



Webinar will start at 12:00 CT

**Welcome to the
Fall 2026
TSGC Design Challenge**

Program: designchallenge@tsgc.utexas.edu

Admin: tsgc_admin@tsgc.utexas.edu

Website: <https://iq.utexas.edu/designchallenge/>



Welcome to the Fall 2026 TSGC Design Challenge



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Program question: Did everyone on your team get the welcome email? If not, please send corrected email address.

Welcome Teams!

Institution	Team name	Topic	Title
Lamar University	OrbitWorks	TDC-202	Psyche: Deployment of Cabling on Hypothesized Surfaces
Prairie View A&M University		TDC-106	Lunar & Mars Surface Habitat Module Manufacturing
San Jacinto College	The Cosmic Six	TDC-301	CISLUNE: Lunar Worksite Mapping & Construction Verification
Tarleton State University	RELLIS LTV	TDC-00	Development of Lunar Terrain Vehicle (LTV)
Tarleton State University	Texan Space Team	TDC-86	Integrated Camera & Lighting System Optical Optimization Project
Texas A&M University	12th Man on Mars	TDC-00	Automated Medical Inventory System
Texas A&M University	Aggie DAWN	TDC-00	Flexible, wearable health monitor for astronauts to track physiological biomarkers
Texas A&M University	Astrochip	TDC-00	Real-Time Measurements of Electrical Activity of Cells in Space
Texas State University	EE_Psyche	TDC-208	Psyche: Robotic Explorer for Hypothesized Surfaces
Texas State University	MEC_Psyche	TDC-208	Psyche: Robotic Explorer for Hypothesized Surfaces
Texas State University	RadFly	TDC-103	Radiation-Tolerant Crew Laptop
Texas State University	Radtopolus	TDC-103	Radiation-Tolerant Crew Laptop
Texas Woman's University	Asterion	TDC-00	Mitigating Shoulder Injuries During Long-Duration Spaceflight
University of Houston - Clear Lake	Artemis Regolith Cadets (ARC)	TDC-112	Lunar Dust (Regolith) Mitigation for Habitat Entry Systems
University of Houston - Clear Lake	AstroMAJE	TDC-112	Lunar Dust (Regolith) Mitigation for Habitat Entry Systems
University of Houston - Clear Lake	TALON	TDC-202	Psyche: Deployment of Cabling on Hypothesized Surfaces
University of Houston - Clear Lake	Team Space Shield	TDC-113	Habitat and Crew Worksite Enhancement for Harsh Lunar Surface Operating Environments
University of Texas at Austin	Hook em' Horizons	TDC-40	NASA Micro-g NExT Challenge
University of Texas at Dallas	Comet Aerobotics	TDC-110	NASA Lunabotics Challenge
University of Texas at San Antonio	AeroNova	TDC-201	Psyche: Additive Manufacturing with Hypothesized Surface Materials
University of Texas at Tyler	Tyler Torches	TDC-170	NASA Undergraduate Student Design Project: Dehydration of Reactants for Improved Energy Reliability (DRIER)
University of Texas at Tyler	Space Explorers	TDC-206	Psyche: Landing System for Hypothesized Surfaces



Team Notebook

<https://ig.utexas.edu/team-notebook/>

Program Summary	Application	Level 1: Profile, Photos, and Patch	Level 2: Midterm Report	} Deliverables & Deadlines
Level 3: Video	Level 4: Poster	Level 5: Showcase	Level 6: Final Report	
Funding – Team Earnings	Funding – Scholarships	Team Organization	Faculty Advisor	} Finances Team Expectations
Mentor	Collaborators	Field Experience	Outreach	
Patch Design	Tuesday Tag- Up Report	Writing Guidelines		} Extras Deliverable guidelines



	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Applications Due	Team Profile	Midterm Report	Video	Poster	Showcase	Final report
Tues, Sept 8	Mon, Sept 21	Mon, Oct 19	Mon, Nov 2	Mon, Nov 9	Nov 15-16	Fri, Dec 4
Submit weekly Tuesday Tag-Up reports from Level 1 through Level 6						



