-based flight preferred over free control</li> <li>Facilitator supervision at all times</li> <li>Immediate landing required if control is lost</li> </ul>
Battery handling	Overheating or misuse	Low	<ul style="list-style-type: none"> <li>Clear instructions for battery swapping</li> <li>Low-charge batteries replaced promptly</li> </ul>
Trip hazards (mats, equipment)	Slips or falls	Low	<ul style="list-style-type: none"> <li>Mats laid flat and spaced appropriately</li> <li>Clear walkways maintained</li> </ul>
Tablet use	Eye strain or posture discomfort	Low	<ul style="list-style-type: none"> <li>Short digital tasks balanced with discussion and physical activity</li> </ul>
Behaviour during flight	Unsafe behaviour around drones	Medium	<ul style="list-style-type: none"> <li>Clear expectations set before flight begins</li> <li>Immediate pause of activity if safety rules are breached</li> </ul>
Equipment misuse	Damage to drones or tablets	Low	<ul style="list-style-type: none"> <li>Clear handling instructions</li> <li>Equipment checked before and after session</li> </ul>

## Supervision and Training

### *Staff / Facilitators:*

- Sessions facilitated by trained Casey Tech School staff
- Visiting teachers retain responsibility for student behaviour
- Safety briefing provided prior to digital design and printing activities
- Students fly drones only within designated mat areas
- First aid facilities available onsite

## Emergency Procedures

- Land all drones immediately
- Stop activity immediately if an incident occurs
- Provide first aid as required
- Notify school contact and complete incident documentation

### *Serious Injury or Emergency:*

1. Call emergency services (000 in Australia).
2. Administer first aid.
3. Document the incident.

## Equipment Safety & Maintenance

- Drones inspected before and after sessions
- Propeller guards fitted at all times
- Batteries charged and stored according to manufacturer guidelines
- Drones and tablets returned, powered down, and checked at session end

## Review & Documentation

- After the session, staff to review and log any incidents, near misses, and feedback to improve future risk controls.
- Review risk assessment annually or after any incident.