



ROBOTICS EDUCATION &
COMPETITION FOUNDATION

SUMMIT

| ROBOTICS PROGRAMS |



Mission

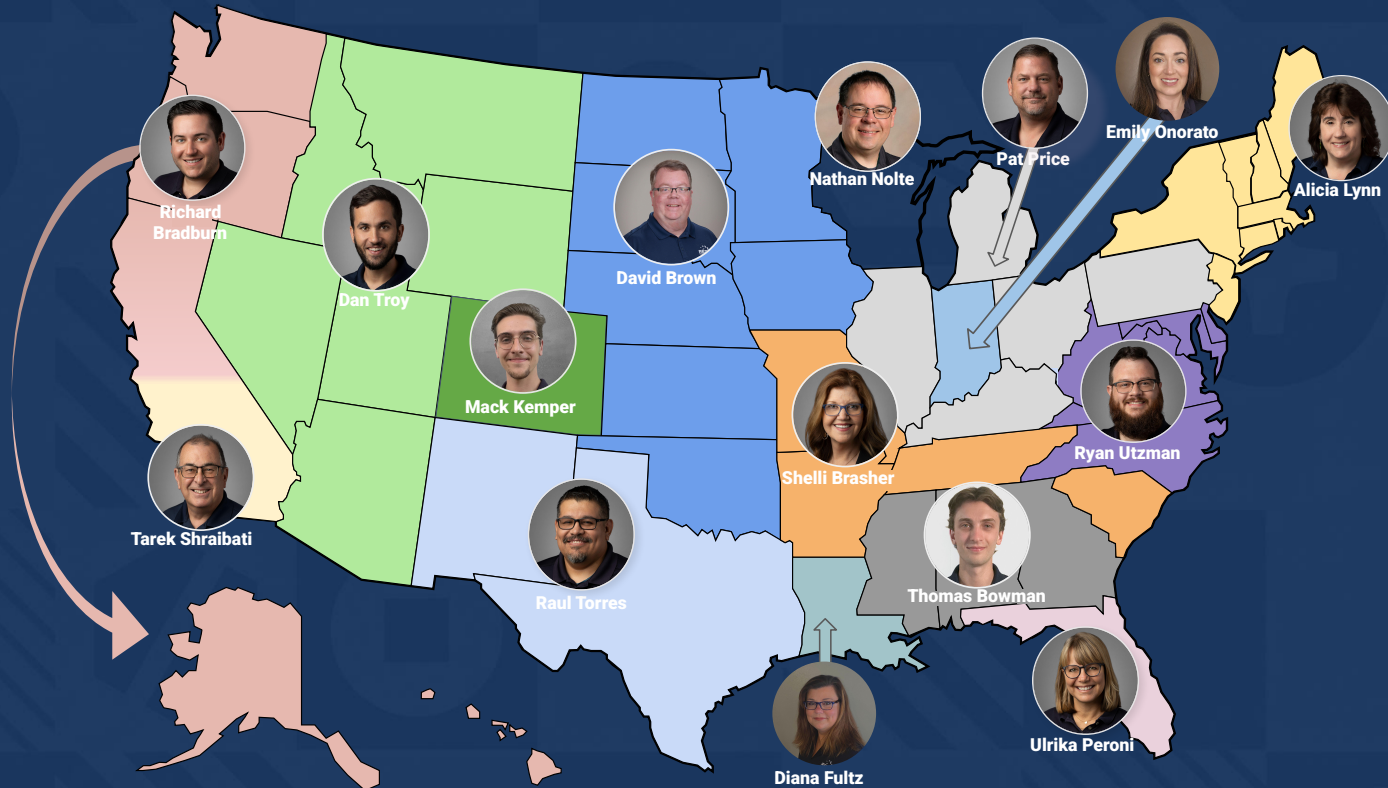
The Robotics Education & Competition Foundation's global mission is to provide every educator with competition, education, and workforce readiness programs to increase student engagement in science, technology, engineering, math, and computer science.

