



## STEM Wars 2026

### HS Drone Aviation Competition Information

#### **Event Coordinator:**

- Sam Qadri
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- Please contact him with any questions.

#### **Indoor Drone Missions**

**Main Task:** Bring and fly your own drone for specific in-door missions as directed.

#### **Competition Learning Objectives:**

1. Demonstrate proficiency in the safe drone operations.
2. Successfully fly your own drone on a pre-determined mission(s).

#### **Criteria and participation rules:**

1. Bring your own drone.
2. Your drone must be ready to fly when your turn comes up.
3. Must have your own co-pilot (if needed).
4. Successfully fly the pre-determined drone mission(s) when your turn comes up.
5. Follow all directions as given.

#### **Determining the competition winners:**

1. Successfully completes the pre-determined drone missions in the shortest amount of time.
2. Demonstrates smooth drone operation and control.
3. Follow all instructions and mission safety procedures.

The top three pilots will be awarded First, Second, and Third place certificates of participation.

#### **Possible Drone Missions:**

1. Rectangle Flight path.
2. Circle flight path: turn-around a specific point twice while keeping a consistent radius.
3. Figure-8 flight Path with provided starting and ending points.
4. Go through a provided obstacle course.

**Rubric below**

**-Aviation Competition Evaluation Rubric-**

<b>Category</b>	<b>Distinguished / Advanced 3</b>	<b>Proficient / Intermediate 2</b>	<b>Capable / Novice 1</b>	<b>Score</b>
General Aircraft Operation	Operates aircraft smoothly during all challenges in a well-coordinated fashion.	Operates aircraft smoothly during most challenges. Some coordination.	Operates aircraft with hesitation and lacks operational knowledge.	
Rectangle Flight Path	Completes flight path flawlessly, full coordination	Completes flight path with some coordination.	Completes flight path but lacks operational coordination.	
Circle Flight Path	Completes flight path flawlessly, full coordination	Completes flight path with some coordination.	Completes flight path but lacks operational coordination.	
Figure-8 Flight Path	Completes flight path flawlessly, full coordination	Completes flight path with some coordination.	Completes flight path but lacks operational coordination.	
Obstacle Course Completions	Completes flight path flawlessly, full coordination	Completes flight path with some coordination.	Completes flight path but lacks operational coordination.	
			<b>Total Score</b>	

**The Top Three Scores will be the winners; and will be granted 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place participation certificates accordingly!**