Level 1: Profile, Photos, and Patch

<Media Release via NASA Gateway Profile>

Deadline: Monday, September 21, 2026 via online Box portal

1. Team Profile

- Approximately **400 words (plain text only)**
 - Include project design goals; team members' plans, goals, hobbies, etc.; background on your team's name and patch design; and any other trivia you wish to share; team photo caption (name people left to right, front to back, clockwise).
- Filename: ***TeamProfile-Institution-TeamName.txt*** or ***.docx***
(Example: TeamProfile-UT-Bevonauts.txt)



Level 1: Profile, Photos, and Patch

2. Team Photos

- Please make sure it is clear
- Good resolution
- Include caption with profile (names left to right, front to back)



Not blurry or low resolution





Level 1: Profile, Photos, and Patch

2. Team Photos

- Photo filename convention:
 - Team: ***TeamPhoto-Institution-TeamName.jpg***
- **NASA media release** via NASA Gateway
 - Instructions online to Create a Student Gateway Profile
 - Enter your data and you will be complete for this step
 - Students with a NASA Gateway account are complete



Level 1: Profile, Photos, and Patch

3. Team Patch

- See details and more examples in the Team Notebook
- Filename convention:
Patch-Institution-TeamName.eps (or .jpg or .tiff or .png)





Level 2: Midterm Report

Deadline: Monday, October 19, 2026

Upload midterm report using the online Box portal.

- Follow the Writing Guidelines
- Filename: ***Midterm-Institution-TeamName.pdf***

New teams:

- Design concepts take shape
- Customer (Mentor) needs are addressed
- Method of down-selection is implemented

Returning teams:

- Fine-tune designs
- Report on tests and costs
- Construct model or prototype

Note: If required by your instructor to submit a Midterm Report in a specific format, you may submit a copy of that report in lieu of the Design Challenge-style Report, as long as all necessary information is included or added. Contact TSGC with any questions.



Level 3: Video

Deadline: Monday, November 2, 2026

Upload video using the online Box portal.

Upload your team video presentation

- Video 60-90 second “elevator pitch”
- Have each team member speak
- End video with everyone saying “We are NASA Space Grant!”
- Filename: ***Video-Institution-Team.MOV*** or *.MPG* or *.MPEG4* (10 GB limit)

Online Review through Showcase

All Showcase participants and the general public have the opportunity to review team Videos online.



