MITTIC

MUREP Innovation and Technology Transfer Idea Competition

NASA MITTIC
Competition Guidelines
2024 – 2025

NASA MITTIC Description

Your career pathway starts HERE, no matter your field of study! The NASA Minority University Research and Education Project (MUREP) Innovation and Tech Transfer Idea Competition (MITTIC) is seeking Historically Black College and University (HBCU) and Minority Serving Institution (MSI) teams of students from *all fields of study* to rise to the challenge of creating new and innovative solutions to benefit your community and the world. MITTIC provides a life-changing experience: an opportunity to gain or show off your entrepreneurial skills, a chance to win money, and bragging rights for your school.

THIS IS MITTIC. **Your entrepreneurial journey…powered by NASA.**

MITTIC Space2Pitch Roadmap

① Submit Space2Pitch Proposals
The Space2Pitch Competition is an opportunity to propose a spinoff idea for a startup business.

Teams of students rise to the challenge of creating proposals for new and innovative solutions using NASA intellectual property (IP).

MITTIC awards travel and lodging to compete in the Space2Pitch Competition.

Space2Pitch Winning Teams
1st Place = $20,000 **AND**
A VIP trip to the MITTIC Accelerator
③

2nd Place = $10,000

② Space2Pitch Competition
MITTIC awards paid travel to NASA's Johnson Space Center in Houston, Texas. The 2.5-day experience includes participating in private tours of NASA facilities, engaging in exclusive opportunities to network with industry experts, and competing live and in-person in the Space2Pitch Competition.

MITTIC ACCELERATOR
④ 1st place winning teams from the Space2Pitch Competition will earn a trip to the annual MITTIC Accelerator. Teams will work with industry experts to develop their businesses through idea development, workshops, and one-on-one coaching sessions.

What's next?
NASA Space Apps Challenge ⑤

OSTEM Funded Opportunities

MUREP Funded Opportunities

NASA Internships

Other Industry Opportunities

MITTIC Participation Benefits & Opportunities

Students who are on a team selected for a Space2Pitch Competition will have the opportunity to experience a variety of benefits.

Prize money!
$20,000 for placing 1st
$10,000 for placing 2nd
*$2,500 of each prize will serve as a stipend for the team principal investigator (PI)

Apply to receive a paid NASA internship funded by MUREP
*Visit intern.nasa.gov for internship eligibility requirements

Exclusive tours of exciting NASA facilities such as Mission Control for the International Space Station and the Neutral Buoyancy Lab where astronauts train for space walks

Networking with NASA and industry leaders to develop your professional network

Professional coaching from business experts on concept development and pitching techniques

Access for your institution to additional funding and research opportunities with NASA, other federal agencies, and industry partners

Space2Pitch Competition Structure

The MITTIC Space2Pitch Competition is paused until FALL 2025. Teams planning to submit a proposal for Spring 2025 are strongly encouraged to continue working on their proposal to submit to the Fall 2025 Competition (proposals will be accepted August-October 2025). Adjusted eligibility has been put in place to compensate for the pause in the competition (see page 5 for full details).

Stage 1:
Teams of 3-6 students, and a primary principal investigator (PI), choose one NASA intellectual property (IP) and use it to create a product or service with commercial applications. Teams submit a proposal explaining the idea or concept (see proposal requirements).

- Teams are encouraged to be multi-disciplinary (e.g., Engineering, Business, Natural Science, Communications, Mathematics, Aviation)

Stage 2:
We will invite selected teams to NASA's Johnson Space Center (JSC) in Houston, Texas. NASA MITTIC will provide travel and lodging for core team members and the PI.

- Selected teams will engage in online orientation as well as a virtual preliminary pitch review to assist the team in the development of their final pitch prior to the on-site experience.
- The on-site experience at JSC will include NASA facility tours, a poster session, networking activities with NASA employees and business partners, subject matter expert (SME) presentations, and culminates with the Space2Pitch Competition.
- The culminating Space2Pitch Competition provides each selected team with an opportunity to present their pitch and engage in Q&A with a panel of NASA and industry experts who will select a winner and runner-up.

Space2Pitch Competition Prizes**:

- 1st place: **$20,000**** **AND** paid travel and lodging to attend the MITTIC Accelerator in the summer of 2025.
- 2nd place: **$10,000****.

