

# Game Design Challenge Award Guidelines

## Concept Award

### Updated

- January 9, 2021

### Description

Celebrates a team that creates an interesting, realistic game concept.

### Guidelines

- The team **must** use the game design challenge ELEMENT (chain) in their concept.
  - Please note a sample of chain was provided in the kit of parts to aid in inspiration, but teams are able to use whatever type of chain they want assuming it meets this definition:
    - Chain: a series of links or rings connected to or fitted into one another and used for various purposes (such as support, restraint, transmission of mechanical power, or measurement).
- The concept exemplifies the *FIRST* Core Values.
- A team can explain:
  - The depth of strategy for all types of robots with a wide variety of capabilities i.e. there is no single solution for gameplay.
  - What makes their game unique and why the design was chosen.
  - How they decided to use the ELEMENT.

## Creativity Award sponsored by Rockwell Automation

### Updated

- January 9, 2021

### Description

Celebrates creativity that enhances the overall game design concept.

### Guidelines

- A team must be able to competently describe the creative/unique feature(s)
- It is highly original in concept.
- Its uniqueness has a practical application and contributes to the objectives of the competition.

## **Designer's Award**

### **Updated**

- January 9, 2021

### **Description**

Celebrates a team's outstanding success with the Game Design Challenge. The winner of this award should be a strong candidate for other awards in this challenge.

### **Guidelines**

- This concept stands out because of the engineering designs, functionality, and visual integration.
- All components are integrated seamlessly, and its uniqueness has a practical application that contributes to the objectives of the competition.
- The designs reflect thoughtful engineering and has the potential to become a reality.
- The design should take into consideration robots with a wide variety of capabilities.

## **Engineering Design Award**

### **Updated**

- January 9, 2021

### **Description**

Celebrates the team that demonstrates sound engineering in the design process.

### **Guidelines**

- A team must be able to describe:
  - The engineering process they went through
  - How the field integrates with robot actions
- The designs reflect thoughtful engineering and has the potential to become a reality.
- The entire design reflects a systematic approach, i.e., the individual field components are designed to function together.

## **Imagery Award in honor of Jack Kamen**

### **Updated**

- January 9, 2021

### **Description**

In honor of Jack Kamen, Dean's father, for his dedication to art and illustration and his devotion to *FIRST*. This award celebrates attractiveness in visual aesthetic integration.

### **Guidelines**

- All components are integrated seamlessly, and visuals are original and exceptional

- Created content is supportive of the *FIRST* Core Values
- A team must be able to explain how their created content connect to their game.
- All forms of creative content are encouraged, including but not limited to: story lines, animations, field artwork, teasers, branding, vocabulary implementation, swag, medallions, trophies, etc.

## **Rookie Design Award**

### **Updated**

- January 9, 2021

### **Description**

Celebrates the rookie team's outstanding success in the Game Design Challenge.

As there are often far fewer rookie teams than veteran teams present at events, Judges have the option of not presenting this award if they feel no rookie team competing meets the criteria.

### **Guidelines**

- This team has created an inspired game design challenge solution.
- The team has a clear concept or approach to their design process.
- The team exemplifies the *FIRST* Core Values.

# **INFINITE RECHARGE<sup>SM</sup> at Home Award Guidelines**

## **Autonomous Award sponsored by Ford**

### **Updated**

- January 29, 2021

### **Description**

Celebrates the team that has demonstrated consistent, reliable, high-performance robot operation during autonomously managed actions. Evaluation is based on the robot's ability to sense its surroundings, position itself or onboard mechanisms appropriately, and execute tasks.

### **Guidelines**

- The award is based on the performance of the robot's autonomous (non-operator guided) operations
  - This may be through a submitted video from a 2020 event, a previous practice of an autonomous actions, or the skills challenge component.
    - Note: teams must upload a video in their submission, so Judges have access.
- A team must be able to explain:

- How the robot understands its surroundings, navigates on the field or positions onboard mechanisms and then executes tasks.
- The factors the teams considered that could interfere with success during autonomously managed actions.
- The design, development, and testing that was done for the robot's autonomously managed actions.

## **Excellence in Engineering Award**

### **Updated**

- January 9, 2021

### **Description**

Celebrates the team that demonstrates a professional approach to the design process

### **Guidelines**

- A team must be able to describe the engineering process they went through and can trace components from conception.
- The designs reflect an engineering solution to a specific problem, and it is functional and practical.
- The designs are elegant and advantageous.

## **Industrial Design Award sponsored by General Motors**

### **Updated**

- January 9, 2021

### **Description**

Celebrates the team that demonstrates industrial design principles, striking a balance between form, function, and aesthetics.

### **Guidelines**

- A team must be able to describe how their robot is elegant, efficient (simple/executable), and practical.
- The entire machine design, or the detailed process used to develop the design, is worthy of this recognition, and not just a single component.
- The robot distinguishes itself from others by its aesthetic and functional design.

## **Quality Award**

### **Updated**

- January 9, 2021

## **Description**

Celebrates machine robustness in concept and fabrication.

## **Guidelines**

- A team must be able to describe their quality plan i.e. how their design ensures robustness.
- A team must be able to explain how they designed in quality: workmanship, welds, attachment systems, wiring, paint, etc.
- A team must be able to describe how they perform maintenance or do a repair on the robot.

## **Rookie Game Changer**

### **Description**

Celebrates a rookie team's outstanding success this season.

As there are often far fewer rookie teams than veteran teams present at events, Judges have the option of not presenting this award if they feel no rookie team competing meets the criteria.

### **Guidelines**

- The team must be able to describe their approach to their design process.
- This team has built a robot appropriate to the game's challenges.
- The team exemplifies the *FIRST* Core Values.

## **Skills Competition Winner**

### **Updated**

- January 9, 2021

### **Description**

Celebrates a team's outstanding success with the Skills Competition. The winner of this award will have the most points in their group. (not based on interview)

## **Skills Competition Finalist**

### **Updated**

- January 9, 2021

### **Description**

Celebrates a team's outstanding success with the Skills Competition. The winner of this award will come in second place for the most points in their group. (not based on interview)

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# ***FIRST* Innovation Challenge *presented by* Qualcomm Award Guidelines**

## **FIRST Innovation Challenge Semi-Finalist**

### **Updated**

- January 9, 2021

### **Description**

Semi-Finalists are teams that achieve excellence across all required criteria as described in the guidelines within a group. For full details see the [At Home Challenges Manual](#).