
FRC TCG: OFFICIAL RULE BOOK

DEVELOPED BY TEAM 4525, RENAISSANCE ROBOTICS

THE CARDS

A deck has 5 types of cards: *Robot cards*, *Component cards*, *Item cards*, *Mentor cards* and *Award cards*. Each card performs different tasks.



Figure 1 The 5 Card Division Symbols: Archimedes, Curie, Newton, Galileo and Einstein

The cards are divided into five divisions, based on the divisions at the First Robotics Championship Tournament. Each division of card can be identified by the symbol in the bottom right corner as well as the base colour of the card. These are the Archimedes (Orange), Curie (Green), Newton (Blue), Galileo (Red) and Einstein (Grey). The Einstein cards, as the championship division, consist of “Epic cards”: Mentor cards, Hall of Fame Teams and Legendary items. Each of the ten robots in the other four divisions were assigned randomly. The divisions are balanced so that each one has close to the same number of overall HP when all Robot card Health Points (HP) are totaled, the same number of components and items cards. Divisions are only relevant if you want to play with specialized decks by colour in alliances. (see Alternative Game Modes)

Robot cards are used for attacking. To win, the opponents Robot cards must be defeated by competing against them with your own Robot cards. A Robot is defeated when its HP reaches zero.



*Figure 2 The 9 Component Types:
Air Tank, Battery, CIM, cRio, Joystick,
Wheel, Omni Wheel, Victor, Xbox
Controller*

Component cards are necessary for Robot cards to attack or to retreat back to your “pit”, your hand. Each Robot card has abilities that require a specific number of Component cards to use.

Item cards, Mentor cards and Award cards act as enhancements, each with different abilities outlined on the individual cards. Item cards are used once and then put into the “shop”, the discard pile. Each Item card has a different effect. Mentor and Award cards stay in play for the duration of the card’s effect.

The game is played usually between two people but can be played by as many as the players deem fit, just be ready for a potentially longer game. See the section on “Alternative Game Modes” for further options.

On Health Points: Health Points (HP) were determined objectively based on how many years the team has been a member of FIRST as of the 2014 season. For each year, the Robot gains 10HP. For instance, a rookie team in 2014 would have 10 HP and a team founded in 2012 would have 30. This information was based on what is listed on the bluealliance.com.

TO BEGIN

Each player begins with a **deck of 54 cards**.

The standard deck consists of 54 cards, but other cards from booster packs may be added. Players must decide on whether they are using booster packs, and if so, the maximum number of cards allowed in a deck. A standard deck contains 20 Robot cards, 25 Component cards, 4 Item cards, 2 Award cards and 3 Mentor cards. The total number of different possible published cards for 2015 are 71. (*Gotta catch 'em all!*)

Each player draws **7 cards in their hand**. The player must **always** have 7 cards in their hand, so drawing from the deck at the end of each turn may be necessary.

From your deck take out four cards of your own choosing in addition to the cards already in your hand. These will be your **prize cards**. They are placed together on the table. The game is won when all of the opposing player's prize cards are captured. The four cards represent the Qualification, Quarter-Finals, Semi-Finals and Final rounds of a Robotics tournament but game length can be changed by playing with fewer prize cards (ex. The game may begin in the quarter-finals with only three prize cards to be won).

Prize cards are captured when an opposing player's Robot card is defeated in battle. (Their HP reaches 0)

THE TURN

A player may play **only one Robot card, one Mentor OR Award card, two Component cards and any number of Item Cards per turn**.

However, a player may only have **one Mentor card in play at a time**.

The player may have up to three Robot cards in play at a time (an Alliance) but may only attack with one Robot per turn.

After the player has played the desired amount of Robot (up to 1), Mentor or Award (up to 1), Component (up to 2) or Item (as many as the player desires) cards, the player may attack.

The one Robot card available for attacking may **only attack once per turn**.

To attack, the player **must have the appropriate number of Component cards** required to use that attack. The Components required can be found directly on the cards.

The same Component cards cannot be used for all of the Robots' attacks. For example, if a Robot has one Omni-Wheel component on it and it has two attacks that both require one Omni-Wheel component they must be stacked separately. In this case, the Robot would require TWO Omni-Wheel Component cards to be able to use both of its moves.

Once a move is used, the Component cards remain on the Robot. They can be used repeatedly.

Players cannot attack during their first turn.

A Robot's attack lowers the defending Robot's HP. The HP of each individual Robot is found on that Robot's card in the top right corner. The amount of HP lost is determined by the damage of the attack,

which is found on the card. A Robot is “broken down” and defeated when its HP reaches zero. When a Robot reaches zero it is removed from play and put into the “shop” (the discard pile), and one of the losing players Prize Cards are taken by the winning player.