Level 3: Video

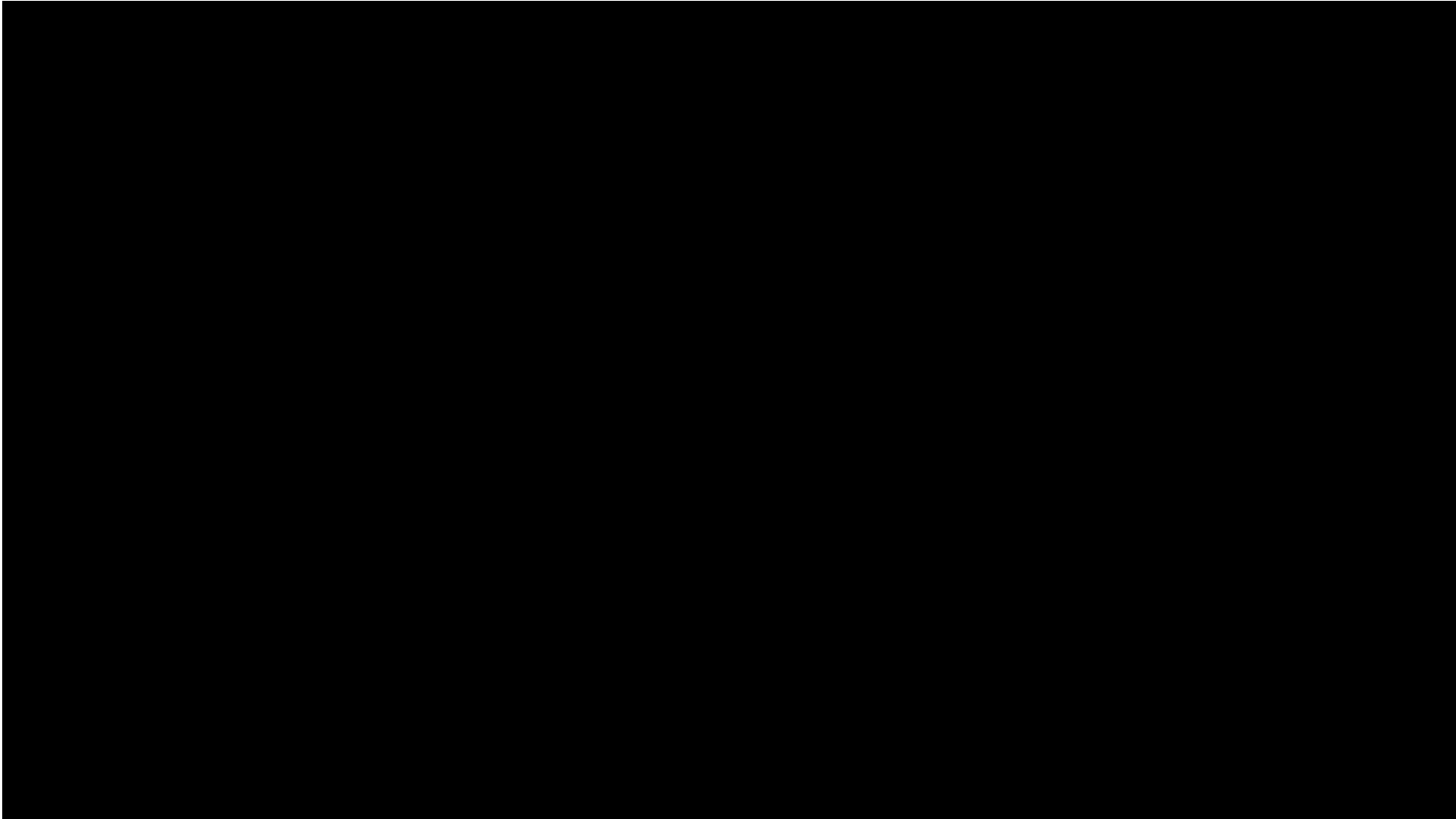
Your Video is...

- 60-90-second “elevator pitch”
- Short project and team introduction
- Promoted online by TSGC for the Showcase
- Have all team members speak
- End video with “We are NASA Space Grant!”

Presentation tips

- Use plenty of visuals
- Video creating/testing/performing where possible
- Include photos, graphs, drawings
- Avoid slides with too much information







Level 4: Poster

Deadline: Monday, November 9, 2026

Upload poster using the online Box portal.

Upload a virtual poster

- Filename: ***Poster-Institution-TeamName.pdf***

Online Review through Showcase

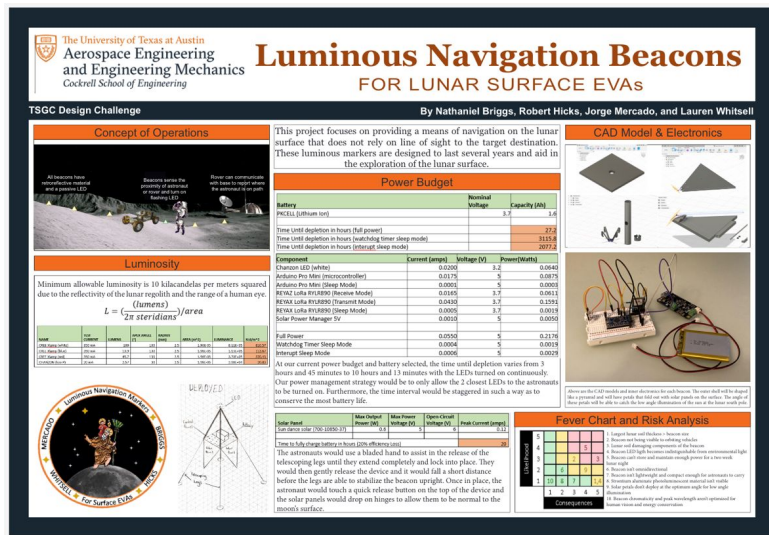
All Showcase participants and the general public have the opportunity to review team Posters online.