*To qualify, winning teams must participate in all events and submit all deliverables.
**$2,500 of each first and second place prize is awarded directly to the PI as a stipend.

Space2Pitch Competition Eligibility and Collaboration Requirements

- All team members must be 18 or older and U.S. citizens (or Lawful Permanent Residents).
- Each team must have three to six members who are full-time undergraduate or graduate students enrolled in an accredited U.S. institution of higher learning (junior college, community college, college, or university) at the time they submit the proposal.
- At least 60% of the team must be enrolled at a HBCU or a MSI.
- Teams that MITTIC has selected to compete in previous NASA MITTIC competitions, or who have won the MITTIC HBCU Hackathon, must have at least 50% new core team members, a new IP, and a new business concept or product.
- MITTC requires each team to have a primary principal investigator (PI) who actively works for the proposing HBCU or MSI. A PI could be a previous or current professor, a dean or department chair, or another faculty member and/or administrator.
- Teams may choose to combine with another MSI or a non-MSI. The "core team institution" is the HBCU or MSI in which the primary PI is employed, meaning when the monetary prize is distributed, it is delivered to that PI and/or institution. The PIs will decide on if they choose to split funds with other partnering institutions on the team after the award is received (MITTIC will not be part of this process).
- Institutions can submit multiple proposals; however, a PI cannot sponsor more than three teams. Teams must have different student members and a different NASA IP. An entire class of students can form multiple teams.
- Students who are foreign nationals may contribute to the development of a MITTIC proposal as a *support* team member, but if we select the team for the Space2Pitch Competition, they will not be eligible for the benefits described above for core team members.

To accommodate for the pause in the Space2Pitch Competition, eligibility will be adjusted as follows:
- Graduating seniors have extended eligibility so that they may submit their proposal for the Fall 2025 competition.
- Students who are transferring to non-MSI institutions for fall 2025 may still participate as a team member so long as the proposal is sponsored by the principal investigator (PI) at an MSI and 60% of the student team is still enrolled at an MSI.
- Students transferring to a different MSI may participate normally.
- All team members and PIs must continue to meet all other eligibility requirements (see above).

Submitting a Space2Pitch Competition Proposal

Interested teams who meet all eligibility requirements may submit a proposal using the "Apply Now" button on the NASA MITTTIC website between August and October, 2025.

A committee will review and evaluate proposals. In the event of a tie, priority is given to teams partnering with a business OR who have documented completion of one of the optional learning tools.

Team proposals must include: a 5-to-8-page technical paper **and** an 8-to-9-minute pitch video highlighting their NASA spinoff concept. Reviewers will evaluate team proposals in a comprehensive nature, considering both parts of the proposal. You can find the rubric below, as well as other resources, on the NASA MITTIC website.

Proposal Rubric

Proposal Elements	Score
INNOVATION/STORY ✓ Cutting edge or ground-breaking spinoff concept is detailed ✓ Compelling need for this product or service is demonstrated ✓ Concept's competitive advantage to disrupt the current market is clearly explained	15 pts
NASA INTELLECTUAL PROPERTY ✓ Specific technology from the NASA IP portfolio is identified ✓ Clear and detailed discussion of how the NASA IP is being integrated or utilized in the product or service is provided	15 pts
MARKET OPPORTUNITY ✓ Thorough research and market studies on the current market trends and potential customers is shown ✓ Detailed marketing plan, including a go-to-market strategy and company branding, is included	20 pts
BUSINESS MODEL ✓ Comprehensive business plan is included ✓ Proposed schedule of milestones for meeting objectives is documented	20 pts
FEASIBILITY STUDY ✓ Narrative that confirms the business or product can realistically be created and successful in the current market is included ✓ Cost efficiency and profitability in the current market is demonstrated	20 pts
TECHNICAL QUALITY ✓ Pitch video is evenly paced and does not have audio that is sped up/slowed down ✓ Images, charts, graphics are high quality and displayed clearly and professionally	10 pts

Supplemental Information
 	
TECHNICAL PAPER APPENDIX
✓ Supplemental charts, graphs, citations, etc., should be included in this section
✓ Appendix does not count toward the page limit
 	
