



World Robot Olympiad 2019

Open Category

SMART CITIES

Theme for age groups

Elementary, Junior, Senior

Version: January 15th

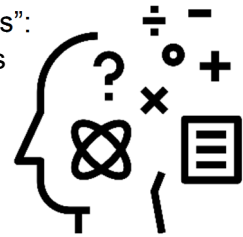


WRO International Premium Partners



INTRODUCTION

The future of cities is developed under the overall name of “Smart Cities”: new concepts, new ideas and new technologies that help building the cities of the future. Cities with more efficient processes, green energy and innovative concepts for all parts of our life. These developments will help save energy, make traffic safer and improve public transport systems. But they can also help the government to function better and can make the lives of people easier.



OPEN CATEGORY THEMES

Smart Governance

The base of a more intelligent and futuristic city is a system of modern government processes that are supported by modern technologies. Smart Governance is about using technology to facilitate and support better planning and decision making. It is about greater efficiency, community leadership, mobile working, and continuous improvement through innovation. It includes e-government, the efficiency agenda, and mobile working.

Smart Workplace

Future workplaces like factories, offices and shops will most likely be very different from today. Computers and robots are already taking over a lot of repetitive tasks that were done by humans for a long time. The future of a modern workplace is about finding new ways of collaboration and communication and self-regulation in the 21st century. Smart Workplace is about policies, digital services, and incentives that help and support innovative and exciting new ideas for the workplace.

Smart Education

Education is also changing rapidly. Some of the things children need to learn to be able to participate successfully in modern society are very different than in the past. But the way we learn and the tools we use for learning are also changing. There is a need for ideas that empower students and engage them in education and society. Smart Education is about creating optimal education environments in schools, universities and other education centers.

THE CHALLENGE

For the WRO Open Category in 2019, teams are asked to come up with innovative ideas for the areas of governance (1), the workplace (2) and education (3) in which robots play a role.

Teams may choose one of the three areas (1-3) to work on, but they can also choose to work on a project that focusses on multiple areas. For example, the interaction between new governance ideas and the workplace of the future.