

Teachers in Space, Inc.

FLIGHT EXPERIMENTS PROGRAM

Teachers in Space

TIS is a 501c3 non-profit dedicated to advancing STEM education.

Our flight experiments program inspires students to reach for the stars by bringing spaceflight directly to them, through your classroom.

What We Do

TIS has been successfully flying student experiments to space and the near-space environment since 2012.

Achievements

- ◆ Two classroom experiments sent to the International Space Station.
- ◆ Stratosphere experiments (a Mars analog) flown and recovered annually, using high-altitude balloons and the the world-record-setting Perlan 2 glider.
- ◆ Participation in testing commercial spacesuits on parabolic microgravity flights for four years.

American STEM teachers of students between 6th and 12th grade: You and your students can send a science payload to the edge of space—starting right now.



Teachers in Space (TIS) will teach you you to design, build, and fly real flight experiments with your students, by providing biweekly live video conferences with our experts. Our program guides you and your students through the process of engineering and integrating experiments for space—with the possibility of sending your students' work on a suborbital spaceflight.

The 2018-19 Flight Experiments Program consists of five modules. Each takes up to six weeks to complete. Modules will be offered live online 6-8 pm EDT two Thursdays per month. Recorded sessions will remain available on our website.

Register for module I for only \$200.

Teams will need to successfully complete the deliverable for each module to be eligible for the next. Make it to module 3 and fly your experiment on a high-altitude balloon. Even if you don't complete all modules, your experiments are yours to keep.

Teams completing all five modules will collaborate to launch experiments on a commercial space platform. **Registration closes October 23rd.**

Fees and Schedule

- ◆ Module 1: Proposal.
CubeFrame + live training and support, \$200.
Module begins Oct 27, 2018.
Delivery date: Nov 27, 2018.
- ◆ Module 2: Construction.
Pre-soldered Arduino kit, UNO board, breadboard, sensors, connectors, data store + live training and support, \$400.
Module begins Dec 1, 2018.
Delivery date: Jan 7, 2019.
- ◆ Modules 3-5: Flight
Module 3: High-altitude balloon flight, \$800. Module 4: Stratospheric glider or microgravity flight, \$1600. Module 5 Suborbital flight, \$3200. Dates TBD.

The total cost for all five modules is \$6200. You can pay as you go, or pay in advance to get \$200 off. If your team doesn't complete a module, you may apply your unused fees to the next year's program or receive a refund of 50% for any unused modules.

Special Prize: Suborbital Flight Experience

For one team completing our entire five-phase program, one member of their community (pending flight readiness approval) will get to experience weightlessness aboard a parabolic microgravity flight in Fall 2019.

Flight Experiments - Program Details

Module 1: Proposals

Registrants receive a TIS CubeFrame, an hour of lecture and questions with TIS Board member and retired NASA Deputy Director of Technology Jim Adams, along with four hours of live video training on Flight Experiments and two hours telephone support time.

Module 2: Experiments

The Arduino Programming module costs \$400 and includes a pre-soldered Arduino starter kit with UNO board, breadboard, sensors, connectors, data store, plus an additional five hours of training, and two hours telephone support.



Modules 3 through 5: Flight

In modules 3 through 5, participants will fly their experiment for real. Teams that make it at least as far as the end of module three will fly their experiment on a high altitude balloon.

Module 4 culminates with a flight on a stratospheric glider or microgravity flight.

Finally, in Module 5, the remaining teams will work together on up to eight experiments for flight on a suborbital spaceship.

Register at <http://teachers-in-space.com/flightex>