USE OF FUNDS
✓ Details on how the team will use any money, in the event they place first or second in the MITTIC Space2Pitch Competition, are included. Some suggestions for using MITTIC funds include:
  a. Student Stipends
  b. Prototype development
  c. Purchase of hardware and/or software to assist in product development
  d. Upgrades to facilities or technology to assist with concept development
  e. Business consultation fees
  f. Fees associated with obtaining patents, trademarks, copyrights, or publishment	

g. Team member travel (and expenses) to workshops, conferences, or trade shows ✓ Use of funds page does not count toward the page limit **OPTIONAL Letter of Support** ✓ If a team has obtained a letter of support from their institution or a business partner, they can include it with the technical paper ✓ Does not count toward the page limit **OPTIONAL Learning Tools** ✓ Certificate of completion from L'SPACE or other training course AND/OR ✓ Documentation of participation in a MITTIC HBCU hackathon competition AND/OR ✓ Proof of non-NASA concept to commercialization training ✓ Does not count toward the page limit	

Formatting Requirements
MITTIC actively screens all concept papers and reserves the right to reject any paper that does not conform to the following formatting requirements.
 	
TYPE AND PAGE SIZE
✓ Type Size: No type size smaller than 10 points shall be used for text or tables, except as legends on reduced drawings
✓ Page Size: Pages must be standard size (8.5 X 11 sheets)
 	
HEADER AND FOOTER
✓ The header must include the name created for your concept/team's name and full name of the NASA Intellectual Property used. Institution names should not be located anywhere on the document other than the cover sheet. The footer must include the page number
 	
COVER PAGE
    A. Team Name
    B. MSI Name (if it is a combined team, list all institutions; MSIs first)
    C. NASA Intellectual Property Selected
    D. Team Member Information
    List core team member's information below.
        1. First and Last Name
        2. Email Address
        3. Institution
    E. PI/Co-PI Information (Lead PI must meet MITTIC eligibility requirements.)
        1. First and Last Name
        2. Email Address
        3. Institution Employed By
    F. Partner Business Information (if applicable)
        1. Large or Small Business Name
        2. First and Last Name of Contact
        3. Email Address
        4. Phone Number
    G. Company Logo (Optional)
✓ Cover page does not count toward the page limit.
	Pass/Fail

Space2Pitch Competition Method of Selection and Evaluation Criteria

Proposals must provide all information needed to complete the evaluation. NASA scientists, engineers, and industry experts evaluate proposals. Qualified experts outside of NASA may assist in evaluations as required to determine merit. NASA MITTIC intends to select proposals that offer the most advantageous commercialization potential. MITTIC gives primary consideration to the innovation, commercial viability, and feasibility of the concept and its benefits to NASA interests.

Optional Learning Tools & Incentives

The NASA L'SPACE Proposal Writing and Evaluation Experience Academy is a free, online, interactive 12-week training course designed to provide unique, hands-on learning and insight into the dynamic world of the Space Industry.

Other NASA-provided commercialization training opportunities, such as the MITTIC HBCU Hackathon, are available for students to gain experience to assist in the development of their NASA MITTIC proposal. Additionally, students may seek other concept to commercialization trainings that are not sponsored by NASA.

MITTIC will award additional points towards the score of their proposal to teams applying to compete in MITTIC Space2Pitch who include proof of participation in another NASA-sponsored activity (NCAS, NASA MINDS, NASA SUITS, etc.) or a Certificate of Completion from a L'SPACE Academy for at least one core team member.

MITTIC will award selected teams that submit proof of completion of a non-NASA sponsored training course additional points toward the score of their proposal.

Participation in a L'SPACE Academy, the MITTIC HBCU Hackathon, or other training is **NOT** required to submit a proposal for NASA MITTIC.

Deliverables for Selected Space2Pitch Competition Teams

MITTIC requires each *selected* team for the Space2Pitch Competition to meet the project milestones identified in the table below:

Deliverable
Team Introduction Video
Travel Survey
Poster Submission
Team Exit Video
Virtual Outreach Activity

Due dates are dependent upon which session (fall or spring) is active and are provided to each team upon notification of their selection for the Space2Pitch Competition.

