WorldSkills Singapore 2012

Scope of Competition

MOBILE ROBOTICS

Entry Requirements

- Possess technical skills and knowledge in typical icon-based programming interface on Windows operating system and assembly and integration of mechanical (e.g., handling units) and electrical components (e.g., sensors) typical to a mobile robotic system.

- All teams are required to bring their own competition mobile robot, Robotino®, and all the necessary parts for the competition.

Competition Format

Competitors will be required to program and configure the competition robot to perform various tasks. The scope includes:

- Analyse and carry out a given task
- Carry out mobile robot system design
- Disassemble and assemble a mobile robot
- Design/Fabricate add-on component(s) [eg. gripper, kicker]
- Design a mobile robot control program
- Integrate external sensors, controllers, actuators and attachments to the mobile robot
- Test and troubleshoot problems
- Interpret manufacturer's technical documents

Time Allocated: 18 – 22 hours