Vision

We see a future where every student designs and innovates as part of a team, overcomes failure, perseveres, and emerges confident in their ability to meet global challenges.



Regional Support Manager Map



Canada



Richard Seniuk

Latin America & Caribbean



Issac Perez

International



Tarek Shraibati



RECF Support

**How to Contact Your RSM
and additional RECF Support**



RECF Library

RECF Competition Programs

RECF ENGAGE
ROBOTICS COMPETITION

RECF Engage

Elementary School (U12) /
Middle School (U15)

 **AERIALDRONE**
COMPETITION

Aerial Drone Competition (ADC)

Elementary/Middle School/High School

RECF ACHIEVE
ROBOTICS COMPETITION

RECF Achieve

Middle School (U15) /
High School (U19)

AERIALDRONE
COMPETITION
PRO

Aerial Drone Competition (ADC) Pro

High School/College

RECF INSPIRE
ROBOTICS COMPETITION

RECF Inspire

College/University



Code of Conduct

RECF is not authorized to organize, promote, approve, or manage VEX Robotics competitions. Any competition organized, promoted, or managed by RECF that involves VEX products is not sanctioned by VEX Robotics, Inc. and will not qualify teams for the 2026–2027 VEX Robotics World Championship.

©2026 Robotics Education & Competition Foundation. All Rights Reserved.

01

 **ROBOTICS**
COMPETITIONS

2026 / 2027

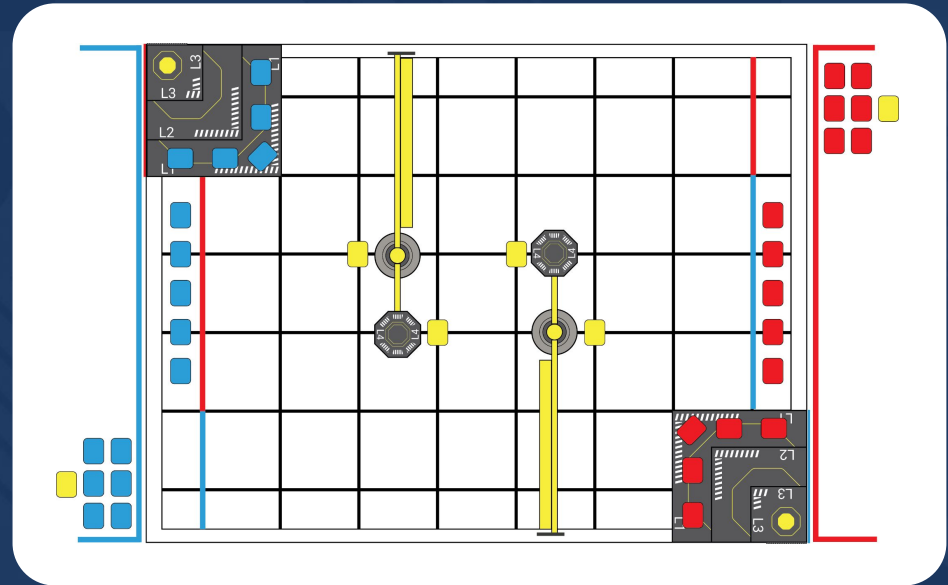
RECF ENGAGE

ROBOTICS COMPETITION

TIER TAKEOVER



Game Manual



Elementary School (U12) / Middle School (U15)

2026 / 2027

RECF ENGAGE

ROBOTICS COMPETITION

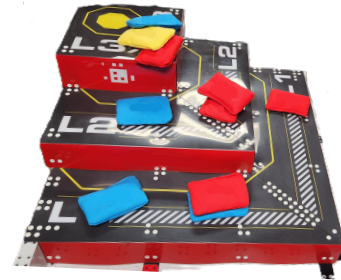
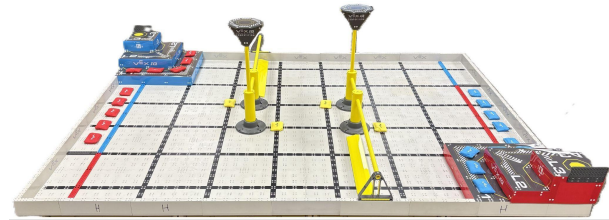
TIER TAKEOVER

GAME SPECIFICS

Teams use robots to push, lift, stack and/or toss bean bags onto goals at 5 different heights: Floor, Level 1, Level 2, Level 3, and Level 4.

