

Robotics Correspondence Competition

"Program your road to victory!"



Competition rules

1. Competition organizer

The competition is organized by the **ICE-R project team** in collaboration with partner schools and organizations supporting the teaching of programming and robotics in secondary schools.

2. Focus and goal

The competition is intended for **high school students** and consists of **four correspondence rounds** focused on working and programming with robots **mBot2**, which were provided to schools within the framework of the ICE-R project. The aim of the competition is to develop logical and algorithmic thinking, technical skills, teamwork and creativity in solving practical tasks with robots. Schools that are not involved in the ICE-R project can also apply if they have access to the robots **mBot2**.

3. Teams and coaches

- Team size is **limited to a maximum of 7 students**.
- The school can compete with more **than one team**.
- Every team has **one adult coach**, who is responsible for registration, communication with the organizers and organization of the team's work.
- The couch can be a teacher, parent, or other responsible adult.
- One couch can lead multiple teams.

Couches must **not actively help** solving tasks (e.g. programming or building a robot). He/she is only responsible for coordinating the team and adhering to the rules of fair play. Violation of this rule may lead to disqualification of the entire team.

4. Login and registration

- Registration is open from December 10, 2025 via the following website form <http://robocoop.sk/register>.
- Additional registration is also possible during the competition – teams can participate in any of 4 rounds. To be included in the overall results, you only need to solve at least one task.

For registration, the coach will send in the application:

- team name,
- school name,
- names of team members, and
- the coach full name, date of birth and a contact email address.

After processing the registration, the team will receive access data to the Google Classroom platform, where assignments will be published and solutions will be submitted.

5. Assignments and solutions

Assignments will be **partially open ended** to allow for creative approaches and different solutions. If the team is unable to solve the complete task, a partially functional solution will also be evaluated. Try to modify the task to be most suitable for you and make an acceptable simplification.

Submissions:

The complete solution must be in English language and must include:

1. **Solution description** – a brief description of the robot's function, the principle of the operation and any problems and difficulties the team overcame.
2. **Video** – demonstrating completion of the task (we recommend multiple attempts under different conditions).
3. **Photo documentation** – at least two photos from the work process (e.g. drawings, tests, construction details), at least one photo capturing the team together with the robot completing the task
4. **Program** – a complete program (screenshot or listing), in block or text form.

The best solutions (2–3 per round) will be published on the ICE-R project website so that other teams can be inspired and learn from successful solutions.

6. Allowed hardware and software

In order to maintain fair play, teams are allowed to use:

- only mBot2 robots (maximum 2 per team),
- extensions provided within the ICE-R project,
- commonly available tools and materials (e.g. wires, strings, screws, magnets, paper, cardboard, glue, etc.).

It is not allowed to add additional electronic peripherals (motors, sensors) to the robot that other teams do not have. Programming is possible in the mBlock (Blockly) environment or in Python.

7. Timetable and evaluation

Each round of the competition lasts one **month**.

- **At the beginning of each month** a new assignment will be posted in Google Classroom.
- Teams have **30 days to submit the solution**.
- After the deadline, the judges will evaluate the task, award the team with certain points and will provide the feedback.

At the end of the competition, the points from all rounds are summed up and thus determine the **overall team result**.

Skipping the round means only that the team will not receive points, but still can continue in the next rounds.

Your solutions will be evaluated by the **independent jury of 3 - 5 experts**. Each judge assigns 0–5 points according to the following criteria:

1. Completeness of the submission
(missing even 1 of 4 compulsory parts results in loss of one point)
2. Reliability and functionality of the solution
3. Creativity and technical processing
4. Quality of documentation (video, description, program)

The overall score is the average of points awarded by the judges. The team will also receive brief feedback for each solution. The jury decision is final and cannot be discussed.

The final event with the announcement of the results will take place at the end **of May 2026** in **Bratislava or Vienna**— the place will be determined according to the number of participating teams.

8. Bonus: AI consultant

Registered teams will optionally gain access to a special AI tool (chatbot) designed for consultations during task solving.

- Data entered into the chatbot is not public and is not used to train the AI.
- A chatbot can help with finding errors, suggesting solutions, or explaining principles, but not with providing ready-made answers.
- Please note, that this is an experimental tool, use it at your own risk.

The organizers welcome feedback and information about interesting or unexpected situations when using it.

Disclaimer: The organizer has absolutely no responsibility for the responses of the AI chatbot. Its use is entirely voluntary, and the coach may decide not to use it at all.

9. Personal data protection (GDPR)

- Videos and photos should preferably contain **just a robot and a working environment**, not persons.
- If there are people in the video or photos, the **team coach is responsible for approval** (or consent of the legal representative) with its publication on the ICE-R project website, social networks or in other promotional materials.
- By submitting solutions the team **agrees to their publication** on the project website and with their archiving **at least until year 2027**.
- In the event of a request to not publish or even to remove specific material, the team coach may contact the organizers.
- Coach's personal data will be used just for the purposes of communication during the competition and will not be shared with third bodies.

By participating in the competition, all participants agree to these rules.

10. Contact

Don't hesitate to contact us for any questions, ambiguities or comments.

 Email: richard.balogh@stuba.sk (competition coordinator)

Further information and updates will be continuously published on:

 <https://icerobotics.online/> (project website) and <http://robocoop.sk> (competition web)
