WELCOME, VISION & MISSION

Ruby Pontbriand
Inspiring students, one robot at a time.

OUR MISSION

Increase student interest and involvement in science, technology, engineering, and mathematics (STEM) by engaging students in hands-on, affordable, and sustainable robotics engineering programs.
Inspire and motivate students to excel in STEM education.
We create programs so all students develop and thrive.

We see a future where all students design and innovate as part of a team, experience failure, persevere, and embrace STEM.
21st Century Workforce
Educating Tomorrow’s Innovators

NEARLY 7 MILLION STEM JOBS ARE GOING UNFILLED

- The REC Foundation’s education programs provide a pathway to STEM careers
- VEX Robotics students earn manufacturing industry certifications 50% faster than other students. (RAMTEC, 2018)
THE AVERAGE STEM JOB AVAILABLE TO WORKERS WITHOUT A BACHELOR’S DEGREE PAYS $53K

21st Century Workforce

STEM Projections

Projected STEM Job Growth

13% STEM Jobs 2017-2027
9% Non STEM Jobs 2017-2027
A Harvard University Study found that achievement on the job required:

- Soft Skills: 80%
- Hard or Technical Skills: 20%

The Wall Street Journal interviewed 900 executives and found:

- Soft skills are as important as hard skills: 92%
- Having a hard time finding hires with soft skills: 89%
21st Century Workforce
Soft Skills For A Strong Future

1. Teamwork
2. Collaboration
3. Problem Solving
4. Time Management
5. Critical Thinking
6. Communication
What is Workforce Readiness?

Workforce readiness means having students* prepared to enter the workforce with the knowledge, skills, abilities and attributes ready to engage in activities that will be required for the workplace.

Workplace readiness skills are important because they ensure workers have the basic academic, critical thinking and personal skills necessary to maintain employment. Academic skills such as reading, writing, basic math and communication skills* are essential for optimal job performance.
<table>
<thead>
<tr>
<th>Pre-K</th>
<th>Elementary</th>
<th>Middle School</th>
<th>High School</th>
<th>Post-Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades K-2</td>
<td>Grades 3-4</td>
<td>Grades 5-8</td>
<td>Grades 9-12</td>
<td>Collegiate</td>
</tr>
<tr>
<td>VEX 123</td>
<td>VEX IQ Challenge</td>
<td>VEX IQ Challenge</td>
<td>VEX Robotics</td>
<td>VEX U</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Competition</td>
<td>Factory Automation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REC Foundation</td>
<td>Competition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aerial Drones (RAD)</td>
<td>(FAC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VEX Robotics</td>
<td>VEX AI Competition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Competition</td>
<td>(VAIC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REC Foundation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aerial Drones (RAD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VEX V5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Factory Automation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Competition</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VEX AI Competition</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(VAIC)</td>
<td></td>
</tr>
</tbody>
</table>
Affordable Robotics Education Kits

Duration of Kits
Kits last about 5-7 years.

Additional Cost
Once a kit is purchased, annual registration fees are the only additional costs.

Fields
Game fields can be repurposed year after year.

Team Activation
On average, teams will remain active for five years after initial kit purchase.
Accessible
Overcoming Barriers

Participation and success in our programs is self-paced and available for everyone, regardless of experience in STEM robotics, or location.

- Student-centered and self-paced learning
- Support educators with free, easy to follow, hand-on STEM lesson plans with guided explorations

THE HIGHEST REWARD FOR A PERSON'S WORK IS NOT WHAT THEY GET FOR IT; BUT WHAT THEY BECOME BY IT

- JOHN RUSKIN-
At a glance of the new programs and participation of teams over the past five years.

Even during the pandemic, we succeeded in engaging teams in our programs and created even more.
2020-21 Programs and Teams

- VEX GO: 176 teams
- RADC: 191 teams
- VRAD: 129 teams
- VEX AI: 60 teams
2021 Live Remote VEX Robotics World Championship

Over 1,400 teams from over 30 countries and 49 US states competed on first-ever streaming platforms allowing students to compete in a dynamic real-time, online setting.

Recognized by Guinness World Records® as the Largest Online Robot Championships record holder.
Live Remote VEX Worlds  
The Largest Online Robot Championship

Students also experienced many of the same World Championship traditions as past competitions such as the Parade of Nations along with Inspiration All-Star and Online Challenges awards ceremonies. New additions to the event included a Celebration of Diversity segment, VEX Innovator features, and daily live-streamed morning check-ins, and afternoon recaps on each day’s highlights. Broadcast via YouTube live, the event and matches were accessible for the community to tune into matches to cheer on their teams on a global level and in real-time. All streams are available to watch on the REC Foundation YouTube channel.
“I want to thank you and your team for providing my students with an amazing opportunity this school year. During what has been the most challenging of my 25 year career, as a result of the pandemic, my students were able to compete at the highest level of high school robotics and ultimately win the Engineering Design Award at the World Robotics Competition…”

Robert N. Polselli, Ph.D.
Killingly High School, CT
Thank you for an amazing season. I know the hard work it took to pull this off and can’t say thank you enough for finding a way to make it happen for the kids. Know how much we appreciate you all.

- Matthew Christian
THANK YOU

2021 VIRTUAL REC FOUNDATION SUMMIT