Highlights:

- ★ Teams can use VEX IQ® or parts from LEGO® SPIKE™ and EV3 robotics systems
- ★ Teams can have up to 6 pieces of custom plastic in a combination of two styles; flat plastic and 3D printed parts both have size restrictions
- ★ There are no height restrictions for the robots during the match



Elementary School (U12) / Middle School (U15)

2026 / 2027

RECFACHIEVE

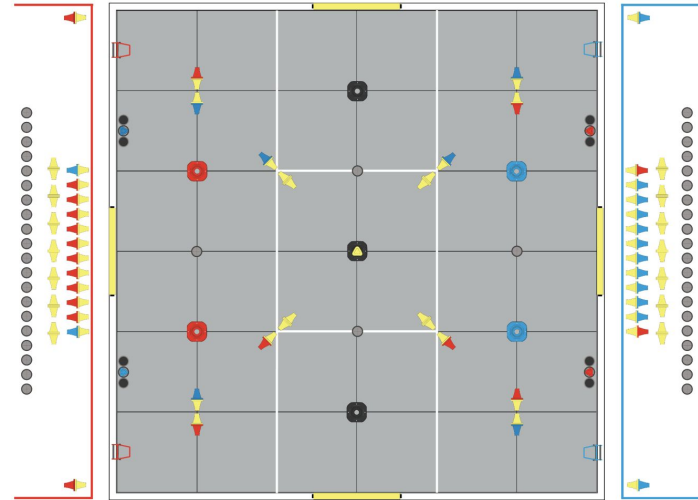
ROBOTICS COMPETITION

PINNACLE



Game Manual

©2026 Robotics Education & Competition Foundation. All Rights Reserved.



Middle School (U15) / High School (U19)

2026 / 2027

RECFACHIEVE

ROBOTICS COMPETITION

PINNACLE

GAME SPECIFICS

In Pinnacle, robots stack pins and cups onto goals, turn rollers, and maximize their score with specific orientations of pins, cups, and rollers.

Highlights:

- ★ Teams will use VEX V5® electronics but are able to also incorporate non-electronic parts from Robits® and TETRIX®
- ★ Teams can have up to 12 pieces of some combination of flat plastic no larger than 4x12 and 3D printed parts no larger than 3x5x2
- ★ There is no limit to how tall the robots can expand during a match



Middle School (U15) / High School (U19)

2026 / 2027

RECF INSPIRE

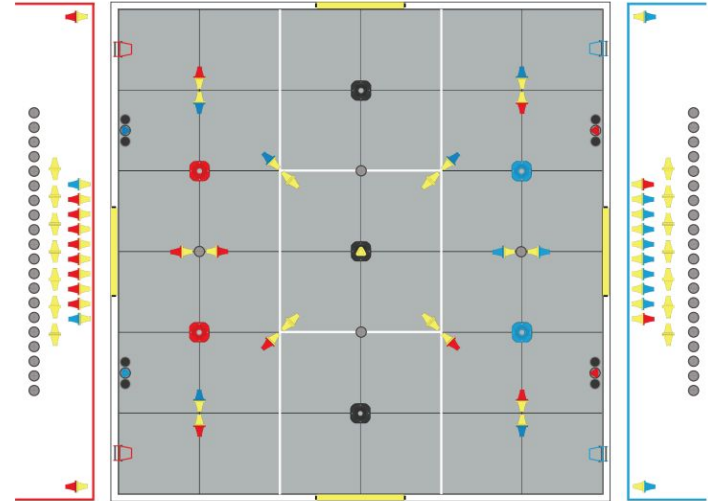
ROBOTICS COMPETITION

PINNACLE



Game Manual

©2026 Robotics Education & Competition Foundation. All Rights Reserved.



