SUITS Frequently Asked Questions 2026

General:

1. What should be included in the Concept of Operations (CONOPS) section?
    a. The CONOPS section should specify how your design addresses each of the challenge requirements by detailing how the design evaluator will interface with your device during each procedural step outlined in the mission description. Be as specific as possible about how you display telemetry and other information, as well as how you implement the AI Assistant throughout.

2. Can we attach videos to our proposal via YouTube links?
    a. Assume the people reviewing your proposal will not watch them. However, you may include a video as an additional way to communicate your proposal. We advise keeping proposal videos short.

3. Are international students able to participate in this challenge?
    a. International students can participate and contribute at their institution. However, they cannot be badged to enter NASA's Johnson Space Center (JSC) in Houston, where the test week will take place.

4. Is there a team size limit?
    a. No, however, most teams include 8-15 people. Each team member should contribute within a defined role on their team. Teams will be limited to **eight (8) persons** badged during onsite test week (seven (7) students and one (1) faculty member.) We recommend large teams split up and submit separate and unique proposals.

5. Do you want system architecture flowcharts in UML 2.0, SysML, etc.?
    a. Use whatever your team feels best describes your architecture.

6. Can students under the age of 18 participate?
    a. No, unfortunately all participants must be at least 18 to sign the Statement of Rights and attend test week.

7. If we have previously had a proposal for NASA SUITS, can we extend our previous proposal, or should we start from scratch?
    a. If aspects from your previous design can carry over to this year's challenges, then you can use that. Make sure you are addressing **this year's** specific requirements first and foremost. We want to see unique ideas.

8. Are international students allowed to be team leads?
    a. This is a little tricky. STEM Gateway limits team leads to U.S. citizens. However, we are happy to interact with and help anyone contacting us. Therefore, you could have co-leads, one a citizen and one that is an international student. However, only U.S. citizens and Legal Permanent Residents (LPRs) will be badged to participate in the onsite culminating event.

9. Does our faculty advisor have to be an active faculty member from our institution?
    a. Yes, your faculty advisor is acting on behalf of the university, so they need to be in a position recognized by the university. You can get advice from anyone, so you may also have more than one faculty member helping you.

Technical/Devices:

10. Can our team use whatever devices we want?
    a. The SUITS team strives to be device agnostic. If an HMD is used in the field during the EVA, it must be a pass-through AR device. This is for safety purposes, as they will need to see the actual ground to walk safely.

11. What language is the telemetry stream server (TSS) in?
    a. Most of the TSS is written in JavaScript and TypeScript.

12. How do you receive data from the TSS?
    a. All TSS data is sent via WebSocket protocol using ws and is in JSON/GeoJSON format.
    b. During testing you will change the TSS IP to the IP of the device where you plan to host the TSS.
    c. During test week the TSS will be deployed by NASA on a local network (SUITSNET) at the test site. Teams will need to update the server IP address on their devices to match the SUITS host server IP.

13. Can phones be used as peripheral devices?
    a. Teams need to state **all** peripheral devices their design includes and any requirements they might need from the NASA SUITS team (internet, time outside of the scheduled testing for set-up, etc.) during the design review in the spring. Approval will either be granted for the devices, or the SUITS team may contact teams for additional follow-up before allowing the external devices on-site.

14. Can we design our own custom hardware interface?
    a. Yes, be sure to include a mock-up of the design and how it interfaces with the augmented reality device in the proposal. If accepted, at the spring design review, teams will be required to present all external devices before receiving approval from the NASA SUITS team to bring them on-site.

15. When will the telemetry stream become available?
    a. The SUITS team's goal is to provide the telemetry stream to selected teams in mid-December 2025 to early January 2026.