

Space Elevator Academic Challenge 2024
ABSTRACT Evaluation Scoring Criteria
On a scale of 1 to 5 with 5 being the highest

1. Mission Design / Scientific Thought: (1-5)

- Does the student identify the mission chosen well enough to identify benefits from space elevators?
- Is the proposal well informed and researched within the mission chosen?
- Was the reasoning behind the processes clearly stated?

2. Analysis and Communication of Data and Conclusions: (1-5)

- Does the proposal address the limitations of the proposed mission?
- Did the proposal thoroughly explain the project and clearly communicate an accurate proposal summary?

3. Creativity, Originality and Enthusiasm: (1-5)

- Does the proposal show creative ability and originality?
- Does the proposal demonstrate how it builds upon existing research in a novel way?
- Does the proposal demonstrate creative and independent thinking?

4. Overall Impression (1-5)

- Was the proposal “sound” and thorough in design towards defining a mission for space elevators?
- Did the proposal explain its limitations and how it utilized scientific processes, technology, engineering, and mathematics?
- Did the proposal demonstrate creativity and enthusiasm in using the space elevator?

Space Elevator Academic Challenge 2024
PAPER Evaluation Scoring Criteria
On a scale of 1 to 5 with 5 being the highest

1. Mission Design / Scientific Thought: (1-5)

- Does the student identify the mission chosen well enough to identify benefits from space elevators?
- Is the proposal well informed and researched within the mission chosen?
- Is there a well-designed plan and data collection method?
- Was the reasoning behind the processes clearly stated?
- Did the student cite credible sources?

2. Analysis and Communication of Data and Conclusions: (1-5)

- Is there evidence of adequate data that supports the proposed mission using the space elevator?
- Was there an explanation of why certain results were (or were not) achieved, and why they reached their conclusions?
- Does the proposal address the limitations of the proposed mission?
- Did the proposal thoroughly explain the project and clearly communicate an accurate proposal summary?

3. Creativity, Originality and Enthusiasm: (1-5)

- Does the proposal show creative ability and originality?
- Does the proposal demonstrate how it builds upon existing research in a novel way?
- How much did the student accomplish relative to the resources available?
- Does the proposal demonstrate creative and independent thinking?

4. Overall Impression (1-5)

- Was the proposal “sound” and thorough in design towards defining a mission for space elevators?
- Did the proposal explain its limitations and how it utilized scientific processes, technology, engineering, and mathematics?
- Did the proposal demonstrate creativity and enthusiasm in using the space elevator?

Space Elevator Academic Challenge 2024
VIDEO Evaluation Scoring Criteria
On a scale of 1 to 5 with 5 being the highest

1. Mission Oriented via Space Elevator: (1-5)

- Did the video discuss the mission well enough to identify benefits from space elevators?
- Did the video explain their design plan and data collection method?
- Did the video discuss the reasoning behind their chosen mission?

2. Demonstrates Innovation (1-5)

- Does the video highlight any innovation regarding the mission using the space elevator?
- Does the video provide an explanation of why certain results were (or were not) achieved?
- Does the video describe any significant conclusions reached?

3. Valid References (Yes = 3)

- Are the references clearly related to the proposed mission?
- Are the references valid (i.e., no Wikipedia)
- Are the references recent (i.e., within the past five years)

4. Proof of Student ID (Yes = 2)

- Are the authors students at their college/university?

5. Overall Impression (1-5)

- Does the video thoroughly explain the project and clearly communicate their proposal?
- Was the video “sound” and thorough in design towards defining a mission for space elevators?
- Did the video explain its limitations and how it utilized scientific processes, technology, engineering, and mathematics?
- Did the video demonstrate creativity and enthusiasm in using the space elevator?