College/University

2026 / 2027

RECF INSPIRE

ROBOTICS COMPETITION

PINNACLE

GAME SPECIFICS

In PINNACLE, robots will stack pins and cups onto goals, turn rollers, and maximize their score with specific orientations of pins, cups, and rollers.

Highlights:

- ★ Each team brings two robots to each match; both robots can be up to 18x18x18 at the start of the match
- ★ There is no limit to how tall the robots can expand during a match
- ★ Robots can use other legal electronics including Raspberry Pis and custom electronics designed by the team



College/University

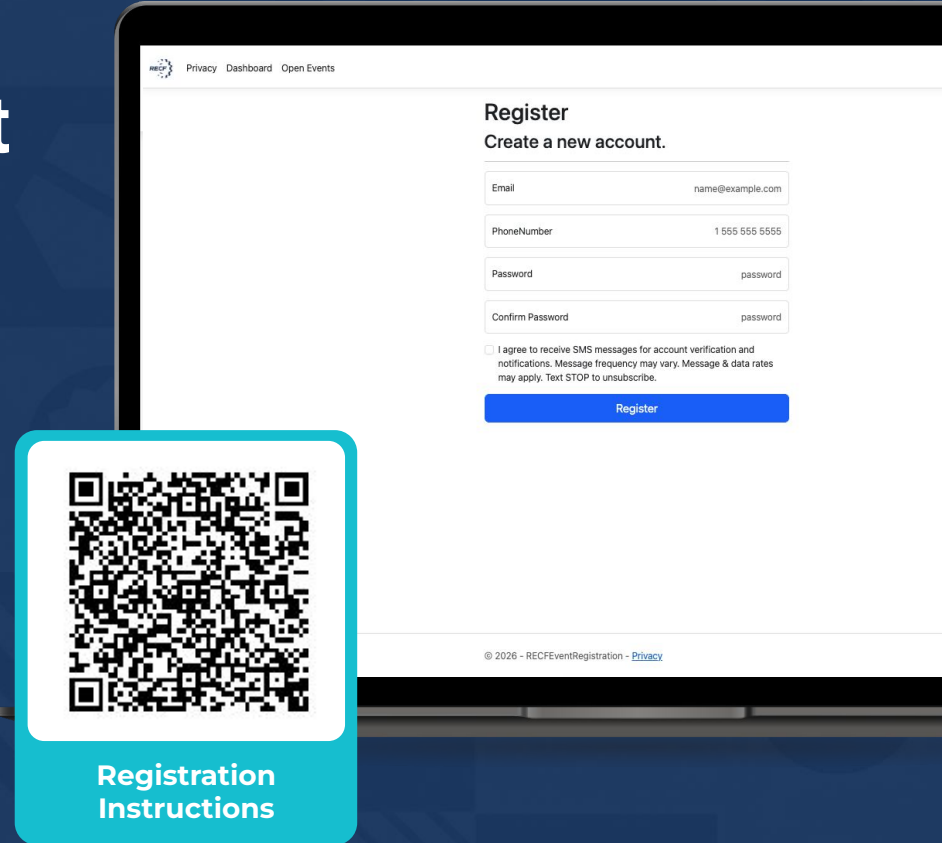
02

RECF Events

Creating an RECFevents.org account

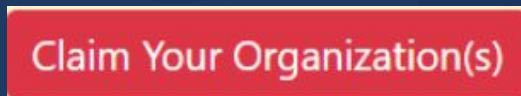
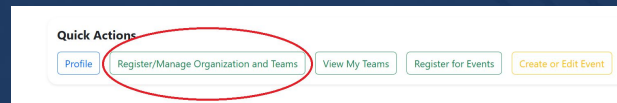
- Go to RECFevents.org
- Click Register at the top right corner
- Enter your information
- Click Register at the bottom of the screen
- Verify your account by confirming your email address
- *If you have trouble or experience issues, please reach out to your RSM*

©2026 Robotics Education & Competition Foundation. All Rights Reserved.



