TECHNOLOGICAL IMPACT

GENERAL DESCRIPTION

This category is aimed at people up to 17 years of age. It consists of developing a project of social, industrial, ecological, health benefit, etc., with robotics as the main tool.

THEMATIC

1. Medicine
2. Environment
3. Science fiction
4. Learning focused on Robotics
5. Humanoid Robotics
6. Industrial Robotics
7. Aerial Robotics
8. Space Robotics
9. Robotic Surgery
10. Robotics with LEGOS
11. Others

TECHNICAL CHARACTERISTICS OF THE ROBOT

a) Any type of robot can be included in the competition.

b) The robot will have to implement a solution to one or several problems listed in the thematic section.

c) There are no limitations in terms of measurements and weight.

d) The design must belong to the team. It is forbidden to make copies, partial or total reproductions of already existing projects in the field of research or industry.

HOMOLOGATION

Deliver a technical report with robot data with the advances and innovation that allow it participate in this category.

The format is regulatory and must be followed as shown in Annex 1.

COMPETITION DEVELOPMENT

The robots will be scored by multiple judges. Each one will provide a score on a 60-point scale.

The scores will be added and averaged.

EVALUATION

The following characteristics will be evaluated:

1. **Originality:** refers to the level of innovation achieved with the prototype (10 pts.)
2. **Functionality:** if it fulfills its function satisfactorily and solves the problem in the most satisfactory way possible (10 pts.)
3. **Aesthetics:** refers to the presentation of your product (10 pts.)
4. **Application of the robot**: provides a solution to one or several problems that are listed in the thematic part or others (10 pts.)
5. **Exhibition:** students must present the project in a clear way and answer questions from the jury. (10 pts.)
6. **Technical report:** document with the established format in annex 1. (10 pts.)

The winners of the competition will be positioned according to the highest score obtained.

JUDGES

i. The role of the judge is important in the competition; he will be in charge of complying with the rules and regulations established by the organizing committee.

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

iii. Contestants 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 norms, the judge will make the final decision.

v. In the event of a controversy about the decision of the judge or judges, a written disagreement can be sent to the Council of Judges. Once the competition is over, the arguments presented will be evaluated and a decision will be made in this regard. This is a final decision.

ANNEX 1

This format must be delivered in an electronic file during the Homologation.

The format must be PDF.

The amount of sheets must be as many as required.

The data must be filled in Times New Roman font, size 12 points.

A. **ROBOT OR PROJECT NAME: Write it down here.**

B. **Team name**:

C. Captain´s name:

D. Team members: (Captain´s name included)

No.	Surname	Second Surname	First name

E. Name of the Institution or Organization:

F. Address of the Institution or Organization:

G. **CATEGORY IN WHICH YOU PARTICIPATE:**

H. Team captain e-mail:

I. **Technical summary**

- a. Introduction
- b. Objective
- c. Development
- d. Specifications:
  - i. Included materials:
  - ii. Electronics design:
  - iii. Type of programming language applied:
  - iv. Used manufacturing
  - v. Description of mechanical systems

e. Expected results
f. Technological impact of the project
g. Conclusions
h. Recommendations
i. Annexes
j. Bibliographic references (APA format, latest edition)