

# 2019 SpaceX Hyperloop Pod Competition

Abbreviated Rules and Requirements

Updated on November 30, 2018



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# 1 INTRODUCTION

### Competition History

On August 12, 2013, Elon Musk released a white paper on the Hyperloop, his concept of high-speed ground transport. In order to accelerate the development of a functional prototype and to encourage student innovation, SpaceX announced the Hyperloop Pod Competition in 2015 to design and build high-speed Hyperloop Pods. For this competition, student teams from around the country and world came together for a Design Weekend in January 2016 to share their Pod designs. Top teams advanced to the build phase and spent 2016 turning their designs into functional Pods. These teams then competed in the first Hyperloop Pod Competition in January 2017, where they raced their Pods on SpaceX's Hyperloop Test Track adjacent to its Hawthorne CA headquarters. Two subsequent competitions were held in August 2017 and in July 2018.

Based on the continued success of teams competing in the Hyperloop Competition, SpaceX is moving forward with a fourth competition: the 2019 Hyperloop Pod Competition.

### 2019 Competition Rules and Requirements

This document outlines the competition logistics, rules, and technical specifications for the SpaceX test facilities. The competition is open to new student teams interested in competing on the Hyperloop Test Track as well as to existing student teams who have already built and tested Pods to further refine their designs. There will be some updates to the competition rules as outlined in this document.

As with previous competitions, the competition will be judged solely on one criterion: maximum speed with successful deceleration (i.e. without crashing).

The key updates to the rules for the 2019 competition are:

- 1. Teams must use their own communications system. SpaceX will not provide its on-Pod communications system, otherwise known as the Network Access Panel (NAP).
- 2. Pods must be designed and tested to propel themselves to within 100 feet of the far end of the tube before stopping. This can take the form of a single main run to that point, or a "slow crawl" after the Pod's main run has been completed.

### Additional Notes

For an updated competition schedule, visit <u>Hyperloop.com</u>. Any questions or comments about the 2019 Competition Rules and Requirements should be submitted to <u>Hyperloop@spacex.com</u>.

- This competition is a SpaceX event. SpaceX has no affiliation with any Hyperloop companies, including, but not limited to, those frequently referenced by the media.
- Additional competition support is provided by The Boring Company.



# 2 GENERAL INFORMATION

### Eligibility

Only student teams are eligible to enter the competition. To determine eligibility:

- 1. A student team is one that is composed solely of undergraduate and graduate students who are currently enrolled as of the intent to compete deadline of September 28, 2018.
- 2. Teams can consist of students from multiple schools. We will also accept exceptional high school entrants on a case-by-case basis.
- 3. The team structure is flexible, with no minimum number of team members and no maximum number (within reason).

# Faculty Adviser

Each team must have a Faculty Adviser. Faculty Advisers are not allowed to:

- 1. Design the vehicle
- 2. Fabricate or assemble more than a minority of the components
- 3. Directly participate in creating any documentation or presentation
- 4. Answer questions onsite during design briefings or reviews with SpaceX and The Boring Company Volunteer Advisers (Volunteer Advisers)

If there is any question about eligibility, please email <a href="Hyperloop@spacex.com">Hyperloop@spacex.com</a>.

# Returning Teams

Teams who have built a Pod for a previous competition are eligible to compete again provided they meet the student team eligibility described above and they make tangible and clear modifications to their Pod used for the previous competition. Returning teams may also choose to build a new Pod.

Note that the intent of this rule is so that teams do not race the exact same Pod at multiple competitions.

## Competition Format

Selected Pods will compete at the SpaceX Hyperloop Test Track during the final competition, scheduled to occur at the end of Competition Week. At SpaceX's discretion, teams may be allowed to test their Pods on the Hyperloop Test Track during Competition Week. Additionally, SpaceX, at its sole discretion, may allow or disallow entrants from accessing the Hyperloop Test Track. No human or animal shall ride in any Pod or other transportation device used within the Hyperloop Test Track during this competition or during any pre-competition access.

Note: Teams selected to compete will receive a non-abbreviated version of this document.