



**LiftOff 2018:**  
**Reach New Heights | Reveal the Unknown | Benefit All Humankind**  
**Summer Professional Development Institute**  
**June 26 – June 30, 2017**



### **PROGRAM ANNOUNCEMENT**

Beginning in the summer of 1990, the NASA's Texas Space Grant Consortium initiated weeklong professional development training for teachers. This aerospace workshop, called LiftOff, emphasizes science, technology, engineering, and mathematics (STEM) learning experiences by incorporating a space science theme supported by NASA missions. Teacher participants are provided with information and experiences through speakers, hands-on activities and field investigations that promote space science and enrichment activities for themselves and others.

### **PROGRAM HIGHLIGHTS**

NASA's stated vision is: To reach for new heights and reveal the unknown so that what we do and learn will benefit all humankind.

Indeed, since its founding in 1958, it has reached that goal numerous times over. From walking on the moon to landing on Mars, NASA has brought the wonders of space to people on Earth for decades. Thousands of people have been working around the world -- and off of it -- for decades, trying to answer some basic questions. What's out there? How do we get there? What will we find? What can we learn there, or learn just by trying to get there, that will make life better here on Earth?

So what does the future at NASA have in store for us?

- Adding to its existing robotic fleet at the Red Planet with the InSight Mars lander set to study the planet's interior and the Mars 2020 rover will look for signs of past microbial life, gather samples for future return to Earth and investigate resources that could someday support astronauts.
- The James Webb Space Telescope will be the premier observatory of the next decade, studying every phase in the history of our Universe in infrared, while the Parker Solar Probe will "touch the sun," travelling closer to the surface than any spacecraft before.
- NASA's first asteroid sample return mission, OSIRIS-REx, arrives at the near-Earth asteroid Bennu in August 2018, and will return a sample for study in 2023.
- Launching no later than June 2018, the Transiting Exoplanet Survey Satellite (TESS) will search for planets outside our solar system by monitoring 200,000 bright, nearby stars.
- And a mission to Jupiter's ocean-bearing moon Europa is being planned for launch in the 2020s.

Building on this growing scientific knowledge of our solar system, NASA is developing the most advanced rocket and spacecraft to extend human presence farther into space than we have ever traveled before. Launching from a revitalized NASA Kennedy Space Center in Florida, the agency's powerful Space Launch System rocket will carry astronauts aboard NASA's Orion Spacecraft past the Moon, and eventually to Mars.

On Earth and in space, NASA is developing, testing and flying cutting-edge technologies for a new future of human and robotic exploration. NASA's current and future Earth missions use the vantage point of space to understand and explore our home planet, improve lives and safeguard our future.

NASA brings together technology, science, and unique global Earth observations to provide societal benefits and strengthen our nation. Critical to understanding how our planet's natural resources and climate are changing, our observations form the foundation for important environmental planning and decisions by people all over the world.

We celebrate all that NASA has contributed and the engineering behind its accomplishments at **LiftOff 2018!**

**Eligibility requirements for participants are provided by the Texas Space Grant Consortium program announcement.**

Should you require additional assistance, please visit our web site at: <http://www.tsgc.utexas.edu/>  
or contact the Outreach Coordinator at 800-248-8742 or [baguio@tsgc.utexas.edu](mailto:baguio@tsgc.utexas.edu)

Texas Space Grant Consortium Summer Institute  
For Middle and High School Educators  
**June 24 – June 29, 2018**

Applications due:  
**March 30, 2018**

Texas Space Grant Consortium  
3925 W. Braker Lane, Suite 200, Austin, Texas 78759



## PROGRAM FEATURES

- Presentations by NASA scientists and engineers
- Tours of NASA and Space Center Houston
- Hands-on, inquiry based classroom activities aligned to educational standards
- Career Exploration
- Teacher Feature (sharing of classroom lessons and activities)
- Opportunity to interact with researchers dedicated to space missions

## ELIGIBILITY REQUIREMENTS

1. Currently employed as a 4-12 grade classroom educator
2. Minimum one year teaching experience prior to workshop
3. Demonstrate willingness to share information with others
4. Must be a U.S. citizen

## REGISTRATION INFORMATION

- Texas Participants: FREE - All expenses paid by TSGC upon selection
- Out-of-State: \$750 registration fee + travel to Houston, Texas
- Applications: Must be submitted online

*This program announcement is contingent upon receiving NASA funding.*

### DEADLINES:

All applications due:  
*March 30, 2018*

On-line: [tsgc.utexas.edu/liftoff/](http://tsgc.utexas.edu/liftoff/)

### Questions?

Texas Space Grant Consortium  
3925 W. Braker Lane, Suite 200  
Austin, Texas 78759

Phone: 800-248-8742  
Fax: 512-471-3585

E-mail: [baguio@tsgc.utexas.edu](mailto:baguio@tsgc.utexas.edu)

