



June 24-29, 2012  
Application Deadline: April 15, 2012

# LIFTOFF

summer institute

SPACE INNOVATIONS AND EXPLORATION



TEXAS  
space grant consortium

**LiftOff 2012: Space Innovations and Exploration**  
**Texas Space Grant Consortium**  
**Summer Professional Development Institute**  
**June 24-29, 2012**

**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, materials, and experiences through speakers, hands-on activities and field investigations that promote space science and enrichment activities for themselves and others.

**PROGRAM HIGHLIGHTS**

This is the beginning of a new era in space exploration where NASA will build the capabilities to send humans deeper into space than ever before. NASA will use the International Space Station as a test bed and stepping stone for the challenging journey ahead. Plans are underway to foster a commercial industry that will safely service low Earth orbit so NASA can focus their energy and resources on sending astronauts to an asteroid and eventually to Mars. The road ahead is challenging but this approach and space exploration architecture puts us in a position to go where no human has gone before.

And our future is building on past accomplishments. NASA presents remarkable examples of spinoffs providing benefits around the world—saving lives, creating jobs, preserving resources, and more. A NASA innovation designed for Mars is wasting no time providing clean, cost effective energy here on Earth. A star-mapping algorithm for the Hubble Space Telescope also helps researchers keep tabs on rare animals. A miniature ion mobility spectrometer for detecting chemicals during exploration of distant planets, moons, and comets, has been incorporated into a commercial hand-held device for soldiers to detect explosives and chemical warfare agents.

LiftOff 2012 will take a look at the historic impact of space exploration and what the future holds. Ignite the spark and pass the torch to your students. All, during *LiftOff 2012 Space Innovations and Exploration...*

**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 ideas and activities)
- Opportunity to interact with researchers dedicated to space Missions

**ELIGIBILITY REQUIREMENTS**

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

**REGISTRATION INFORMATION**

- Texas Participants: FREE- All expenses paid by TSGC upon selection
- Out-of-State: \$650 registration fee + travel to Houston, Texas
- Applications: Must be submitted online

**DEADLINES:**

All applications due:  
*April 15, 2012*

On-line: <http://www.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)

Texas Space Grant Consortium Summer Institute  
 For Middle and High School Educators  
**June 24-29, 2012**

Applications due:  
**April 15, 2012**

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



**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"/> Urban	<input type="checkbox"/> Rural
Elected Officials:	Senator:		
	Representative:		

**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 [baquio@tsgc.utexas.edu](mailto:baquio@tsgc.utexas.edu)

**Professional Information** continued

Grades you currently teach (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 (check all that apply):	<input type="checkbox"/> Teacher				<input type="checkbox"/> Curriculum Specialist		
	<input type="checkbox"/> Other:						

**Professional Experience**

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

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

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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.)

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If you have never attended LiftOff before, on a separate page, answer the following questions:

- 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:

- 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 April 15, 2012 to:**

LiftOff Summer Institute 2012  
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
Recommended by:	
Other:	

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