

CHALLENGE: RECYCLE THE PAST AND BUILD YOUR FUTURE



(1)



(2)

The Electrotechnics and Automation Department of ISS Patetta offers students of the fourth and fifth year the possibility of taking part into a competition called "*Recycle the past and build your future*".

The aim of the competition is to:

- promote knowledge of automation and robotics
- enhance the integration and application of technologies to real projects;
- encourage the development of soft skills, such as the ability to share ideas and teamwork;
- highlight the importance of giving new life to materials through recycling.

Those who want to participate, in groups consisting of min 2 max 4 students, will have to conceive and design an anthropomorphic arm using the metal structure obtained from old disused table lamps (ref. photo 2 *).

The designed product must have a utility, or a real use in an industrial or social context.

To control the robotic arm you can use Arduino board or a PLC supplied to the automation laboratory. For handling, linear type electric actuators or electric motors (12 or 24 V) must be used. It will also be allowed to use relays or contactors, economic sensors and other materials chosen by the students as long as they are cheap or recycled.

A jury of skilled teachers will choose the 3 winning projects.

One or all the projects will be implemented and made operational starting from 7th January 2021.

Preliminary projects must be sent to the email gaetano.aliberti@patettacairo.edu.it by 31th December 2020.

They must be composed of a file containing the class and names of the students, title, description of the product and its intended use, the necessary material to make it and a rough drawing.

Good job!

(*) In the photo 1 our robots Roby One and Sunrase, solar powered automatic lawnmower built with recycled material.