# **2021 World GreenMech Contest Regulations**

### 1 Contest Purpose

The World Forum for GreenMech Promotion has been hosting the GreenMech tournament in Taiwan since 2006, and the World tournament since 2012. Previously, contestants would visit from all over the world to participate. Due to potential health issues arising from international travel, the contest organizers will place safety first and postpone the in-person events. Because creativity, engineering, and the mutual exchange of ideas are at the core of our identity, as an alternative we will provide learners with a new opportunity. The Virtual World GreenMech Challenge. We hope that all interested students will be able to continue their social and personal development without interruption, and invite all creative learners to join us for the 2022 World GreenMech Contest!

1.1 GreenMech Jr. Contest (Jr. Science and Jr. Programmer) contestants are young and may have difficulty with video production. Contest organizers will not host GreenMech Jr. virtual contest this year.

	2021 Virtual World GreenMech Contest		
	GreenMech	R4M	Remarks
Participant Selection	Full time students in grades 1-12, split into three categories: elementary, junior high school, senior high school.	Full time students in grades 1-12, split into three categories: elementary, junior high school, senior high school.	Contestants that prepared for the contest in one school year (e.g., Grade 3), and then moved into a different school year (Grade 4) can choose to use the school or grade they were in when they registered on June 7 <sup>th</sup> 2021. Students doing this will require the approval of the school and must notify them of their participation.
Team Size	3 to 4 people	3 to 4 people	
No. of Instructors	1 to 3 people	1 to 3 people	The instructor can be a teacher or parent.

### 2 Summary of Events

### 2.1 Event Schedule

	Online Registration	Video Submission	Score & Award
	Date	Deadline	Announcements
2021 Virtual World GreenMech Contest (Video Contest)	10/11/2021 (Mon) 10/15/2021 (Fri)	10/18/2021 (Mon.) 11/15/2021 (Mon.)	12/15/2021 (Mon)

### **3** Notes for Applicants

### 3.1 Registration Information

Registration for the Virtual World GreenMech Contest must be completed within the time limits specified by online registration, there will be no flexibility in this regard

(https://www.worldgreenmech.com/en/eng\_index.asp)

3.2 Contest Video File Submission

Teams must submit their contest video by uploading it to a cloud service and providing a link for the organizer to download it. The link must allow downloads and not be "view only". The link should be submitted to this online form: <u>https://forms.gle/HVHq8k8zyNg4rzjZ8</u>

The video should use the following file naming system:

2021\_Country/Region\_ Contest Name\_Group\_School Name\_Team Name

e.g.,2021\_Taiwan\_GM\_elementary school\_Taichung Harry Potter elementary school\_Superman.

The submission period for video links is  $(10/18/2021 \sim 11/15/2021)$ .

3.3 Registration Fee: Free registration fee for this Virtual contest.

3.4 Awards

Position	Prizes	Score Interval
First Class Honors	<ol> <li>Award certificates for contestants and team leaders.</li> <li>One product prize for each contestant.</li> </ol>	more than 95 points
Second Class Honors	<ol> <li>Award certificates for contestants and team leaders.</li> <li>One product prize for each contestant.</li> </ol>	90 to 94 points
Third Class Honors	<ol> <li>Award certificates for contestants and team leaders.</li> <li>One product prize for each contestant.</li> </ol>	85 to 89 points
Honorable Award	Award certificates for contestants and team leaders.	84 to 80 points
Judges' Award	Award certificates for contestants and team leaders.	79 to 70 points

3.5 If the team does not meet the criteria for an award, the award will not be granted.

### 3.6 Competition Certificates

Due to the addition of Judges' awards, team leaders will be able to download the instructor's certificates. Student participation certificates are no longer issued.

### 4 The GreenMech (GM) Contest

### 4.1 Video Content

The video contest follows the 2021 GM contest regulations, which contains 7 general levels, 2green energy levels, and 1 specified task. The environmental settings must comply with all standard 2021 GM regulations.

4.1.1 Video Content Specifications

The total length of the video can be up to 6 minutes and must contain four parts. For more details see Section 4.2. For the movie script, please follow the GM script animation description below:(will announce URL on contest website later) movie format:1920 \* 1080 mp4.

