



FT STEM FF East  
Jake Marshall

## The FT STEM Classroom Experience

Flite Test STEM will be showcasing the best of rc STEM through scratch build aviation. FT STEM's K-12 curriculum constructs STEM literacy through scratch-build aviation for 21<sup>st</sup> century learners. The goal is to provide innovative, hands-on aircraft activities that develop science, technology, engineering and math skills through the model design process. The curriculum engages learners of all levels and provides real-world learning opportunities that expose students to careers in science and technology. Demonstrations of FT STEM will take place through the following courses and times offered by the FT STEM team.

- FREE to all kids
- Onsite Limited Classroom Enrollment/Day

## Courses Offered

### Stunt Gliders

**Grades:** Lower and Upper Elementary

**Unit:** Fundamentals of Flight "Control Surfaces"

**Duration:** 1 Hour

**Days:** Friday and Saturday

**Lesson:** Control Surfaces in Action

**Objective:** Students will understand the basic physics of aircraft control surfaces movement through the creation and testing of an FT Chuck Glider

### Wing Design

**Grades:** Middle and High School

**Unit:** Engineering and Design

**Duration:** 2 Hour

**Days:** Friday

**Lesson:** Wing Design

**Objective:** Students will understand the basic usage of the FT STEM Design Thinking Model by developing a wing to complete and fly an FT Tiny Trainer.

### Flite Tank

**Grades:** K through College

**Unit:** Engineering and Design

**Duration:** 1 Hour

**Days:** Saturday

**Lesson:** Flite Tank

**Objective:** Students will have an opportunity to pitch their scratch build aircraft as a future FT product within the FT STEM series.

### Redbull Flugtag Community Build

**Grades:** K through College

**Unit:** Engineering and Design

**Duration:** See Schedule

**Days:** Thursday through Saturday

**Lesson:** Scaling an Aircraft

**Objective:** Students will have an opportunity as a Flite Fest Team to build this years' Flite Test Redbull Flugtag Aircraft.

# SCHEDULE

All located at the FT STEM Tent

## THURSDAY

10:00 to 7:00 FT STEM Course Signups  
10:00 to 10:30 Redbull Flugtag Builders Meeting  
10:30 to 12:00 – 2:00 to 5:00 Redbull Flugtag Community Build

## FRIDAY

10:00 to 7:00 Course Signups  
10:00 to 12:00 Redbull Flugtag Community Build  
12:00 to 1:00 Stunt Gliders FT STEM Elementary  
2:00 to 4:00 Wing Design  
5:00 to 7:00 Redbull Flugtag Community Build

## SATURDAY

10:00 to 12:00 Redbull Flugtag Community Build  
1:00 to 2:00 Stunt Gliders FT STEM Elementary  
3:00 to 4:00 Flite Tank Presentation  
5:00 to 6:00 Redbull Flugtag Community Build  
6:00 to 7:00 Redbull Flugtag Community Build Presentation