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**General Information** *(please print)*

|               |  |   |       |
|---------------|--|---|-------|
| First name:   |  | Middle:   | Last: |
| Home Address: |  |   |       |
| City:         |  | State:  | Zip:  |
| Home Phone:   |  | Home Fax:   |       |
| Home E-mail:  |  |   |       |
| U.S. Citizen: | <input type="checkbox"/> Yes <input type="checkbox"/> No   |   |       |
| Ethnicity**:  | <input type="checkbox"/> White <input type="checkbox"/> Hispanic <input type="checkbox"/> Black <input type="checkbox"/> Pacific Islander <input type="checkbox"/> Other |   |       |
| Gender**:     | <input type="checkbox"/> Male <input type="checkbox"/> Female  | **Gender and ethnicity are strictly used for NASA reporting purposes only and is optional |       |

**Professional Information** *(please print)*

|                                     |                 |   |      |
|-------------------------------------|-----------------|---|------|
| School:                             |                 |   |      |
| School Address:                     |                 |   |      |
| City:                               |                 | State:  | Zip: |
| School Phone:                       |                 | School Fax:   |      |
| School E-mail:                      |                 | School District:  |      |
| Principal/Supervisor Name:          |                 |   |      |
| School Type (check all that apply): |                 | <input type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Charter <input type="checkbox"/> Urban <input type="checkbox"/> Rural |      |
| Elected Officials:                  | Senator:        |   |      |
|                                     | Representative: |   |      |

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**Professional Information** continued

|   |                                  |                            |                                  |                             |  |                             |                                    |
|---|----------------------------------|----------------------------|----------------------------------|-----------------------------|--|-----------------------------|------------------------------------|
| Grades you currently teach<br>(check all that apply): | <input type="checkbox"/> K       | <input type="checkbox"/> 1 | <input type="checkbox"/> 2       | <input type="checkbox"/> 3  | <input type="checkbox"/> 4                     | <input type="checkbox"/> 5  | <input type="checkbox"/> 6         |
|   | <input type="checkbox"/> 7       | <input type="checkbox"/> 8 | <input type="checkbox"/> 9       | <input type="checkbox"/> 10 | <input type="checkbox"/> 11                    | <input type="checkbox"/> 12 |                                    |
| Subjects:   | <input type="checkbox"/> Math    |                            | <input type="checkbox"/> Science |                             | <input type="checkbox"/> Technology            |                             | <input type="checkbox"/> Geography |
|   | <input type="checkbox"/> Other:  |                            |                                  |                             |  |                             |                                    |
| Current Position/Title<br>(check all that apply):     | <input type="checkbox"/> Teacher |                            |                                  |                             | <input type="checkbox"/> Curriculum Specialist |                             |                                    |
|   | <input type="checkbox"/> Other:  |                            |                                  |                             |  |                             |                                    |

**Professional Experience**

I am part of an interdisciplinary team – team members include:

What is your formal education and teaching experience? (Degree, Years Taught, etc.)

What is your current assignment? (Describe job responsibilities and other related duties.)

List professional activities. (In-service participation, membership in professional organizations, # workshops taught and audience.)

Other teacher-related activities. (Educational outreach activities in the community, youth programs, etc.)

If you have never attended LiftOff before, on a separate page, answer the following questions, minimum 100 words, maximum 500:

- What do you expect to gain from attending the LiftOff Summer Institute?
- What are some ways you would incorporate space science materials into your classroom?
- How would you share the information you receive with fellow educators?
- Why would you like to be selected for the LiftOff Summer Institute?

If you have attended a LiftOff Summer Institute in the past, on a separate page, answer the following questions, minimum 100 words, maximum 500:

- How have you used the LiftOff information, lessons, and resources with students?
- In what ways have you shared the LiftOff information with fellow educators?
- How has the LiftOff Summer Institute helped you as a teacher?
- Why would you like to be selected to return for the LiftOff Summer Institute?

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I certify that the information in this application is accurate to the best of my knowledge.

\_\_\_\_\_  
*Signature of Applicant*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Signature of Principal/Supervisor*

\_\_\_\_\_  
*Date*

**Submit application by March 30, 2018 to:**

LiftOff Summer Institute 2018  
Texas Space Grant Consortium  
3925 W. Braker Lane, Suite 200  
Austin, Texas 78759

**How did you hear about the LiftOff Summer Institute? (check all that apply)**

|  |  |
|--|--|
| <input type="checkbox"/> colleague/administrator | <input type="checkbox"/> advertisement         |
| <input type="checkbox"/> convention/conference   | <input type="checkbox"/> NASA Educator Program |
| <input type="checkbox"/> Teacher Training        | <input type="checkbox"/> TSGC                  |
| <input type="checkbox"/> Web                     |  |
| Recommended by:                                  |  |
| Other:   |  |

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