EDU ROBOTICS CUP

Project Challenge General Rules 2023

1.0 v – 15/10/2023

EDU ROBOTICS CUP

organized by

EDUTUS UNIVERSITY

1. THEME

Main theme of the 2023 Edu Robotics Cup is: Sustainability

Have you ever heard of the term Earth Overshoot Day?
The fact itself that such a term exist is a sad thing. It refers to the very bothering idea that humanity year by year consumes more of the ecological resources and services of the Earth than it can generate. In 2023 it falls as early as 2nd of August. If you look country by country this date in many cases fall even lot earlier in the year. For how long this can be sustained? It is crucial for the mankind and everybody on its own personal level to stop and reverse the trend of using more than what we have.

Do you think You can have an impact on the future of mankind?
Be a hero! Save the Earth and save humanity with your ideas, your solutions, your inventions!

Look for examples of overusing Earth's resources in your own environment, in your own village or city, in your family or in the communities you are part of. Can you make a change with your ideas?
Do you think robotic based solutions can bring relief?
"Think Global, act local!" Or we just as well say, "Think big, but act small!"

Some topics you might want to look at closer, but remember these are just ideas, you are free to explore and offer solutions for any relevant topic related to sustainability:

#agriculture   #foodproduction
#packaging   #publicservices
#transportation   #travelling

2. APPROVED MATERIALS

The project presented by the teams must contain at least one robotic solution, beyond that the teams can use any material to present their idea.

Important!
Keep the idea of sustainability in mind when selecting materials and designing the project!
Take cost efficiency into consideration at any time!

**For the robotic solution the teams are free to use any micro-controllers and building platforms!
Teams can use any software and an unlimited number of controllers, motors, sensors to present their project!**

3. THE PROJECT

3.1.

Teams have to submit and present their projects in the following formats:

- written documentation of the project, presentation video of the project, live interview with a team of judges

Judges will consider all three when they determine the team's final score.

3.2.

Written documentation

Teams have to submit a written documentation of their project in which they present their project including the followings:

- how the team picked their sub-team and the problem they have a solution for, how the project relates to the official main theme,
- how the project relates to digitalization and robotics,
- what research methods they used and what results they got, what is the exact problem and solution,
- how their solution can be put to use in a wider environment.

The text of the Written documentation should be at least 2 - 3 and maximum 6 A/4 pages long, including pictures, tables, etc. It is possible to include pictures as well in the documentation, but that should not be the focus.

Length: **2-6 pages**   Format: **PDF**   Language: **English**

Deadline to upload the first draft of the Written Documentation:
4th December 2023 (23:59:59 CET)
Deadline to upload the final version of the Written Documentation:
14th December 2023 (23:59:59 CET)

3.3. Presentation video

Teams have to upload a video in which they present their project. Teams have to build a presentation area with the aim of presenting the project. The dimensions of the presentation area is not limited in any way. Judges will base the scoring on the how the presentation area fits the theme, the sub-theme, how creative the team was designing it and if it helps the understanding of the project. The all team members have to appear somehow in the video. For better understanding an English language subtitle is required and teams have to make sure to record the video in the best possible quality. if needed you can ask someone to do the recording for you so that all of you can be on the footage or you can use a camera stand as well. If needed you can record the presentation many times and pick the best one to show us. Before you submit it please check the video to see that the sound is audible, visuals are not blurred, the video is not shaking etc. The video can be edited as you wish but make sure that the project stays in focus and not the movie effects sell it.

Length: **maximum 2 minutes**   Format: **avi, mp4, wmv**

Minimum resolution: **1920 x 1080 (FHD)**   Orientation: **horizontal (landscape)**   Language: **English**

Deadline to upload Presentation Video:
14th December 2023 (23:59:59 CET)

3.4. Online interview

Each team will have one online interview with a team of judges. The exact date and time of the interview will be communicated to teams in due time. At the interview teams are not required to repeat what they have recorded in their uploaded video because judges have already seen that footage. It is an interactive discussion between the team and the judges about the project. It is not required for the whole team to be at the same location but we want all team members to participate and join the online session. Coaches are also welcome to join the team.

4. COMPETITION FORMAT

4.1.

This category is announced for **two age groups**: **Kids** (10-14 year old) and **Teens** (15-19 year old)

4.2.

Official language of the competition: **ENGLISH**

4.3.

Important dates are:

Deadline for **registration**: 1st December 2023 (23:59:59 CET)

Deadline to **upload the first draft of the Written Documentation**: 4th December 2023 (23:59:59 CET)

Deadline to **upload the final version of the Written Documentation and Presentation Video**: 14th December 2023 (23:59:59 CET)

Online **interviews**: 16th – 19th December 2023 (according to schedule)

Results and closing ceremony: 21st December 2023

4.4.

After registration starts teams will be provided examples of a good documentation and presentation video.

4.5.

Once the deadline is up (14th December 2023), submitted presentation videos will be available to watch freely by anyone on the official website.

4.6.

All requested files have to be uploaded on the competition platform by the coach after logging in.

5. SCORING

Criteria	Notes	Max. points
Research	The team conducted a research for their project. Methodology is similar to scientific researches in any way, results and conclusions are related to the project and make it better to understand.	10
Creativity	The team shows signs of a new approach to problems and solutions, thinking outside the box and finds unique ways of presenting their project.	20
Innovation and value	The team presents a solution or a prototype that is not an exact copy of those that can be already found on the market. It can of course be one that exists but with added value from the team.	10
Robotics	The software and hardware solutions used by the team in their project is complex, reliable and represent a high standard (within their age group expectations). Engineering concepts are efficient and solid.	20
Difficulty	The team chooses a sub-theme or problem that is complex and their answer to that is thorough and well designed. The presentation of the project includes all parts of the project and it is visible that the team put a lot of effort in creating it.	15
Aesthetics and presentation	The project presentation, documentation and video is clear, well designed and helps the understanding of the project. Visual elements are created with care and look nice.	10
Impact and sharing	The project has something to offer beyond the project as well and could make an ever bigger impact if further developed. The team also includes information on how they shared their project with others in their environment.	15
	Max. score	100

6. REGISTRATION AND PAYMENT

Maximum number of teams allowed in Project Challenge: 50 teams

So hurry up with the registration to secure your place among the participants of Edu Robotics Cup 2023!

Registrations are accepted in the order of fully completed registrations, that also includes the payment of registration fee. When number of maximum teams are reached we are closing registration even if the registration period is not expired yet.