4.2	Scoring
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Scoring	Standards	Weighting
Video Completeness	<ol> <li>The video must meet the specifications in Section (4.1.1).</li> <li>Video refinement.</li> <li>The clarity and completeness of the interpretive work.</li> <li>Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.</li> </ol>	40%
Scientific Principles	Introduce the scientific principle of each level with subtitles, as actions are completed in the video. Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.	
Green Energy Principles	<ol> <li>Introduce the Green Energy principle with subtitles, as actions are completed in the video. Green energy devices must successfully trigger the first action of the next device.</li> <li>Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.</li> </ol>	10%
Specified Tasks	<ol> <li>Introduce the operation of specified tasks with subtitles, as actions are completed in the video.</li> <li>Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.</li> </ol>	16%
Creativity	<ol> <li>Introduce and describe the creative level and specified tasks in Chinese or English.</li> <li>Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.</li> </ol>	20%

### 4.2.1 Grading Method:

Five judges are required to form a panel of judges. In order to ensure fairness in the video contest, the highest and lowest points of the evaluation will not be used. The remaining three scores are averaged to determine the final score.

4.2.2 Note: If the team's projects are too similar, it will affect their creative scores.

### 5 Robot for Mission (R4M)

### 5.1 Video Content

The video contest follows the 2021 R4M contest regulations, therefore all the projects must comply with the standard 2021 R4M regulations.

### 5.1.1 Video Content Specifications

The total length of the video is up to 6 minutes, which must contain four parts. For a detailed description of video specifications, please refer to Section 5.2. movie format:1920 \* 1080 mp4.

Scoring	Standards	Weighting
The overall task clearance process	<ol> <li>First part of the video is up to 3 minutes, and the content must include the actual situation of the three Robots A, B, and C as they complete their tasks.</li> <li>Grading: team cooperation, mission results, and operational fluency.</li> <li>Teams must explain how they completed the task(s) in the video. Teams may use Chinese or English.</li> <li>Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.</li> </ol>	40%
The operation situation of Robot A	<ol> <li>The second part of the video is up to 1 minute, and shows Robot A as it completes the task(s).</li> <li>Grading: Robot A structure, number of motors, the operating condition of the device, number of tasks accomplished.</li> <li>Teams must explain how Robot A operates in the video. Teams may use Chinese or English.</li> <li>Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.</li> </ol>	20%
The operation situation of Robot B	<ol> <li>The third part of the video is up to 1 minute, and shows Robot B as it completes the task(s).</li> <li>Grading: Robot B structure, number of motors, the operating condition of the device, number of tasks accomplished.</li> <li>Teams must explain how Robot B operates in the video</li> </ol>	
The operationThe operationThe operationsituation of Robot CRobot C3.Teams must explain how Robot C operates in the video. Teams may use Chinese or English.4.Subtitles should follow the specifications in Section 7.1, and may be in Chinese or English.		20%

### 5.2.1 Grading Method:

Five judges are required to form a panel of judges. In order to ensure fairness in the video contest, the highest and lowest points of the evaluation will not be used. The remaining three scores are averaged to determine the final score.

5.2.2 Note: If the team's projects are too similar, it will affect their creative scores.

#### 6 Legal Matters

#### 6.1 Intellectual Property Rights

During the online registration, team leaders must sign to confirm the contestants' original production statement and to ensure their works do not infringe on known patent or intellectual property rights of others. If the contestants need to use another person's IPR, they must submit a letter of authorization from the copyright owner at the time of registration to prove legitimate use.

#### 6.2 Organizer's IPR

All competing teams shall grant their project's IPR to the Organizer, who for the need of publicity, is entitled to revision, photography, publishing, book-compilation, exhibition, production, and plate display of the created works, with no objection from the winners. In case the Organizer needs to carry out derivative designs of the award-winning work, the winners should cooperate in supplying pictures and documents.

## 7 Appendix

Language	Standard	Example
English	<ol> <li>Requires correct punctuation.</li> <li>No more than 37 characters per line (including punctuation marks and spaces).</li> <li>No more than two lines per screen</li> <li>Font size:12</li> </ol>	<ol> <li>After my break-up with Suzy, (28 characters).</li> <li>I just couldn't fall asleep anymore. (36 characters)</li> </ol>
Chinese	<ol> <li>Does not require punctuation marks, except for exclamation marks, question marks and other special meaning symbols.</li> <li>Each line must not exceed 16 characters (including punctuation marks and spaces).</li> <li>No more than one line per screen.</li> <li>Font size: 12</li> </ol>	<ol> <li>今天要跟大家介紹我們的最新作品 (15 個字元)</li> </ol>

## 7.1 Video Subtitle Specification