



Texas Space Grant Consortium







Dr. Tim Urban – Director
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 Program Managers
 Education and Outreach

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National Space Grant College and Fellowship Program

NASA Office of STEM Engagement




Goal: Contribute to the nation's science enterprise by funding **education, research and public engagement projects** through a national network of university-based Space Grant consortia.



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Texas Space Grant Consortium

60+ members include community colleges, four-year universities, government, industry, and non-profits

<p>Angelo State University Austin Astronomical Society Austin Community College Austin Planetarium Baylor University Bob Bullock Texas State History Museum Capitol Area Council BSA Don Harrington Discovery Center El Paso Community College Girlstart Houston Community College Lamar University Lockheed Martin Lone Star College System McLennan Community College National Society of Blank Engineers Houston Space Professionals Office of the Governor Prairie View A&M University Rice University Rio Grande Valley Science Association</p>	<p>San Jacinto College Scobee Education Center Seal of Valor Southern Methodist University Southwest Research Institute St. Edwards University Sul Ross State University Tarleton State University Texas A&M International Texas A&M Texarkana Texas A&M University Texas A&M University - Commerce Texas A&M University Corpus Christi Texas A&M University- Kingsville Texas Christian University Texas Higher Education Coord. Board Texas Medical Center Texas Southern University Texas State University - San Marcos Texas Tech University Texas Woman's University</p>	<p>Trinity University UT Medical Branch Galveston University Space Research Association University of Dallas University of Houston University of Houston Downtown University of Houston Clear Lake University of North Texas University of St. Thomas University of Texas at Arlington University of Texas at Arlington Planetarium University of Texas at Austin University of Texas at Dallas University of Texas at El Paso University of Texas at Tyler University of Texas HSC-Houston University of Texas HSC-San Antonio University of Texas San Antonio University of Texas Southwestern Medical University of Texas Rio Grande Valley</p>
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Texas Space Grant Consortium

Key programs:

- Fellowships & Scholarships
- NASA Internships
- Teacher Professional Development
- K-12 Education & Public Outreach
- Undergraduate Design Challenge
- Other Higher Ed Project Support













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K-12, Professional Development and Public Outreach









CAMP SOAR

ZERO ROBOTICS

ISS PROGRAMMING CHALLENGE









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Design Challenge











- NASA projects from JSC engineers
- Teams of 3-6 students work 1-2 semesters
- Faculty Advisor and NASA Mentor
- Teams present their work in Houston
 - NASA, industry, and educator audience
 - Teams present, review, and compete
 - Feedback on Poster, Model, and Presentation
 - Top Design Teams awarded scholarships

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Top Teams



TEXAS SPACE GRANT CONSORTIUM
DESIGN CHALLENGE




Lamar University (2013, 2015, 2016)
Texas A&M Kingsville (2013)
Texas State (2014)
UT Rio Grande Valley (2015)







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University of North Texas
(2015, 2016, 2017)



Texas A&M (2017)



Lonestar College CyFair
(2016, 2018, 2019)



Texas Woman's University (2018)

8

Student-designed spacewalk tool sent to ISS



Lone Star College Cyfair (2018)



MICRO-G NEXT (2019)



While participating in Microg NEXT, Lone Star College Alumna **Chris Cassidy** describes USC-CyFair's zip-line cutter tool "elegant, magnificent and awesome" after testing it at NASA's Active Response Gravity Offload System, or ARGOS.





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Design Challenge participation since 2002

- More than 20 schools
- More than 350 teams
- More than 1600 students
- 93% stay in STEM

SHOWCASE
DEMONSTRATION AND AWARDS







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