Register/Claim Your Organization

- Log in, and click “Dashboard” in the upper left part of the screen. Then click “**Register/Manage Organizations and Teams**”.
- For **brand new organizations**, click the “**+Add**” button and enter your specific organization information. You will be assigned a random number or series of letters depending on your program.
- For **returning organizations**, click the red “**Claim your Organization(s)**” button. If your email address matches the Primary Coach email address from last year you will see your past organization numbers(s) appear in a list after clicking the button.
 - Claim your organization number.



If you can't find your previous organization number please reach out to your RSM

Creating and Registering Teams

- After you have created your organization, login and click “Dashboard” in the upper left part of the screen. Then click “**Register/Manage Organizations and Teams**”.
- Click on the **green “TEAMS” button** to add your teams. You will be asked to fill out the team number, team name, grade level, and anticipated payment type.

Org Name	City	State	Country	Zipcode	Organization Type	
Sample Organization	Greenville	Texas	United States	75402	Public School	TEAMS Edit Delete

- Team names and anticipated payment type can be changed by the user. Changing the grade level and team letter will require assistance from your Regional Support Manager.

03

Coach
Trainings

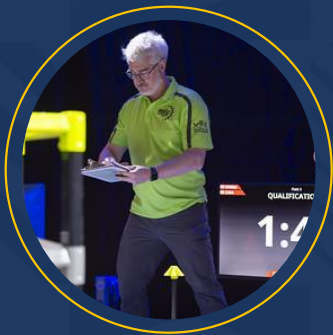
COMING SOON

Training and Certifications

ALL CERTIFICATIONS ACCESSIBLE - training.recf.org



**Drive Team
Member
Training Courses**



**Head Referee
Certification
Courses**



training.recf.org



**Event Partner
Certification
Courses**



**Judge Advisor
Certification
Courses**



RECF Coach Academy

Online training located on Moodle platform

- Courses on
 - Administrative tasks
 - Registration procedures
 - Coaching resources
- New training courses added throughout the season
- PD hours available

Weekly Coach Academy Office Hours Calls

- Calls lead by the Training Team
- Different topics each week
- Coaches can sign up for as many calls as they'd like





