



Chicago Robotics Invitational

CRI 2019 Rules

For ROVER RUCKUSSM

The following rules are in addition or modification to the most recent version of the *FIRST* Tech Challenge 2019 Game, Rover RuckusSM, and its listed Game Manuals 1 and 2 for traditional events. Refer back to Game Manuals 1 and 2 for rules not explicitly listed here.

Gameplay:

All Chicago Robotics Invitational Matches will see alliances of three teams face another alliances of three teams, for elimination matches, alliances will four teams (pending 26 or more teams attending the tournament).

For the purposes of the CRI-Modified Rover Ruckus, the Alliance Stations have been expanded to hold three Drive Teams; however, unlike the official FIRST Tech Challenge Qualifying Matches, there are not defined Driver Stations inside each Alliance Station and the Teams in each Alliance may choose where to position each Team inside the Driver Station. Keep in mind that there will be at least one Referee in each Alliance Station. Drive Team Coaches are all welcome to move about this alliance station as they wish during the match, but Drivers must stay approximately in their initial position. Keep in mind there are still penalties for exiting the Alliance Station.

Referees will stand approximately where the stars are in the diagram.

Autonomous:

In Autonomous, Teams must start at one of the three positions on the Alliance-specific sections of the Lander directly in front of their Drivers Stations in a legal Latched or Deployed configuration. Teams are not allowed to start Autonomous positioned, Latched or Deployed, in the "ANY" zone of either Lander.

Each Alliance may Sample from any of the Sampling Fields in front of the Landing Zone for their Alliance.

In order for an Alliance to Fully Claim their Alliance-specific Depot, two out of a possible three team markers must be legally placed inside the Depot. Alliances ARE able to gain points for three legally placed Team Markers, but only two are required to Fully Claim the Depot.

Driver Control:

During the Driver Controlled period of CRI-Modified Rover Ruckus, there are a few new additions to add to the fun.

30 seconds will be added to the Driver Controlled period, making the Driver Controlled period a total of 2 minutes and 30 seconds long, with the last 30 seconds being the End Game period. Autonomous will continue to be 30 seconds long, resulting in 3 minutes

total of game play in each match, not including the 8 second gap between Autonomous and Driver Control, which will be executed as outlined in T29.

Teams are able to score Gold Minerals in the two Gold Cargo Holds on the Lander in front of their Alliance's Driver Station, and Silver Minerals in the one Silver Cargo Hold in front of their Alliance's Driver Station. Teams are also able to score both Gold AND Silver Minerals in their "ANY" Cargo hold in the Lander opposite their Alliance's Driver Station. Gold or Silver Minerals scored into an "ANY" Cargo Hold are worth 10 points a piece.

Teams are also able to score their Alliance-Specific "Platinum Minerals" in any of the eight Cargo Holds on the Playing Field. Each Platinum Mineral scored in a Cargo Hold is worth 20 points for the Alliance that the Platinum Mineral belongs to. Each Platinum Mineral Scored in its Alliance's Depot is worth 5 points for the Alliance for the Platinum Mineral it belongs to. A Platinum Mineral in the Opposing Alliance's Depot does not score points.

Alliances are NOT allowed to block the Opposing Alliance from their Platinum Minerals through blocking (G18), or through Control/Possession of those Minerals. Platinum Minerals are MINERALS for all purposes (e.g., G21, G23, GS3, GS4) except for scoring, which they are worth the same no matter which Cargo Hold they are placed in, even the opposing alliance's Cargo Hold.

Robots may not Control, Trap, or Block access to opposing alliances Platinum Mineral. The first instance will result in an immediate Minor Penalty and an additional Minor Penalty assessed for every five seconds that the rule violation persists. If the referee declares a Controlling, Trapping, or Blocking access Penalty, the offending Robot must move away at least 3 ft. (0.9 m), approximately 1.5 floor tiles from the opponent's Platinum Mineral. Additional occurrences of violations of this rule will escalate to Yellow Cards quickly. The intent of this rule is to allow Robot access to their Platinum Minerals. Blocking means denying ALL access, so general Robot movement with respect to other Robots should not be considered in violation unless there is no other way to traverse the Playing Field to get the Platinum Mineral. Also, note that this rule requires attempted action on the part of the opposing Alliance.

End Game:

End Game allows Alliances to pursue additional accomplishments, with Robots being able to Latch onto the Lander in any of the three Landing Zones in front of their Alliance's Driver Station. In the End Game though, one Robot from each Alliance is permitted to

Latch onto the latch in their alliances "ANY" landing zone. Latching in the "ANY" zone will be worth 75 points.

Scoring:

Scoring Achievement	Autonomous points	Driver Controlled points	End Game points
Landing	30	-	-
Claiming	15	-	-
Fully Claim bonus	10	-	-
Parking	10	-	-
Latching	-	-	50
Latching in "ANY" zone	-	-	75
Robot In Crater	-	-	15
Robot Completely In crater	-	-	25
Sampling	25	-	-
Mineral in Depot (silver, gold)	2	2	2
Gold Mineral in Gold Cargo Hold	5	5	5
Silver Mineral in Silver Cargo Hold	5	5	5
Gold & Silver Minerals in "ANY" Cargo Hold	10	10	10
Platinum Mineral in Cargo Hold	20	20	20
Platinum Mineral in Depot	5	5	5
Silver Mineral in Gold Cargo Hold	0	0	0
Gold Mineral in Silver Cargo Hold	0	0	0