Objective

- Inter - city and Intra city delivery.
- Delivery of packages for military and rescue operations.
- Delivery of packages for military and rescue
- operations.
- Operations in Adverse Weather Conditions.
- High Speed Delivery -> Useful for delivery of perishable goods.
- Increased Affordability for Customers.

Methodology

- Design of the UAV - After thorough design and simulations to arrive at a stable model with definite constraints.

- Design of the Single and Dual-Axis Tilt Rotor mechanism followed by 3D printing

- Design and Simulation of The Electronic and Electrical Circuit with Failure Safety and Power Management.

- Using Arduino Mega as a flight controller and NodeMCU for Real-Time Internet Connectivity and Control to the UAV.

- Use of Computer Vision for High Speed Obstacle Avoidance and Precise Control, AI for on-board power optimization and analytics and Genetic Algorithm for optimized PID.

- Using Sensor Fusion and On-Board Processors to achieve Full and Semi Autonomous Senses.