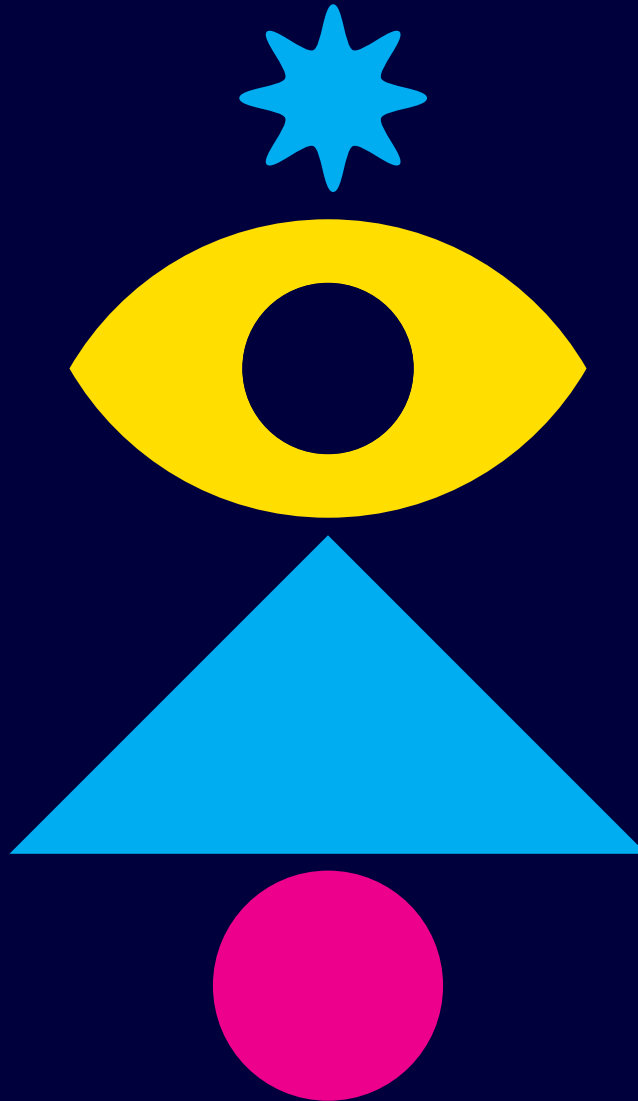# WRO UAE 2021
Online Competition Guide
Future Engineers Category

Welcome! We hope you are as excited as we are that you have been selected to participate in the UAE national event of the World Robot Olympiad 2021.

As this is the first time that WRO is online, teams are required to submit the video of their best run online in order to be eligible to compete in the international final. Please find below the competition rules and requirements:

COMPETITION RULES FOR 1 AND 2 OCTOBER 2021:

1. On WRO UAE website you will find the online randomization and a stopwatch tools to time your team's run.
2. You must use these and they must always be visible in the video during the matches.
3. You must record and submit two videos as per the below schedule (submissions after this deadline are not accepted and multiple submissions will lead to disqualification):

•   Video 1: Your qualifying match video at 2:00 pm on 1 October
•   Video 2: Your final match video at 11:00 am on 2 October

TECHNICAL VIDEO SPECIFICATIONS:

1. Videos must be recorded in landscape mode (16:9).
2. Hold the phone camera still or use a tripod for image stability.
3. Conduct a sound check to make sure your voice is loud and clear.
4. Check the lighting to ensure all elements are clearly visible.
5. Use regular / automatic video speed (i.e. do not increase or lower the video speed).
6. Videos cannot be edited (edited videos will automatically be disqualified).
7. During the robot run, the camera must have a full view of the table and all elements.

VIDEO RECORDING RULES:

1. All team members must be featured / shown in the video.
2. No coaches or parents can be featured / shown in the video.
3. Prior to commencing your recording, position your robot in the designated start area on your table.
4. Team members are not allowed to touch the table, elements or robot at any point during the robot run.
5. You can only stop the robot at the end of your run.
6. Once the robot has stopped it must remain on the table in the position it stopped in and must not be picked up or touched.
7. The camera may then be panned over the table if necessary.