Counters are included in every deck; these counters are used to help keep track of Health Points. Each counter is worth 10HP. When a Robot is put into play the appropriate numbers of counters are placed on the card. When the Robot takes damage, the appropriate numbers of counters are removed to show deductions to HP (ex. two counters are removed if a robot sustained a loss of 20HP) Counters can also be added to the Robot as some cards increase the max HP (ex. The Woodie Flowers card) and so the counters can be placed on the card to show the increase in total HP, and then simply removed when that Robot takes damage. Alternatively a paper and pencil can be used to track this.

Robots can retreat if they have at least one fully active ability but they sacrifice all component cards on their robot in doing so. Retreated Robots are returned to the player’s hand (meaning the player cannot have a full hand of seven cards if they retreat a Robot) and the component cards are put into the discard pile.

Swapping Cards: The player can pick two cards from their hand and put them into the bottom of their deck. The player then picks up the top two cards from their deck and puts them into their hand. This is a swap, and cannot be done if the player has already played a card or attacked. After the swap the players turn ends. There is no limit to how many times this can be done in a game.

You cannot pass or skip your turn. At every turn the player must at least make some move.

Defeated Robots or cards that have been used and then removed from play are put in the Repair Shop (discard pile) and cannot be used again in the game.

“Going Out for Coffee”: If each player has a Mentor card in play, one of the players, on their turn, can make the decision to sacrifice their Mentor card to take out the other player’s mentor card. Both Mentors are then “going out for coffee” and are removed from play.

The game is won by the player who has captured all an opponent’s prize cards. It is then up to the discretion of the players whether the captured Prize Cards are returned at the end of the game or taken permanently by the winner.

ALTERNATIVE GAME MODES

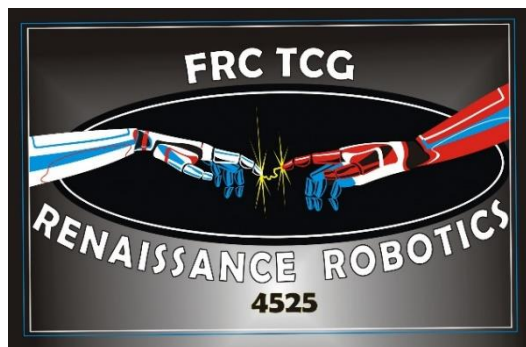
For an added challenge, the game can be played with particular Divisions only. This can be done in a number of different ways, from the player’s only using Robots in the Galileo division, for example vs. another player using only Curie Robot cards, to 2 divisions vs. 2 divisions, ex. Newton and Curie divisions vs. Archimedes and Galileo, or any combination thereof. Partner play can be implemented using this style of deck setup as well, where each partner in the alliance uses a single colour of robots & item cards to play as a team. Note that regardless the deck setup, component cards from all divisions are still necessary for players to keep in their deck.

House rules are acceptable as long as they are agreed upon prior to the start of a game.

THE FRC TCG STORY & RATIONAL

The concept of a trading card game (TCG) is one that has been popular and appealing to youth for decades. Our idea was to create one that captured Mr. Kamen's vision of science and technology leaders being something to which young people aspire. What better way to encompass this dream than to make them into heroes inside a piece of pop culture – an FRC TCG!

In keeping with the mission of FIRST, we used technology to create the game cards, which required our team to learn new skills and to use a variety of industry design software to create vector images and layouts. The cards were developed with comprehensive research about FRC and the teams and robots from the 2014 season. Our team used data collected at last year's FRC tournaments as well as off season and online research to make each robot card personalized especially for the team that built it. We also worked with primary elementary school students as a part of our research and development phase and game testing phase, since they were active players, collectors and experts on TCGs! These mini-mentors proved to be an excellent resource and a plethora of knowledge!



Our team wanted to have a long term project that would engage and attract a diverse cross-section of students and talents, and at the same time, with the mission of FIRST in mind, encourage young people to be excited about STEM. We wanted the cards to celebrate the FIRST Robotics Competition while also paying tribute to the mentors and teams. We wanted to develop a project that would allow our talented and creative students to be challenged and build their skills in technology, inspire innovation, and develop

something unique and new for the FIRST community to be a part of! We also wanted to be able to use this as a learning tool for younger students or students unfamiliar with FRC. It teaches about FIRST Robotics Competitions, robotics parts, requires math, literacy, communication skills and promotes robotics teams (and their robots) as the stars of the show! The most valuable cards are of course the mentors, while most of the other epic cards are intended to highlight the contributions of legends and leaders in FRC.

Our team name, Renaissance Robotics, was selected because it describes the nature of our attitude towards FIRST. We are especially inspired by science, technology and engineering in terms of the creativity and divergent thinking that are integral to the advancement of these fields. We are proud of how uniquely creative and artistic our team members are and always seek ways to infuse art and quality design into all aspects of our approach to FRC each year – an approach that is very Renaissance in spirit! We hope you can see this captured in our inaugural set of FRC TCG cards and enjoy the game!

Questions, comments, ideas & inquiries are always welcome!

Team 4525, Renaissance Robotics
St. Thomas, ON Canada, N5R 6A7
Rambot2545@gmail.com
@ FRC4525

www.rambot.ca

facebook.com/RambotHQ