Level 4: Poster

Poster

- Profile the design project with **textual** and **visual** information.
- Easy-to-follow **summary** of the project for those unfamiliar with the topic.
- **Include:** title, institution, team members, advisor, mentor
- Include at least one student team member's email for any questions.
- **Photos** of any models, prototypes, schematics, etc. are strongly encouraged.
- Will be made available for **online viewing**
- Print, mount*, and bring to the Showcase
 - May be an updated version if necessary
 - *No mounting for F26





Level 5: Showcase in Austin

Sunday-Monday, November 15-16, 2026

Commons Conference Center at UT Austin's north research campus

- Day 1: All day: 8am-5pm
 - 8am set up, 9am program begins
 - Alternating talks and presenting table display
 - Visit with other teams, other STEM students, academic, industry, and NASA partners.
 - Audience of 150-200 people
- Day 2: All day: 8am-5pm
 - Similar talk & poster format
 - Finale includes recognition & awards





Level 5: Showcase in Austin

- Teams present slides live (10 minutes presentation + 3-4 minute Q&A)
 - Each person should have a chance to speak
 - Practice, practice, practice!
 - Talks will be live-streamed, and you may record yours too.
-
- Team student and faculty registration will open a few weeks before Showcase.
 - Additional team guests may register for the whole Showcase for a fee.
 - Nearby hotel group rate will be available.
 - UT event parking will be included.





Level 5: Showcase in Austin

Team Recognition and Awards

- Team recognition and awards (**scholarships**) are presented at the conclusion of the Showcase.
- Several **professionals** act as judges for the poster and oral presentations.
- **Teams** also score each other.
- Judges' scores are normalized, high and low scores for each team are dropped, and the average team score is used to determine team rankings for each award **category** (oral, poster, model, peers).
- **Top Teams** are determined from an aggregate of all category scores and earn scholarships. Only US citizens are eligible for **scholarship** awards.
TSGC will send eligible team members directions for filling out scholarship acceptance forms.



Level 5: Showcase

Sample scorecard

POSTER / VIDEO / PRESENTATION	Low	–	Avg	–	High
• Visual: Legible text & images, acknowledgements & references, organization, grammar and creativity	1	2	3	4	5
• Background: Project background and research goals clearly explained	1	2	3	4	5
• Trades: Design trades support goals and decisions are clearly described and logical	1	2	3	4	5
• Technical: Team technical understanding demonstrated, work technically sound	1	2	3	4	5
• Results: Significant and convincing conclusion, Design Challenge met	1	2	3	4	5
• Future: Future work or direction described	1	2	3	4	5
• Q&A: Good Q&A responses (presentation)	1	2	3	4	5



Level 6: Final report

Deadline: Friday, December 4, 2026

Upload final report using the online Box portal.

- Follow the **Writing Guidelines**
- **Filename:** *FinalReport-Institution-Team.pdf*
- This report should **build** upon the Midterm Report and should cover all materials generated.
- **Feedback** from the Showcase experience should be incorporated.
- Final-semester teams: **this is your legacy!**

Note: If required by your instructor to submit a Final Report in a specific format, you may submit a copy of that report in lieu of the Design Challenge-style Report, as long as all necessary information is included or added. Contact TSGC with any questions.