MANDATORY VIDEO RECORDING ELEMENTS / SEQUENCE:

1. All team members must introduce themselves at the start of recording.
2. Hold up an A4 sign with every team member's name and the competition category you are participating in.
3. Explain your program and design features.
4. The total introduction should be no longer than three (3) minutes.
5. One team member must count down "3, 2, 1, GO". On "GO" other team members must start the robot's program and the online randomization and stopwatch.
6. The robot running time cannot exceed three minutes in each match.
7. Video 1 – your qualifying match video: The racetrack cannot feature any traffic signs. The entire video (with introduction) cannot exceed six minutes, whereby the racetrack sequence shall not exceed three minutes.
8. Video 2 – your final match video: Ensure the red and green pillars are set-up on the racetrack. The entire video (with introduction) cannot exceed six minutes, whereby the racetrack sequence shall not exceed three minutes.

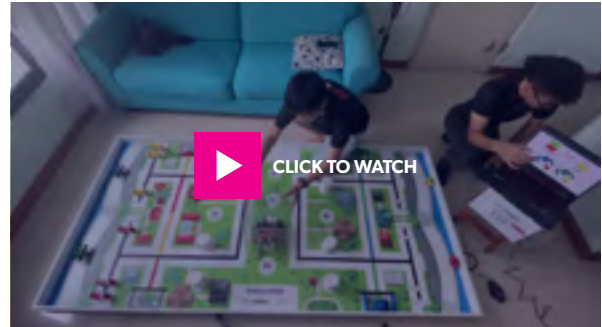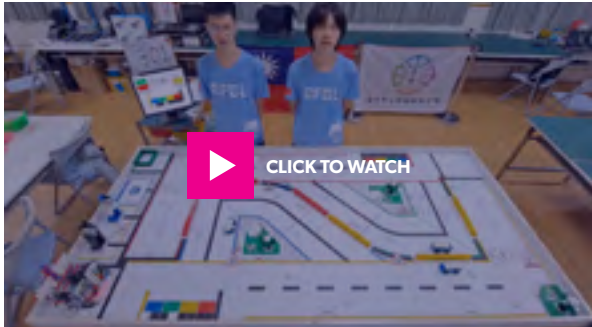
GENERAL SUBMISSION REQUIREMENTS:

1. One official team photo with all team members.
2. One funny photo with all team members.
3. Six photos of the vehicle covering all of its sides (i.e. every side, top and bottom).
4. YouTube URL showing the vehicle driving autonomously for at least 30 seconds.
5. A schematic diagram (in either JPEG, PNG or PDF) of the electromechanical components illustrating all electronic components and motors and how they connect to each other.
6. Link to a GitHub public repository with the code for all components, which were programmed to participate in the competition. The repository may also include the files for models used by 3D printers, laser cutting machines and CNC machines to produce the vehicle elements. The history of commits should contain at least 3 commits:

- Commit 1: Not later than 2 months before the competition and must contain not less than 1/5 of the final amount of the code.
- Commit 2: Not later than 1 month before the competition.
- Commit 3: Not later than 1 day before the competition.

The repository must contain a README.md file with a short description in English (not less than 5000 characters) of the designed solution. The goal of the description is to clarify which modules the code consists of, how they are related to the electromechanical components of the vehicle, and what is the process to build/compile/upload the code to the vehicle's controllers.

VIDEO SUBMISSION REQUIREMENTS:

1. Provide a possible score for the submitted run.
2. Upload your video to YouTube as an "unlisted video". Follow this link for a tutorial on how to do this.

If you have any problems with the video presentation, please refer to the sample video:

REASONS FOR DISQUALIFICATION:

1. The robot is being controlled remotely and is not autonomous.
2. A team member touches the table, robot or elements on the table, before, during or after the run.
3. The video has been edited.
4. The timer has been tampered with or edited.
5. The video was submitted after the deadline.
6. A team submits multiple videos.

Kindly be informed that the judge's decision on scores is final.

ONE TEAM. ONE ROBOT. LIMITLESS POSSIBILITIES.
WE LOOK FORWARD TO YOUR CREATIONS!