ARDUINO CREATIVITY

GENERAL DESCRIPTION

The ARDUINO Creativity category consists of the creation of a prototype that completely performs the actions and/or functions previously described by the qualifying jury, during the day of the competition.

The challenge will be established by the jury on the day of the competition and will be socialized to all participating teams.

CONTEST RULES

1. The robot must only be built from an ARDUINO controller module of any model, additionally, it can use any type of electronic and/or mechanical component to meet the challenge; commercial robots or robots built based on development kits of any kind (examples: LEGO, mbot, roboblogs, pololu, etc.) will not be allowed to participate. In case of any doubt, please contact the Organizing Committee.
2. All prototypes must be autonomous at the time of presentation. Any control mechanism can be used, as long as all components are contained within the prototype and it does not interact with any external control system, otherwise it will be eliminated from the competition.
3. The prototype must meet all specifications stated by the jury.

CHARACTERISTICS OF THE WORK AREA

The competition area comprises the open space provided by the organization for the development of the competition.

DEVELOPMENT OF THE COMPETITION

During the development of the competition, the participating teams must consider the following aspects that will be respected without exception, otherwise they will be eliminated:

1. The ARDUINO Creativity category consists of creating a prototype on the day of the competition, during the competition hours, which performs actions and/or functions previously described by the qualifying jury.
2. The challenge will be established by the qualifying jury on the day of the competition and will be socialized to all participating teams.
3. The competition will be held on a single day and participants must be present 15 minutes before the competition to check the work kit. In case the organizers or the jury find materials or equipment not allowed for the competition, they will have the power to ask the participants

not to enter the competition area.

4. The prototype will be built only and exclusively in the working area and during the time given by the qualifying jury: the structure and control of the prototype will be made with materials and parts allowed in the rules of the competition. Teams must bring at least one laptop computer for the development of the competition. Each team must bring the tools and materials necessary for the development of the competition.

5. The prototype must not perform obscene actions or functions that violate morality.

6. The programming of the prototype can only be done with the ARDUINO IDE program. The use of another programming language such as Java, Python, etc. is prohibited.

7. There must always be at least two participants in the work area. It is recommended to take turns in case someone wants to leave the work area and, if that is the case, they must return to the work area within a maximum of five minutes. If the jury observes that this is not done, the team will receive a warning and the respective score will be reduced.

8. Only the participants will be allowed to enter the work area established for the competition. If any person from outside the team is caught talking to the participants without prior authorization from the jury, the team involved will be reprimanded and the respective score will be reduced.

EVALUATION

Once the time established for the competition has expired, the participating team will have to present its prototype to the qualifying jury for its respective review. The jury will verify that all the groups are present and if there are any missing, a new call will be made. If after five minutes any of the teams is not present, it will be eliminated.

1. During the review phase, participants may not touch their prototypes or invade the designated area. If this occurs, the team will receive a warning.

2. The performance of the prototypes will be evaluated by the qualifying jury in view and presence of all the teams.

3. These scores will be taken individually by each of the judges and then averaged. The aspects considered for the qualification of this category are shown in Table 1:

ASPECTS	SCORE
1. Ability and performance of the prototype	35
2. Creativity, originality, and aesthetics	30
3. Performance of the team in the work area	10
4. Presentation before the judges	15
5. Documentation (report)	10
6. Warnings	-5

TABLE 1

4. Regarding the team's performance within the work area, participants must be ready to answer two questions that will be asked during the course of the competition by the qualifying jury.

5. Of the averages obtained, the three highest will be taken into account for the designation of the winners. The winning project, as well as the second and third places, will be announced at the closing ceremony of the event.

6. In the event of a tie between teams, the team with the highest score will be taken into account according to the order presented in Table 1.

7. It will be considered as a sanction and, therefore, the qualifying jury will proceed to disqualify the team and penalize in the general score in the following cases:

    a. Disrespect to any member of the jury, the organization, or a member of any team.

    b. Attempting to circumvent the rules by using equipment, tools, or electronic cards other than those indicated in the contest rules.

JURY

I.   The figure of the judge is important in the competition, the judge will oversee that the rules and norms established by the organizing committee are complied with.

II. The judges for this competition will be appointed by the organizing committee.

III. Participants may present their objections to the judge in charge of the category before the end of the competition.

IV. In case of doubt in the application of the rules, the judge will always have the last word.

V.   In case of controversy with the decision of the judge or judges, a written objection may be submitted to the Council of Judges, once the competition is over, the arguments presented will be evaluated and a decision will be made. This decision is final.