



## Education Program *Grades 9-12*

iFLY's unique vertical wind tunnel provides the perfect environment to show students how exciting STEM can be! Our Education Program has been designed by professional educators to support and enhance STEM learning in your classroom.



### **Every iFLY Field Trip includes:**

- Interactive STEM presentation, delivered by iFLY STEM Educator
- Physics demonstration in the wind tunnel
- Classroom experiment to derive students' predicted terminal velocity and compare with actual measured wind tunnel speeds
- Flying instruction & safety training
- Flying time, with one-on-one supervision from a highly-trained and certified instructor
- Pre and post-field trip activities to conduct in your classroom
- Photos and videos for the students to keep



"...all I can say is **WOW!** Best field trip in 18 years of teaching. My students couldn't stop talking about it today!"

– Raine Maggio, Austin teacher



iFLY field trips make STEM relevant, interesting and accessible for your students.



**Our Learning Objectives include:**

- Increasing awareness of exciting STEM careers
- Learning how STEM is used in the real-world
- Drawing and interpreting free-body force diagrams
- Understanding the nature of fluids and how they exert forces on solid objects
- Deriving equations to represent physical phenomena
- Applying engineering principles to think about tunnel design, energy efficiency, and safety factors
- Understanding variability, uncertainty, and error in experimental results

All iFLY field trips support the following standards:

Common Core Mathematics: HSA.CED.A.1; HSA.CED.A.2; HSA.CED.A.4;  
HSA.REI.A.1; HSA.REI.B.3

NGSS: HS-PS2-1; HS-PS2-2; HS-ETS1-2