# **FIRST®** Robotics Competition 2016 Game

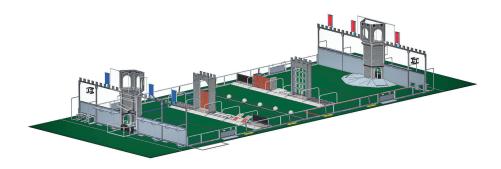
Today, and at more than 125 events around the world this season, Alliances of three robots are on a Quest to breach their opponents' fortifications, weaken their tower with boulders, and capture their tower.

#### The Quest

- Robots operate independently for first 15 seconds of the Quest
  - Alliances score points by:
  - Reaching opponents defenses
  - Crossing defenses
  - Scoring boulders through goals in the opposing tower
- Human drivers take control for the final 2 minutes and 15 seconds controlling their robot to:
  - Defend their castle
  - Retrieve boulders
  - Defeat defenses
  - Score goals from the opponents' courtyard in tower
  - Capture and scale the opponent's tower

### The Outer Works (outermost line of fortification)

- Eight defensive options (over 18,000 possible field configurations)
  - One permanent (the low bar)
  - One chosen periodically by the audience
  - Three selected by Alliances just before each Quest begins
- Once the Quest begins
  - Illuminated lights on each defense reduce when an opposing robot fully crosses it for first time
  - These lights go dark after the defense has been crossed a second time, signaling it's considered damaged
  - Once any four of the five defenses are damaged, the fortifications are considered breached and the charging Alliance is rewarded with points



### The Tower

- Openings in the tower are available for robots to score boulders
  - Scoring boulders reduces a tower's strength as indicated by decreasing tower lights
  - The tower's flag will drop when enough boulders are scored and then the tower can be captured at the end of the Quest

## The Capture

- During last 20 seconds of the Quest, robots may surround and scale the tower to capture it
- When capture is successful, their flag is raised on the opposing tower and even more points are earned

## The Alliance with the highest score at the end of the Quest wins!