Teams who place first in the Space2Pitch Competition receive $20,000. Teams who place second receive $10,000. $2,500 of each first and second place prize is awarded directly to the PI as a stipend. The remaining award amounts are sent to the MSI of which the primary PI is employed at the conclusion of the competition.

MITTIC Accelerator Structure

For the team who places 1st in the fall 2024 Space2Pitch Competition, MITTIC will provide paid travel and lodging to attend the MITTIC Accelerator at NASA's Ames Research Center in Silicon Valley, California, in June of 2025.

Goals of the accelerator:
- Provide teams with coaching and mentorship to continue to develop their winning businesses and solutions.
- Engage teams with one-on-one consultations with industry experts.
- Deliver seminars and subject matter expert (SME) sessions to build entrepreneurial and business knowledge for students and PIs.
- Inspire participants through tours of NASA's Ames Research Center and/or other private/public companies.

MITTIC Accelerator Eligibility Requirements
- Teams must be the winner of the Fall 2024 MITTIC Space2Pitch Competition

MITTIC U is a new virtual MITTIC course and competition. HBCU and MSI students will have the opportunity to learn about NASA, business startups, IP, and more. Stay tuned for more information and updates!

2025

NASA MITTIC Calendar

AUGUST 2024

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August
26 – Fall Space2Pitch Proposal Window Opens
29 – Open Information Session

SEPTEMBER 2024

S	M	T	W	T	F	S
1	2	3	4	5	6	7
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

September
10 – Open Information Session
13-18 – HBCU Hackathon @ HBCU Week
24 – Open Information Session

OCTOBER 2024

S	M	T	W	T	F	S
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

October
3 – Open Information Session
16 – Fall Proposal Window Closes

NOVEMBER 2024

S	M	T	W	T	F	S
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17	18	19	20	21	22	23
24	25	26	27	28	29	30

November
1 – Fall Space2Pitch Invitations Sent
6 – Virtual Orientation & On-Site Preview
13 – Preliminary Pitch Review (Virtual)

DECEMBER 2024

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

December
4-5 – Fall Experience at JSC
6 – Fall Space2Pitch Competition

JANUARY 2025

S	M	T	W	T	F	S
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January

FEBRUARY 2025

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23	24	25	26	27	28	

February

MARCH 2025

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23	24	25	26	27	28	29
30	31					

March

APRIL 2025

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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

April

MAY/JUNE 2025

S	M	T	W	T	F	S
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18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

May/June
June 4-5 – MITTIC Accelerator

MITTIC
MUREP Innovation and Tech Transfer Idea Competition

Website HTTP://GO.NASA.GOV/NASAMITTIC

Email HQ-MITTIC@MAIL.NASA.GOV

#Space2Pitch

The MITTIC team looks forward to receiving your ideas!

Misti Moore
MITTIC Activity Manager

Dustin Kinnison
Education Project Manager

John Davis
Education Project Coordinator II

Olivia Stiver
Education Project Coordinator II

Stacy Schmidt
Student Engagement Specialist

Fall 2023 Winning Team

University of Houston-Clear Lake

Spring 2024 Winning Team

Texas A&M University

List of Institutions Who Have Previously Competed with MITTIC
Institutions are listed alphabetically. Names in bold are previous winners of a MITTIC competition.

Adelphi University
Alcorn State University
Bakersfield College
Boston College
Bowie State University
California State University-Los Angeles
City College of San Francisco
College of Marin
Colorado State University-Pueblo
East Los Angeles College
El Camino College
Fayetteville State University
Fullerton College
Hampton University
Hartnell College
Houston Community College
Langston University
Leeward Community College
Lincoln University
Lonestar College System
Los Angeles City College
Morgan State University
Navajo Technical University
New Mexico Institute of Mining and Technology
Norfolk State University
Pasadena City College
Prairie View A&M University
San Diego State University
San Jacinto Community College
San Jose State University
Santa Monica College
Sitting Bull College
Southern University and A&M College
Texas A&M University
Texas Christian University
Tufts University
University of California-Davis
University of Hawaii at Manoa
University of Houston
University of Houston-Clear Lake
University of Massachusetts-Boston
University of Puerto Rico-Rio Piedras
University of St. Thomas
University of Texas at Austin
Washington State University
Xavier University of Louisiana