Kwadropus Mobility Arm

The Kwadropus is a robotic duster for a space station--clean dust from the surfaces inside a microgravity environment. The idea is to operate similar to how an octopus would move around the ocean floor without damaging the space station or the people--soft robotics. The initial robot may be as large as 2ft in diameter and 10 kg--eventually it will be made smaller to dust in confined areas. **This team is building the Mobility Arm that would use handrails in the space station to grab, hold and release as it moves from one handrail to another. There will be a minimum of 3 mobility arms on the robot and one arm that collects the dust as it moves around.**

1.   1. Does the team have a good Presentation Board (edited for spelling and grammar) with drawings, descriptions, early prototypes and any research to help them present their ideas?

Mark only one oval.

	1	2	3	4	
Insu	◯	◯	◯	◯	Excellent

2.   2. Does the team have a good Brochure that has pictures of their team and current prototype along with a QR code for more information about their prototype and ideas?

Mark only one oval.

	1	2	3	4	
Insu	◯	◯	◯	◯	Excellent

3.   3.   Can the mobility arm grab and hold a space station handrail?

Mark only one oval.

	1	2	3	4	
Insu	○	○	○	○	Excellent

4.   4. Can the mobility arm release from the handrail?

Mark only one oval.

	1	2	3	4	
Insu	○	○	○	○	Excellent

5.   5. Can the team show how the mobility arm would be able to switch to another location or a different handrail?

Mark only one oval.

	1	2	3	4	
Insu	○	○	○	○	Excellent

6.   6. Can the arm be automated easily?

Mark only one oval.

        1   2   3   4

Insu ◯ ◯ ◯ ◯ Excellent

7.   7. Is there a good location for a switch or sensor to be located on the Mobility Arm that would indicate the arm had grabbed onto a handrail?

Mark only one oval.

        1   2   3   4

Insu ◯ ◯ ◯ ◯ Excellent

8.   8. The Mobility Arm is made out of a material or has an outer covering that will prevent the Arm from damaging the rack faces or an astronaut.

Mark only one oval.

        1   2   3   4

Insu ◯ ◯ ◯ ◯ Excellent

9. 9. Did everyone on the team share in the discussion?

Mark only one oval.

	1	2	3	4	
Insu	◯	◯	◯	◯	Excellent

10. 10. Comments--Constructive criticism or Compliments

_____

This content is neither created nor endorsed by Google.

Google Forms