**2020 Virtual Unified Robotics FAQ**

With 2020 being a virtual season, we are anticipating additional questions about the toolkit software, Microsoft Teams communication software, overall season timing, championship event and more.

## Season

**Will Special Olympics Washington Unified Partner Form and Athlete Medical Form be needed?**

No! Special Olympics Washington will not require Unified Partner Release Forms or Athletes Medical forms for the 2020 Virtual Season. However, each team will need to submit a roster with Athlete/Unified Partner full name and birthdate.

**How much will the season cost?**

The only cost for each team (robot) is the $50 fee for the Virtual Robotics Toolkit program. Washington state teams can submit for reimbursement to Special Olympics Washington or request funds upfront. See section "Subscription Reimbursement Request" above.

**Will the students be using the LEGO MINDSTORM EV3 kits?**

No, instead of using the physical kit, there is a software program called LEGO Digital Designer that allows people to access all of the LEGO parts in the kit on their computer. Using a computer mouse, they can drag and drop the LEGO parts into place. The software to program the virtual robots is the same.

**Will the students need to be in the same room?**

No, through the use of Microsoft Teams, students will be able to communicate with each other through video calling from their separate locations. Teams also allow for students to share their computer screens.

**I don't have a webcam, or I'm not comfortable sharing my video**

Voice should be fine among partners to build and program their robot. One computer will be screen sharing so all teammates can view the robot or programming blocks together.

**When will each team meet?**

Each team can meet on their own individual schedule for as long and as often as desired. It is recommended to meet at least one day each week to ensure you have enough time to complete the robot.

**How will the robots compete against each other?**

At the end of build season, all robots will be uploaded to the Unified Robotics Management Team using WeTransfer here: [unifiedrobotics.wetransfer.com](unifiedrobotics.wetransfer.com). This year's referees will have access to the robot and programming files from each team. During a match, both team's robot files will be imported into Virtual Robotics Toolkit software, and, on the live stream, the referee will "start the match" by playing the simulation.

**What software do I need to compete in the 2020 Virtual season?**

For building your robot using the bricks, links, axles, and more, we are using a program called Lego Digital Designer.

- LEGO Digital Designer (free) [https://www.lego.com/en-us/ldd](https://www.lego.com/en-us/ldd)
- We are using Brick version 2670

For programming your robot, we are using the same software as in previous years, Lego Mindstorms EV3.

- LEGO MINDSTORMS EV3 (free) [https://www.lego.com/en-us/themes/mindstorms/downloads](https://www.lego.com/en-us/themes/mindstorms/downloads)

For testing and running your virtual robot with your program, we are using a program called Virtual Robotics Toolkit. This does cost money for a license, but can be reimbursed through Special Olympics Unified Robotics. We recommend that one member on each team has this software.

- Virtual Robotics Toolkit ($50) [https://www.virtualroboticstoolkit.com/](https://www.virtualroboticstoolkit.com/)
- We are using VRT version 4.3.11

For communicating with your school and team-mates, we are using Microsoft Teams. This is also where group chats among all schools and build chats will be held.

- Microsoft Teams (free) [https://www.microsoft.com/en-us/microsoft-365/microsoft-teams/group-chat-software](https://www.microsoft.com/en-us/microsoft-365/microsoft-teams/group-chat-software)

**What do I do if my computer can't run this software?**

Special Olympics Washington has Microsoft Surfaces available to lend to Washington state teams. To receive computers, coaches need to complete the "Surface Checkout Form" and submit via the registration link.

**Does everyone need this software?**

All team members and coaches will need Microsoft Teams to communicate. However only one team member needs the Lego software. However, Lego Digital Designer and Lego Mindstorms EV3 are free, so all team members can download and use this software.

**I have the software, but I'm not sure how to use it.**

Lego Digital Designer and Lego Mindstorms EV3 have pdf's available for their basic use.

- LEGO Digital Designer User Manual https://www.lego.com/r/www/r/portals/-/media/themes/ldd/ldd-4-3-en-manual.pdf
- LEGO MINDSTORMS EV3 User Guide https://www.lego.com/cdn/cs/set/assets/bltbef4d6ce0f40363c/LMSUser_Guide_LEGO_MINDSTORMS_EV3_11_Tablet_ENUS.pdf

Virtual Robotics Toolkit has a youtube playlist with all types of tutorials. We recommend beginning with the "Getting Started" playlist.
- Virtual Robotics Toolkit video tutorials https://www.youtube.com/user/VirtualRobotics/playlists (Recommendation: start by watching the "Getting Started" playlist)

Microsoft Teams has an online demo for getting started.
- Teams Basics Guided Tour https://teamsdemo.office.com/index.html#/

**Software runs really slowly on my computer and is impacting our progress.**

Try closing all applications on your computer except Teams and whichever program you are currently working on (Lego Digital Designer, Lego Mindstorms EV3, or Virtual Robotics Toolkit). Network connections can slow down if house members are playing online games or streaming movies while you are working. If there are still issues, Special Olympics Unified Robotics has laptop lending options that may help.

