

## The Game:

VEX IQ Robotics Competition Mix & Match is played on a 6' x 8' rectangular field configured as seen above. Two robots compete in the Teamwork Challenge as an Alliance in 60-second long teamwork matches, working collaboratively to score points.

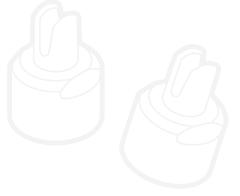
Teams also compete in the Robot Skills Challenge where one robot takes the field to score as many points as possible. These matches consist of Driving Skills Matches, which will be entirely driver-controlled, and Autonomous Coding Skills Matches, which will be autonomous with limited human interaction.

## The Details:

The scoring objects in the VEX IQ Robotics Competition Mix & Match are **Pins** and **Beams**.

The primary objectives of this game are to build **Stacks** out of Pins and Beams, and **Place Stacks** in **Goals**. Additional Pins are introduced to the Field by Drive Team Members at the **Load Zone**.

Points are awarded based on how many Pins and Beams are **Connected**, how many **colors** are included in each Stack, and for Stacks that **match** the color of the Goal.





Each Connected Pin

1 point

Each Connected Beam

10 points

Each 2-color Stack

5-point bonus

Each 3-color Stack

15-point bonus

Each Stack Placed in a Matching Goal and/or Connected to a Beam

10-point bonus

Each Stack Placed on the Standoff Goal

10-point bonus

Each Cleared Starting Pin

2 points

Each Robot in contact with Scoring Objects at the end of the Match.

2 points



See the Game Manual for more details.

The Robotics Education & Competition Foundation (RECF) sparks interest in science, technology, engineering, and math (STEM) by engaging students in hands-on, sustainable, and affordable curriculum-based robotics programs.

# **Online Game Resources**

#### **STUDENTS**

#### **Game Overview**

Learn all about Mix & Match (vigrc.recf.org)

## **RECF Library & VEX Library**

Robot builds, coding, competition, and more (students.vex.com)

#### **VEX Forum**

Chat and collaborate with the VEX Robotics Community (vexforum.com)

#### **VEX via**

Follow the progress and results of the VEX Robotics competition season with match lists, match results, and more. Download from Google Play or the iOS App Store.

#### COACHES

### **RECF Library**

Learn more about being a mentor advocate for VIQRC teams (coaches.vex.com)

#### **VEX PD+**

An on-demand streaming and learning platform, from in-classroom and competitive robotics experts (pd.vex.com)

#### **VEX Educators Conference**

Learn from the VEX Experts and connect with other educators as you explore best practices in STEM education (conference.vex.com)





