

Drone Triathlon Details

<u>3 contests:</u> Each of the below three contests will result in participating teams earning points. The team with the largest aggregate points, after deducting any penalties, on completing all three rounds shall be declared the winner.

Speed: The drone with the fastest top speed wins. (measured by transit time from Point A to Point B)

Agility: The drone that can complete a series of obstacle courses in the fastest time wins.

Payload Delivery: The drone that can carry a payload securely and accurately between two designated points wins.

Date: Saturday, 27 January 2024

Time: 9:30 AM to 5 PM

Venue: ā hub, Andhra University College of Engineering

(https://maps.app.goo.gl/kfjs88uzLVmCnwXy8)

Registration Form: https://forms.gle/7Kg8TSJAaAYTGtiu8

General Rules

• Team size: 2-4 people

- Each team must use the same drone for all three challenges.
- Drones must be battery-powered and electric.
- Drones must be flown in a safe and responsible manner.
- Pilots must wear eye protection at all times.
- Drones must be weighed before each challenge.
- Drones must be inspected before each challenge to ensure they are safe to fly.
- Drones may not be modified during the competition.
- The event will be held outdoors unless the weather does not permit.
- Sportsmanship: All teams must compete in a sportsmanlike manner.
- The decision of the judges is final. Any arguments with the judges will result in disqualification.

Rules for Specific Challenges

Speed:

- Drones must race around the track in the fastest time possible.
- Drones must not touch the ground during the challenge.
- The drone with the fastest time without any penalties wins the maximum points for this challenge.
- The race will be approximately 100 feet long.

Agility:

- Drones must fly through the obstacle course in the correct order.
- Drones must pass through or over all of the obstacles on the course.
- Drones must not touch the ground during the challenge, once they take off and until they land.
- The fastest team to complete the course with no penalties wins the maximum points for this challenge.
- The course will be approximately 100 feet long and will include a variety of obstacles, such as hoops, rings, and tunnels.

Payload Delivery:

- The package will have a weight of 250 gms.
- Drones must deliver the package to the specific location as quickly and safely as possible.
- Drones must not drop the package during the challenge.
- The team with the fastest time without penalties wins the maximum points for this challenge.

Drone Specifications:

- Max size 50cm *50cm * 30cm +/- 5 % Tolerance
- Remote control can be with the different frequency (RF) / Bluetooth
- To avoid clash of frequency pls use dual frequency remote
- Please have an extra battery or additional power supply
- Drone weight shouldn't cross 2 kgs 2.5 kgs including payload

Speed Race Details: To be announced

Obstacle Course Details: To be announced

<u>Payload Delivery Details</u>: Payload is a square box of 20 * 20 * 20cm which weighs 250gms +/- 10%

Race Track sample image