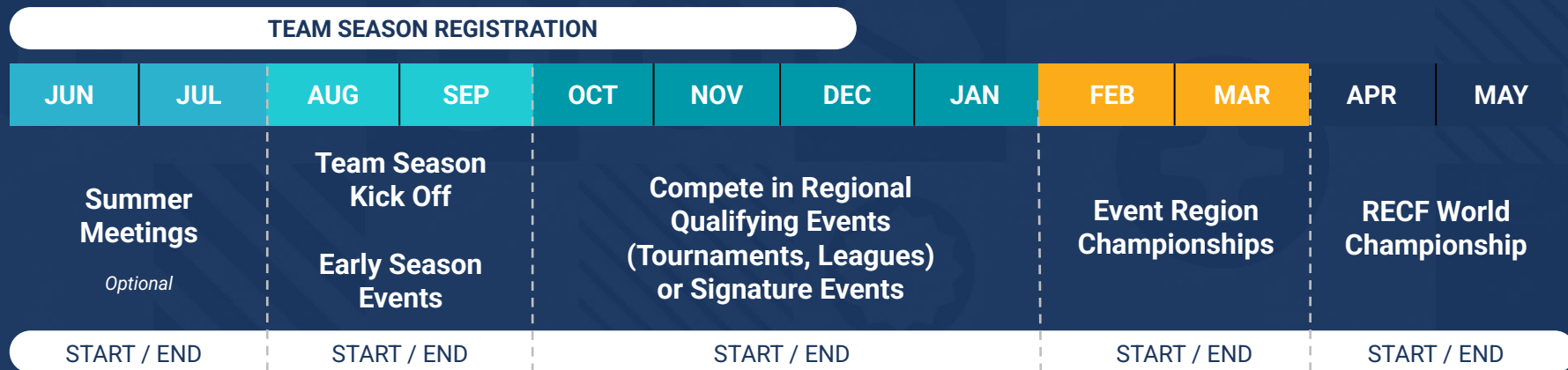
Upcoming Trainings



04

Season
Timeline

Typical RECF Robotics Season Timeline



05

**Your Role as a
Robotics Coach**

Your Role As A Robotics Coach

The **coach** facilitates team interactions and guides students in their development of foundational robot knowledge that they can apply to their own robots.

Coaches are tasked with keeping the program Student Centered.

Student Centered Learning builds ownership and autonomy and thus drives student motivation and engagement.

Students and Their Robots
Collaborate and Compete

Competitive Robotics
as a Recognized Sport

Student Centered Programs



Student Centered

Behavior Guidelines for Team Adults

Student Led, Student Success!

We thank you for your cooperation and commitment to making this a memorable and educational experience for all students. For comprehensive information on the REC Foundation's Student-Centered Policy and Code of Conduct, please visit audience.recf.org.



Encourage Student Communication

Guideline: Students should be the only ones who communicate directly with judges, referees, and members of other teams.

Reason: Leading team communications gives students opportunities to practice their presentation, problem-solving, and negotiation skills.



Avoid Unnecessary Interference

Guideline: Do not interfere with the operations of other teams or the event staff.

Reason: This maintains the integrity and smooth operation of the competition.



Stay Behind the Scenes

Guideline: Adults should stay in the background during active problem-solving and match play.

Reason: When students are the primary participants and leaders in the competition, all teams are on a level playing field.



Respect All Participants

Guideline: Treat all students, mentors, volunteers, and other event attendees with respect and courtesy.

Reason: Respectful behavior promotes a fair and enjoyable experience for everyone involved.



Consequences for Non-Compliance

1. Teams will receive warnings or violations for adult interference.
2. Repeated offenses could lead to a team's disqualification.
3. Adults may be asked to leave the competition area.



Creating A Team Preparation

Identify Roles - Team Development

Let the Students Develop the Team Identity

- A wonderful way to get started
- Generate excitement before the robot is built

All teams are created different. Not one right or wrong way to do it.

Team Identity

- Team Name
- Team Logo
- Team T-Shirts
- Team Colors
- Team Tagline
- Team Size

Roles on the team

- Leadership
- Designers
- Builders
- Programmers
- Notebook Manager
- Drive Team

Creating A Team Preparation

Building a Competition Robot

- Download instructions by visiting the [VEXRobotics.com](https://vexrobotics.com)
- Quick immersion in robot building and driving
- Intended to be modified to be more competitive
- Allows students to follow the **Design Process** while improving the design
- Competitive robots will not be a strictly standard build

Creating A Team | Resources

Engineering Design Process



Helpful hint:
Document it all.

