Robot

Robot can be made of any non-hazardous hardware components.

Recommended overall dimensions of the robot: 350x400x400 mm (height x length x width).

The robot must be wireless, with a power supply on board.

Use ofthe IR remote control is PROHIBITED.

During the event it is FORBIDDEN to harm other participants ofthe competition (communication interference, dangerous structures).

How to take part

Look into competition schedule on RTC Cup official website.

Pick a suitable competition and register your team. Usually registration opens a month before competition.

Pass the preliminary selection based on the submitted materials: photo, video and description of the robot. Selection conditions for all competitions are different. Some of the competitions are held without selection.

Competitions for young engineers, students and schoolchildren who create robotic systems for working in extreme conditions

Competition Schedule

The schedule can be found on RTC Cup official website.
In 2020, the International and National stages of the RTK Cup robotic competition are held.

Competition Organizer

The Russian State Scientific Center for Robotics and Technical Cybernetics (RTC)

Competitions are held under the State assignment of Ministry of Science and Higher Education of the Russian Federation dated April 29, 2021 No. 075-00913-21-01

www.rtc.ru

RTC CUP: Final

ROBOTICS COMPETITION

NATIONAL STAGE

December, 08-09, 2021, Sochi

2 attempts, for 10 min each

Can your robot complete the route ?

- *autonomously complete tasks*
- *overcome obstacles*

WELCOME RTC FINALISTS !

cup.rtc.ru vk.com/rtccup cup@rtc.ru

RTC Cup Competitions are carried out in 2 stages

"SCOUT" category

7-14

The operator can observe the actions of the robot. 2 robots from different teams can pass the test site at the same time.

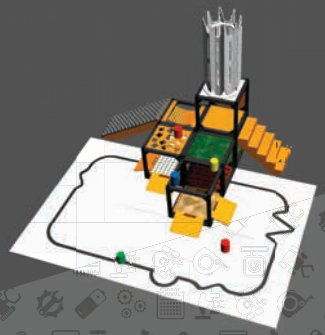
"EXTREME" category

7+

The robot is out ofsight ofthe operator, control is carried out using the robot's video vision. There is one robot at the test site.

RTC CUP Mini Competition

Reduced version of the RTK Cup polygon is intended for competition RTK CupMini. This competition for junior participants that are recently started to study robotics (from 7 to 14 years old).



7-14

"SCOUT Mini" category

Test Site

Trials

Each pass trial is a simulation of polygonal terrain or emergency situations. Test cells can be placed in any order, which allows you to create unique tracks for the passage of robots.

Tasks

The list of tasks for robots to perform includes various interactions with objects on the polygon: moving objects, turning valves, pressing buttons, opening doors, reading QR codes, moving along a line or along a wall, etc.

Tower Challenge

The Tower test visually resembles the RTC tower, which is the symbol of the institute. As with other challenges, the Tower may not be included in the polygon configuration at individual events. This element is a separate test, which involves the completion of certain tasks.

The structure of the "Tower" contains an elevator, which is set in motion by typing a code on the keypad. The elevator moves the robot to the top of the tower, from where the robot can make a Leap of Faith and earn extra points.