**iROC**

| Creative Movies | Division | Team | How to Create |
|---|---|---|---|
| | Junior L / H | 1-3 people, teams | On-site production |
| | Senior L/ H | | |

# 1. Description

It is an event that utilizes robots to create original multimedia works using video to show characteristics that meet the given theme. The event evaluates participants' planning, image literacy, and creative thinking by designing, manufacturing, and expressing robots according to the theme, and aims to achieve holistic education, which is the goal of science and art convergence education.

| Sectors | |
|---|---|
| **Elementary** L (Grades 1-3) | Junior Low |
| **Elementary** H (Grades 4-6) | Junior Low |
| **Middle School** | **Senior Low** |
| **High School** | **Senior High** |

# 2. Robot

**2.1 Robot type:** Unlimited

**2.2 The robot's construction:** All parts of the robot, whether hardware or software, must be built on site.

**2.3 Robot Power:** Autonomous mobility with an independent power source and no combustion engines.

**2.4 Robot Actuation:** The video should show the robot actuation scene in line with the purpose of the proposal.

  **2.4.1** Examples that don't fit

1) You've created a walking robot, but the robot doesn't appear to be walking.
2) There are no scenes of a laundry robot performing laundry-related functions or behaviors.
3) The rock climbing robot doesn't show a scene of the robot climbing a rock wall.

## 3. Stadiums

**3.1** There is no separate playing field, but each team is provided with a table measuring 900 mm x 600 mm (L x W). (Table size may vary depending on venue availability)

**3.2 Space utilization:** Able to utilize the space around the table without disturbing other teams.

## 4. Shooting and editing tools

**4.1 Props**

    **4.1.1 Structures:** Background structures (within the size of the arena) and various props.

    **4.1.2 Manufacture:** Unlimited

**4.2 Shooting Tools**

    **4.2.1 Configuration:** video-ready camera, lights, camera support, etc.

    **4.2.2 Camera:** Unlimited

        **4.2.2.1** If you are using your smartphone as a camera, the SIM must be removed or will be disqualified for using your phone for any reason.

        **4.2.2.2** The type and model of the camera should be specified in the production plan.

    **4.2.3 Editing Tools**

        **4.2.3.1 Composition:** PC (desktop or laptop, doesn't matter), software, background music

        **4.2.3.2 Software:** No manufacturer restrictions, but type must be specified in the brief

        **4.2.3.3 Background music:** Sound files for music and sound effects

## 5. Match

**5.1 Presentation of the theme:** The theme of the year will be announced on the website, and on the day of the competition, the participants will be given a problem corresponding to the theme, and they must choose one of them and produce a production plan and video at the competition venue.

**5.2 Mission Opening:** Game day public
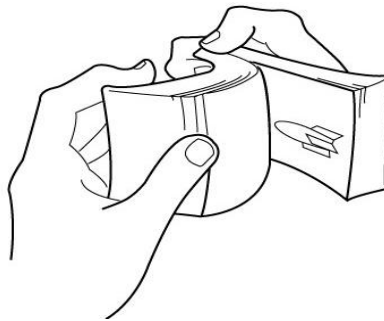
**5.3 Video production**

    **5.3.1 Create a video** You should create a video according to the production plan using your own materials.

    **5.3.2 Shooting conditions** The featured element must be three-dimensional.

        **5.3.2.1** Examples that don't fit

        **1)** No cell animation concepts like flipbooks, stop motion, etc.

        **2)** Can't list photos and text in a slideshow fashion

**\<Figure 1\> Example of not fitting - flip book**

    **5.3.3 Production time:** Teams will be given a maximum of 5 hours. Teams are free to spend as much or as little time as they like planning, creating, and editing within the time limit. If the limited competition time is exceeded, 10% of the total score will be deducted for every 5 minutes of overtime, and if the overtime is more than 30 minutes, the submission will be invalidated.

    **5.3.4 Marker Appearance:** At the start of the competition, a unique marker specific to the competition will be issued to prove that the video was created after the mission opening, and it must appear on all videos. Failure to do so will result in disqualification as pre-produced.

**5.4 Storyboard:** Fill out the storyboard provided by the organizer. (The storyboard should be at least 4 steps long).

**5.5  Participant Self-Interview Video:** Participant submit commentary on the intentions or highlights of the production, filmed on location and submitted after the production, limited to 60 seconds (1 minute).

**5.6 Video editing:** Edit shots, titles, subtitles, sound effects, and more for video effects.

**5.7** When quoting a video or photo, you must comply with the following

   **5.7.1**   You must acknowledge the original source within your entry.

   **5.7.2**   Contestants must indicate in their proposal the time at which the quoted passage begins and ends.

   **5.7.3**   Any photographs or videos that are quoted mustbe incidental in scope and the quoted material must not be the main content of the entry. The extent of the citation will be judged by the judges, not only in terms of the length of the video, but also in terms of the content, and if Sections 5.7.1 and 5.7.2 above are not addressed or the extent of the citation is deemed excessive, points may be deducted or the entry may be disqualified by agreement among the judges.

   **5.7.4**   Robots with no electrical equipent inserted can be used <2024.07.03 Revision> as a prop, but it will not be graded on the robot build.

**5.8** Submit The video saved on each team's USB memory and submitted to the Operations Center along with the Storyboard. (USB memory will be copied and returned.)

**5.9  Artwork specifications**

   **5.9.1**   **Time:** No less than 30 seconds and no more than 120 seconds (2 minutes) (10% of the judge's total score will be deducted for non-compliance)

   **5.9.2**   **Size:** 600 MB or less (10% of judges' total points deducted for non-compliance)

   **5.9.3**   **Resolution:** 1280x720 or higher (non-compliance will result in a 10% deduction of the judges' total score)

   **5.9.4**   **File types:** AVI, WMV, MOV, MP4 (other formats are not accepted.)

# 6. Judging methodology and ranking decisions

**6.1 . Judging method:** The total score of this judging criteria will be compared to the total score of this judging criteria to determine the ranking.

| Separation | Detailed Criteria | Topic fit | Scorecard |
|---|---|---|---|
| Design(30) | Problem Solving (20) | | 4/8/12/16/20 |
| | Storyboards (10) | | 2/4/6/8/10 |
| Creativity (50) | Robotics Creativity(30) | O/X | 5/10/15/20/25/30 |
| | Story creativity (20) | | 4/8/12/16/20 |
| Visuals(20) | Completeness(10) | | 2/4/6/8/10 |
| | Using Video, Sound effect(10) | | 2/4/6/8/10 |

**6.2 Tiebreaker criteria:** In the event of a tie, prioritize in the following order

1) Rank 1: No penalties

2) Rannk 2: Higher Completness

3) Rank 3: Hiver Robotics Creativity

4) If there is still a tie after the three steps above, the tie will be recognized.