**I have a specific question about design or programming.**

Throughout the build season we will be hosting Office Hour sessions on Thursdays through Microsoft Teams. Additionally, there is a Teams channel available to all schools for questions and sharing answers.

# Team Submissions

**This is taking longer than using physical bricks, I'm worried I won't finish**

There are pre-built robots that exist, that you can use if you are unable to build a robot for any reason. You are encouraged to modify these to make them unique. You will still be required to program the robot.

**How and where do I send my robot when it's done?**

We will be using MyTransfer to upload the robot files to Special Olympics Unified Robotics. For robot file submission, visit unifiedrobotics.wetransfer.com and check out the "How to Document" on our resource page.

**I submitted my robot, but was told that my robot needs changes, what do I do and how much time do I have?**

        The referees should make clear indications of changes to be made. Timing will be handled case-by-case, but oftentimes we would ask for changes within 2-3 days. Once you have finished making changes, please upload a new version of your files.

**I submitted my robot, but was told that my robot needs changes, and I cannot make those changes due to time or computer reasons**

        First, ask your head coach for help, maybe another team is able to make the necessary changes. If that does not work, reach out to Special Olympics Unified Robotics for additional support either on the Microsoft Teams chat channel, or emailing us/

## Judging

**What if I have a scheduling conflict with my time slot but still want to be able to participate in the interview?**

        We will send out the times as early as possible so you can plan around it. If you are still unable to attend, directly message Kayla Neckorcuk on Teams  and she will work  with you to find a suitable alternative.

**I can attend the judging interview but my partner cannot. What do I do?**

        Directly message Kayla Neckorcuk on Teams to see if another time slot is available. It would be best if the entire team is able to attend, but it is not a requirement. Other options include submitting a video of the team or a written submission so the full team can be involved.

**I am having technical difficulty and can't join the interview. What do I do?**

        Don't panic! Directly message the judges and Kayla Neckorcuk to let them know you are trying to get on the call. They should be able to help you troubleshoot or find an alternative so you are able to participate.

**I don't know if I would prefer in person or a submission, when do I need to make that decision?**

        Fill out the survey to share your preference and availability. The survey responses will be due October 21st, time slots will be assigned October 25th. If you do not fill out the survey, a time slot will be randomly assigned. If you would like to change this decision, please notify Kayla Neckorcuk on Teams ASAP and she will try to accommodate. Remember, submissions are due November 5th and interviews will be held November 7th.

**How do I submit my video or written submission for judging?**

        Using WeTransfer, you will be able to upload your files.
- [unifiedrobotics.wetransfer.com](http://unifiedrobotics.wetransfer.com)
- In the message section of the submission, please include the following:
  - School Name

○ Team Name

**My robot is not complete yet, are we still eligible for any robot awards?**
　　　　Yes, this year the main focus of the robot awards is on the process your team has gone through to get where you are. Since the judging is before the robot submission is due, it is not expected to be complete and you are still eligible to win any award.

# Championship

**How do I watch the championship?**
　　　　This year the Championship will be available on a Live Stream on both the Facebook and Youtube platforms. Youtube will have four streams with chat, one for each field. Facebook will have a single stream, highlighting matches from all four fields.

**Can my family watch the championship?**
　　　　The live streams will be publicly available for anyone to watch!

**How do I know which field to watch?**
　　　　The Facebook stream will try to highlight as many matches as possible from each field. If you want to make sure you don't miss any of your robot's matches, you can watch your specific field's stream on Youtube. One week before the Championship, we will post the robot and field lists to the Unified Robotics Website.

**How do I watch finals?**
　　　　Finals will be streamed in much the same way, on Facebook, and with one stream on Youtube.

**Can I cheer on my team in chat?**
　　　　Go for it! Youtube streams will have chat available with moderators watching content. Cheer on your team, and keep comments positive and respectful to all participants, spectators, and volunteers!