



# PROJECT COURIER

## A Drone Delivery Network System for College Campuses and Beyond

Project Courier is an Unmanned Aerial Vehicle (UAV) delivery service that would operate across a university campus. The goal of this service is to allow for quick delivery of correspondence, packages, and other deliverables. This would introduce an innovative and interesting campus service unseen on any university campus before now. The equipment is designed to be scalable for specific environments and payloads. Project Courier is an undergraduate research project focused on improving the members abilities to research, create, and innovate as well as delivering a functional project.

### The Basics:

- DJI S1000 Octocopter - 24lb Carrying Capacity
- Pixhawk/A3 Autopilot System
- RFID Transmitter for pinpoint landings
- 15,000 mAh Battery-40 minute flight time
- Unique Contact Charging System
- Fully Autonomous System
  - Self-Charging
  - Carousel Storage System
  - Arduino based landing/unloading system
- Fully enclosed storage for safety.



### What We've Done:

- Lab-space acquired
- Initial construction on mailbox components completed
- UAV upgrades
  - Gimbal removed
  - Parcel basket designed
- Software has been modified
- GPS programming is in process
- FAA certification acquired



### The Big Idea:

A primary goal of Project Courier is to create a design that is easily adaptable to many needs. We believe this product could be featured across of variety of college campuses. Eventually the model could be scaled to work within entire cities. We firmly believe that Project Courier represents the future of short distance parcel delivery.