Team Earnings



NEW FOR 2026

1) Get your team funds at the start of the semester

- Each **Institution** has been sent a “**Sponsored Activity Agreement**” to facilitate TSGC payments for the next 4-year grant period.
- Once your institution & UT’s sponsored projects offices complete all agreement paperwork, then your **faculty advisor may invoice for funding**.
- TSGC authorizes **\$1200** payment to the team’s department.
- The team may get **reimbursed through their department** for travel and project expenses. TSGC does not reimburse team members directly.
- The invoicing process is slightly different for teams from UT Austin.
- Note: No funding can be sent until the “**Sponsored Activity Agreement**” is in place for your institution.

2) Outreach is no longer optional

- All teams are expected to perform outreach during the semester



Team Earnings



Important Notes:

- All funds received from TSGC must be used for the direct purpose of **addressing the Design Challenge topic**.
- NASA is a federal agency; therefore, some **restrictions** exist on how team money may be spent or distributed.
- Budget carefully. **TSGC is not responsible for covering team over-expenditure**.
- **Funds remaining** at the completion of the team's participation will remain with the Faculty Advisor and may be spent at their discretion.
- Government Shutdown: Any federal budget delay or government shutdown will impact TSGC funding and could impact timeliness, availability, and amount of team earnings, scholarships, and NASA support (including team support from NASA mentors). Federal funding and support is not guaranteed.



Outreach

- Present, demonstrate, or display any **STEM-related activity with an audience** (University event/open house, or outreach to K-12 classrooms, scouts, museum, library, or community events, etc.)
- **Promote** Space Grant and your Design Challenge project
- Incorporate outreach at **any time** during each semester (or between semesters for two-semester teams)
- Submit an “Outreach Report” with your final report & fill out the “TSGC Outreach Metric Form”





Outreach

Outreach documentation you will need

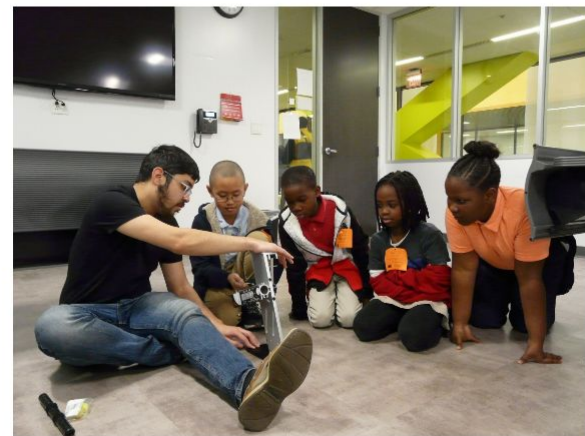
- Include at least **1 photo** of the team conducting the activity
- **500-word description** the activity presented, what the team learned though this outreach, what questions or feedback the team received, and what impact the team believes they made.

Event information for the online form:

- **Name** of the event or school/class/group visited
- **Date(s)** and **duration** of the event (e.g., 2 hours or 2 days)
- **Location** (school/business name, city, state & zip code)
- **Audience type and number** of people
 - *K-12, university/college, or general public*



