

# FIRST<sup>®</sup> Robotics Competition Playoff Changes

The Timeout/Playoff Task Force has recommended multiple ways to improve the playoff experience, including switching from a best 2 out of 3 to a **double elimination** tournament structure.

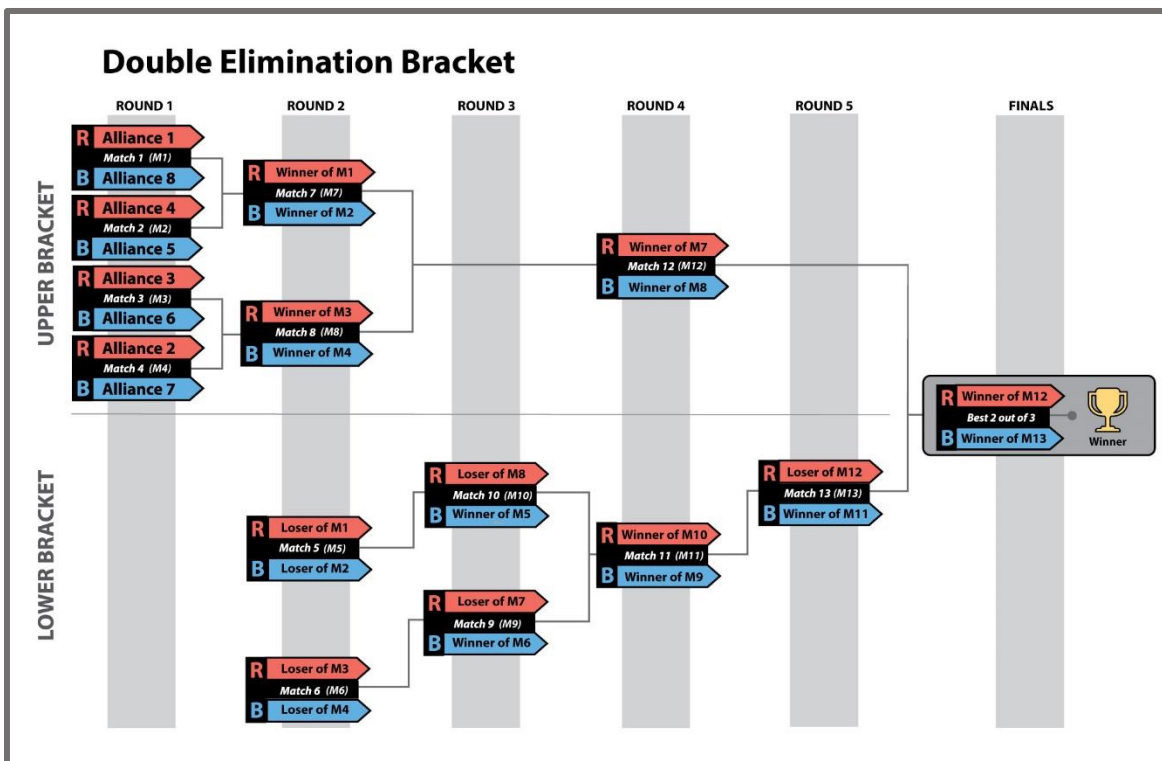
## How does a Double Elimination tournament work?

An alliance ceases to be eligible to win the tournament upon having lost two matches.

All alliances start “Round 1” in an upper bracket. Alliances that win matches progress through rounds in the upper bracket. Upon losing a match in the upper bracket, alliances move to a lower bracket.

Alliances that win matches in the lower bracket progress through rounds in the lower bracket. A loss in the lower bracket results in elimination from the tournament.

The winners of the upper and the lower bracket play each other in a best 2 out of 3 “Final Round” to determine the tournament winner.



## Advantages to a Double Elimination tournament

- **Static match schedule**
  - In the double elimination bracket, every scheduled match will be played.
  - Alliances always know their next match time immediately after their previous match.
  - The length of time the playoff tournament will take is more predictable.
- **Every match matters**
  - Each win will result in advancement through a bracket.

- Other tournament options, such as a “round robin”, allow for potential matches with no impact on which alliance advances; this is not the case with a double elimination tournament
- **Opponents change from round to round**
  - Upsets are rewarded – An alliance doesn't have to beat the same alliance twice to advance.
  - Teams won't get stuck on a “difficult” side of the bracket
- **More time between matches**
  - This schedule allows for breaks between rounds and longer periods for teams to prepare their robot for the next match.

## Additional Modifications for *FIRST*<sup>®</sup> Robotics Competition Playoffs

- **Flexible backup robots**

After the first round of matches, an alliance can request and call in the next highest unpicked robot as a backup. After being called as a backup, that team must play in their following match. The backup team becomes a 4<sup>th</sup> alliance member, and all four teams can swap interchangeably for the remainder of the tournament.
- **Scheduled match times**

Similar to qualification matches, each playoff match will be scheduled for a specific time making it easier for teams to know how long they have to prepare their robots.
- **No timeouts**

Instead of a timeout, additional breaks are built into the playoff schedule to allow teams more time to prepare their robots for matches. There will be a minimum of ~15 minutes between each playoff match for an alliance, including back-to-back matches. The average time between playoff matches for an alliance is ~26 minutes.
- **Breaks between rounds**

Each stage of progression in the bracket is a “round”. Between each round, there will be a break to allow teams to prepare their robots for their next match.
- **Late robot grace period with escalating penalties**

Instead of immediate disablement, teams that cause a significant delay to the start of a match may be warned, and then penalized, before being disabled for the match.
- **Driver station choice**

To give teams more choice for strategic purposes, teams within an alliance will have the flexibility to choose which driver station they control their robot from.
- **Increased communication during tournament**

To help eliminate confusion, teams will receive a printed copy of the bracket and backup robots after alliance selection. Additional audience and team focused displays will help teams know exactly when their next playoff match will be and how the tournament is progressing.