**Drone Delivery Canada**

Project No: DDC1

**Objectives:**

Drone Delivery Canada (DDC) is consistently looking for new ways to improve the performance and functionality of its Sparrow and Robin XL Unmanned Aircraft Systems (UAS). The selected student would be involved in multiple of these initiatives.

**Description:**

The selected student will be involved in the continuous improvement of DDCs Sparrow and Robin XL drones. This will include:

- Testing and evaluation of propulsion systems for future implementation in production vehicles.
- Development and testing of emergency recovery systems for these drones.
- Development and prototyping of ground systems to interface with these drones.
- General improvements to airframe designs where applicable.

**Prerequisite and Skill Required:**

- Experience designing mechanical parts and assemblies with computer aided design (CAD) software
- Hands on experience with electronics, embedded systems, autopilots or robotics
- Knowledge of common aerospace engineering topics such as aerodynamics, structures and propulsion
- Experience with programming languages (Python, C++, JavaScript)

**Preferred Skills:**

- Experience in UAS development, flight testing and operations through student design teams and/or previous internships
- Experience developing, testing and validating mechanical and/or robotic systems
- Experience integrating, configuring and tuning autopilots, sensors, actuators and/or other avionics systems