Picture 7: Students are Waiting for the Ball to Hit the Foam Cup



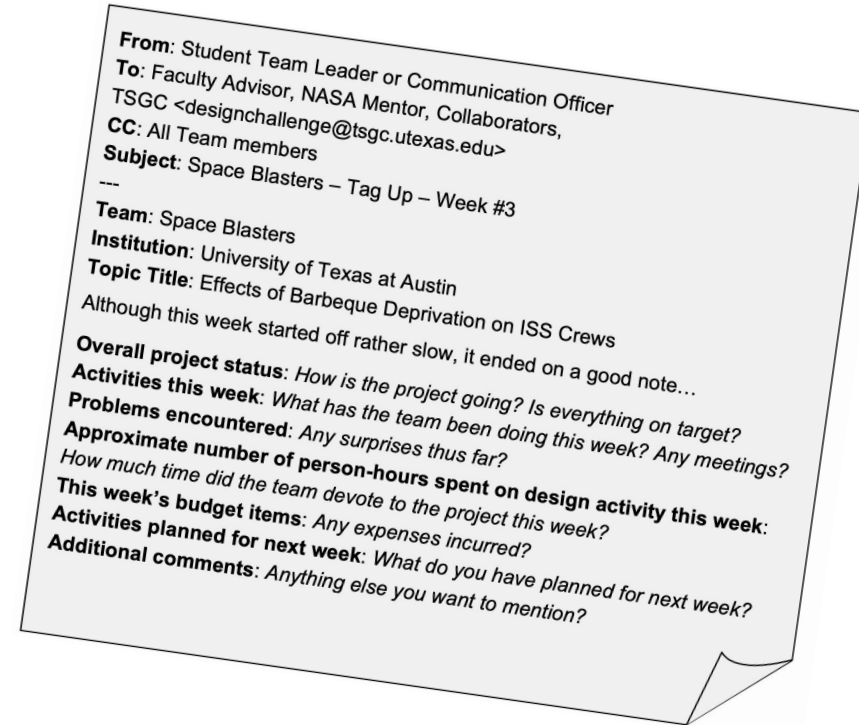
Picture 8: A Volunteer is Setting Up the Launchers for the Kids



Tuesday Tag-Up Reports

Weekly status report for the project

- Provides an update on accomplishments, changes, issues, concerns, plans
- Does not need to be lengthy
- Lets the *Faculty Advisor, Mentor, and TSGC* know how the team is working, and lets the team know that we are listening.
- If you have weekly class report requirements
 - May be the same report
 - May choose another day of the week



***If one single requirement is going to keep the team on track this semester,
it will be this weekly briefing.***

Easy to “reply all” each week to ensure tag-up continuity – keep the thread going.



More in the Notebook

- Team Organization
- Faculty Advisor
- Mentor
- Collaborators
- Field Experience





FAQ

Q: Can we change the name of our team?

A: Yes, up until the Level 1 deadline.

Q: Can we add team members?

A: Yes, up to 6 undergraduates may be on a team. Send an email to TSGC about adding or dropping students or faculty. New students please fill out this form: <https://forms.gle/t9r8xaGjqcyXc3U69>. Send new Level 1 materials as necessary. Changes made after the Level 2 deadline may not have time to be incorporated into materials for Showcase.

Q: Can we add a faculty advisor?

A: Yes, please email TSGC their name, affiliation, and email. Each team may have one or two faculty advisors. Additionally, it is highly suggested that teams identify a collaborator or other SME that can support in the event of a government shutdown.

Q: What do teams competing in NASA Artemis competitions do for mentor support? (SUITS, Micro-g, etc.)

A: As described at the application phase, there is no mentor for NASA Artemis competition topics. Reach out to the NASA competition coordinator to ask if a NASA subject matter expert might be available to help your team. Be sure to check and comply with requirements of both programs (Design Challenge and the NASA Artemis challenge). If you need assistance, TSGC can help facilitate.



FAQ

Q: What are the citizenship rules?

A: - At least half of the students on the team must be US citizens (2 on a 3-4 member team; 3 on a 5-6 member team).

- The faculty advisor(s) & collaborators do not need to be a US citizens.
- Some topics may be ineligible for non-US citizen participation as described in the topic.
- Some site visits may be restricted to US citizens.
- Students who are not US citizens are not eligible for federal Space Grant scholarship awards.

Q: Are two-semester teams automatically renewed for the next semester?

A: No. Teams must:

- (1) participate in the Showcase and
- (2) submit a satisfactory final report to continue.
- (3) Additionally, teams applying to a NASA Artemis competition must be chosen by NASA to automatically continue in the TSGC Design Challenge. Otherwise the team must reapply.



Thank you for joining the Fall 2026 TSGC Design Challenge

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