Optimize

- Mechanisms
- Robot Design
- Game Strategy
- Check the rules



Define

- Scoring
- Game Rules
- Robot Design
- Game Strategy

Develop Solutions

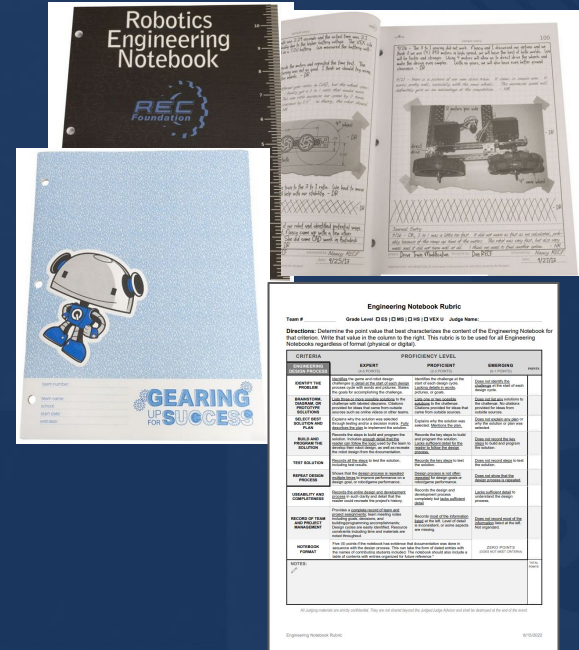
- Test
- Compete
- Evaluate
- Observe

Creating A Team | Taking Action

Team Implementation of the Engineering Notebook

Including, but not limited to

- Record all activity in the Engineering Notebook and begin during the first meeting.
- Use the Engineering Notebook Rubric as a guide to the steps in the engineering design process
- Study the Game Manuals
- Review constraints of time, resources, game challenge
- List all must-have functions
- Brainstorm and record all possible solutions
- Develop a scoring strategy and understand the rules
- Record a plan to build and program a prototype
- Develop and record a plan to test the build and program
- Work as a TEAM to build, test, revise, and repeat!



06

Preparing
for an Event

Competitions | Four In One Event



Event Formats

Open Tournaments

School-Based Tournaments

Conference Tournaments

Invitational Tournaments

Leagues



Registering For An Event

Events are posted on RECFEvents.org
Seasonal registration is due before teams can register for an event.

Welcome back, alynn@sau4.org!

Here's what's happening with your account

 Season Fee Required

You have Teams that have not paid the Season Fee. Click **Season Fee Status** below to pay.

Season Fee Status

Organizations

3

Teams

4

Upcoming Events

0

Past Events

0

Event Partner Access

Request Event Partner status to create events.

[Request Event Partner Status](#)

Quick Actions

[Profile](#)

[Billing](#)

[Register/Manage Organization and Teams](#)

[View My Teams](#)

[Register for Events](#)

[My Registrations](#)

Registering For An Event

Open Events

These events are currently released and accepting registrations or coming up soon.

RECF ACHIEVE ROBOTICS COMPETITION

ACHIEVE (MIDDLE/HIGH SCHOOL ROBOTICS)

Registration Open

Pinnacle Season Opener at KU

Lawrence, KS; HS/MS Blended

📍 Lawrence, KS

📅 Jul 31 – Aug 1, 2026

📅 Reg: Jul 1 – Jul 24, 2026

👤 High School Middle School

💰 \$145.00

[View Details →](#)

RECF ENGAGE ROBOTICS COMPETITION

ENGAGE (ELEMENTARY/MIDDLE SCHOOL ROBOTICS)

Registration Open

Robot in 2 Days

Come try out an idea for the coming season, or build a hero bot!

📍 Farmington, UT

📅 Aug 7 – Aug 7, 2026

📅 Reg: Jun 25 – Aug 5, 2026

👤 Elementary

💰 \$50.00

[View Details →](#)

RECF ACHIEVE ROBOTICS COMPETITION

ACHIEVE (MIDDLE/HIGH SCHOOL ROBOTICS)

Registration Opens Soon

RECF Solo Remote Matches - Robotics Tournament (Oct. 7)

RECF Achieve Invitational SRM

📅 Oct 7 – Oct 7, 2026

📅 Reg: Aug 7 – Sep 30, 2026

👤 High School

💰 \$25.00

[View Details →](#)

RECF ACHIEVE ROBOTICS COMPETITION



Competition Day Expectations

- Packing list
- Overview of a typical event
- Awards

A blue-tinted photograph of a crowd of people at an event. In the center, a person wearing a white hoodie with 'DISC BLASTERS' and the number '31230' on it, a white cap with 'KOREA' on it, and a black face mask is holding up a medal. Other people in the crowd are also wearing 'KOREA' caps. A dark blue rectangular box is overlaid on the left side of the image, containing the text 'THANK YOU' in white.

**THANK
YOU**