



OneWorld Robotics Competition 2019 – Area Competition

OneWorld Robotics Competition – Smart Cities with Autonomous Vehicles

This year, Actura will be staging its inaugural *OneWorld Robotics Competition*, with “Smart Cities” as its solution category. The aim of the competition is to explore the students’ resourcefulness in finding solutions to real-world problems with the help of robotic technology, while encouraging critical thinking, problem solving, teamwork, effective communication and agility and adaptability. Participation will broaden the acquired STEAM-related skills and deepen the critical approach to problem solving, stimulate curiosity and encourage a design-thinking approach.

Students will be able to utilise robots as an integral part of a solution to a real-world problem while allowing for the comparative evaluation of different approaches. The contest will foster collaboration and teamwork between team members as well as other external teams. “One student, one robot, one world” is the motto that in essence strives to create a network of cooperation in the development of learning STEAM skills. It also awards each and every student with an opportunity to master the robotic concepts, apply transferable skills to a wider context, create ideas and finally, become valuable members of future societies.

The adjudication will be carried out by a panel of industry experts and educators. Students will consider the issues surrounding the problems associated with smart cities such as transport congestion, pollution, environmental sustainability and over-crowding. Students will also consider the relevant social, ethical and legal issues surrounding environmental impact, regulating traffic, accident management and control and consequent privacy and cybersecurity risks, in conjunction with their application of robotics techniques to arrive at a solution. The adjudication process will focus on the critical thinking process and not just the technical application of robotics in assessing what the students finally present.

Actura

Actura provides the leading STEAM learning solutions spanning from in-class to out-of-class environments. Our FlipRobot range provides the ultimate robotic STEAM learning solution for the in-class environment. For the out-of-class solution, the CASE Space School International Study program aims to deliver the once in a lifetime, best STEAM experience at the most inspiring organisation, NASA.

CASE

California Association for STEAM Education (CASE) is a non-for-profit STEAM education organisation based in Cupertino California USA. It aims to design and deliver the most inspiring and innovative STEAM based educational programs where students will acquire and master critical transferable skills for their future success.

Volunteer Coordinator

The Volunteer Coordinator for the OneWorld Robotics Competition oversees all volunteer staff. Provides direction, assistance, and information to event volunteers and attendees.

Responsibilities

- Work with the Volunteer Welcome Table Attendant and other Volunteer staff to deliver the OneWorld Robotics Competition
- Help with set-up of the registration area
- Greet and check in volunteers as they arrive at the event
- Gather all completed necessary paper forms from volunteers
- Monitor and enforce Actura policies for minimum age requirement and other volunteers
- Distribute name badges, t-shirts, volunteer year of service pins, and alumni recognition patches
- Ensure that all Volunteers check in daily before commencing duties (early morning)
- If necessary, for registration and check in process, learn required system and computer use
- Break down registration table and applicable equipment at the close of the event
- Experience and Skills Needed

OneWorld experience not required

- An understanding of office and internet technology, and the ability to utilize them
- Self-directed individual
- Strong interpersonal, communication, and leadership skills
- Ability to collaborate with others
- Strong assessment skills
- Volunteer Time Commitment

2-day commitment (Area Competition)

Note: Event schedules vary. Please check the event schedule and talk to your Volunteer Coordinator for detailed information on when you are expected to arrive. Volunteers should arrive on site 15-20 minutes prior to the start of every shift to allow time to check in at the Volunteer Registration table.

Training

Training is provided by Actura staff at the event. Training may include: PowerPoint presentation, Manual or Handbook, teleconference(s), email communications and other support materials.

Reporting Relationships and Supervision

Direct supervision: Actura staff

Disclaimer and further information

- Must sign a Conflict of Interest and Disclosure Statement prior to start of service
- have a valid Working with Children number