

FIRST[®] Robotics Competition Game

Underground Extraction, SM the 20xx FIRST[®] Robotics Competition game, finds our teams on a distant asteroid clearing away debris and mining precious stones.

Underground Extraction

Each three-team alliance has three ways to get gemstones to the surface:

1. Putting them into the high surface conveyor to be transported to the surface.
2. Put them into the two mine carts to be transported to the surface.
3. Carry the gemstones with the robot as it's elevated up to the surface.

Autonomous Period:

Robots operate independently following preprogrammed instructions for the first fifteen seconds of the match.

Alliances score points by putting gemstones into scoring locations.

Alliances also have the ability to affect the game play by placing a package of explosives in the scoring locations.

- If the explosives are placed into either a mine cart or the surface conveyor, the alliance can decide to double that points scored in that device for amount of time anytime during the game.

- If the explosives are placed into the crusher, all rocks placed into the crusher must be returned to the field.

Teleoperated Period:

Operators take control for the final two minutes and fifteen seconds of the match.

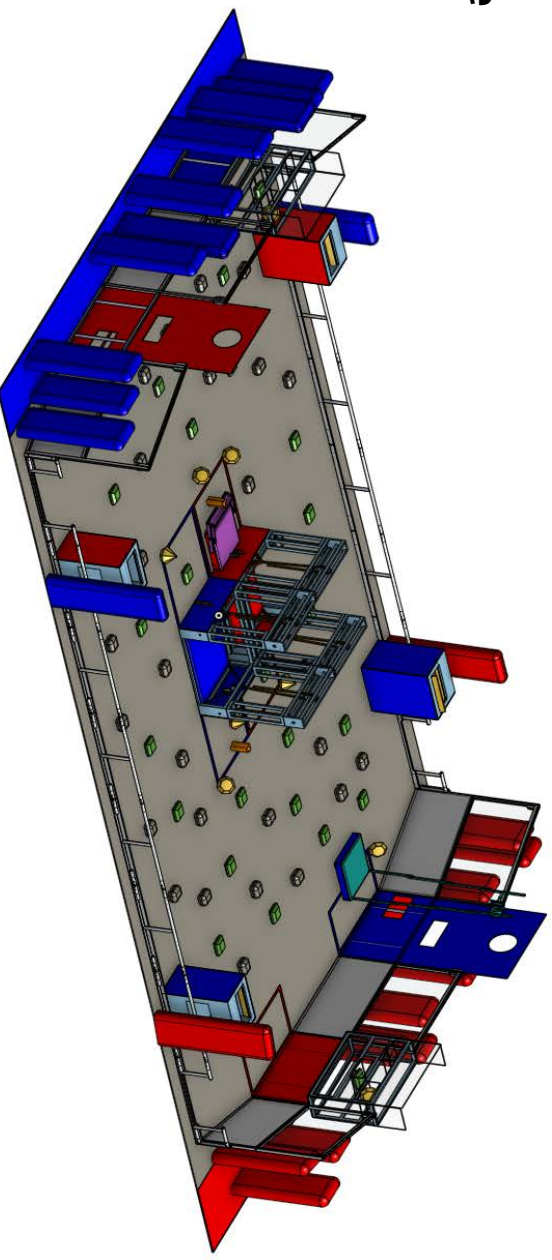
Alliances continue to score points by:

- Placing gemstones in scoring locations
- Putting rocks into the crusher

To obtain the gemstones teams from the mine wall at the opposite end of the field.

Endgame Period:

Operators decide to raise one robot to the surface during the last 30 seconds of the game. To do this one of the robots parks on the elevator platform, while the two others pull on chains to lift the first robot off the ground.



Scoring:

Item	Crusher	Mine Cart	Surface Conveyor	Carried out
Rocks	1	0	0	0
Emeralds	1	2	3	4
Dimonds	1	6	8	12

Rank point for either (only one):(150 points Emeralds and 60 points Diamond.)

Or

(100 points in crushing)

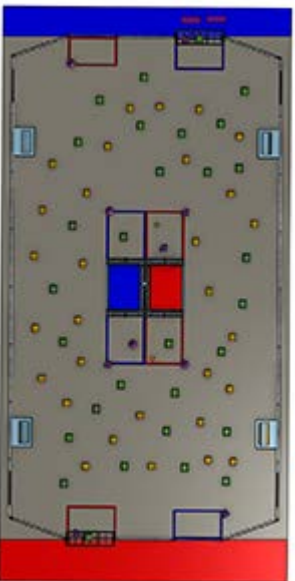
End Game:

20 one side

40 one side, robot tilted

60 two side empty

120 Balanced Robot + 1 rank point



**Each robot can carry
1 diamond + 5 emeralds + unlimited
rocks at a time.**

Starting location:

Ten diamonds (five on each side of field).

- 1 pre-loaded
- 1 in the mine wall
- 2 at the corners of the elevator safety zone
- 1 at the corner of the scoring zone

Thirty Emeralds (fifteen on each side of field).

- 1 pre-loaded
- 1 in the mine wall
- 10 randomly scatered between elevator safety zone and driver station wall.
- 3 next to allience elevator.

Thirty Rocks

- Randomly scattered around the field.

