RoCoCo – Robotic Correspondence Competition

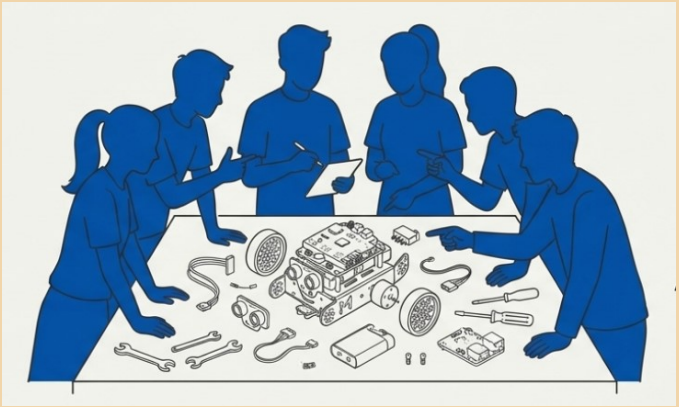
Program your road to victory!

ROCOCO

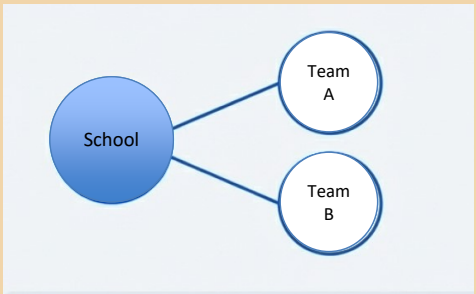
Why RoCoCo?

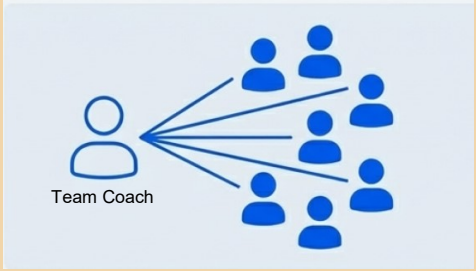
International correspondence robotics competition
Focused on real robot programming and creativity
Designed for high school students

Develop logical and algorithmic thinking
Improve programming and technical skills
Encourage teamwork and creativity



Who Can Participate?

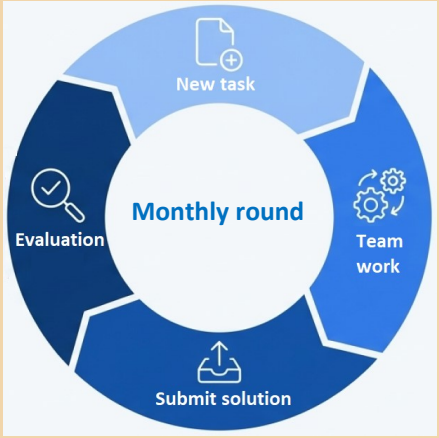




Student teams from secondary schools

Team size: up to 7 students per team
Multiple teams per school allowed
One adult coach per team
(teacher, parent or another responsible person)

Coach:
- can lead more teams
- is responsible for registration and communication
- is fair - must not actively help to solve tasks (programming or building).



Competition Schedule

- 4 independent tasks
- each month published new one
- 30 days to submit solutions

(partial solutions are welcomed too)

Final event in May 2026

Your official toolkit

✓ Allowed Hardware

- mBot2 robots (max. 2 per team)
- extensions provided within the ICER project
- commonly available materials (wires, strings, cardboard, glue etc.)

✗ Prohibited

It is not allowed to add any additional electronic peripherals (motors, sensors) that other teams do not have.

Allowed Software

Programming is permitted in mBlock (Blockly) or Python.

mBlock python

Submitting Solution

Description

Description (in English) about the robot operation, its function and problems you encounter during the problem solving.

Video

Demonstration of the successful operation of your robot. Recommended is more than single experiment and different conditions.

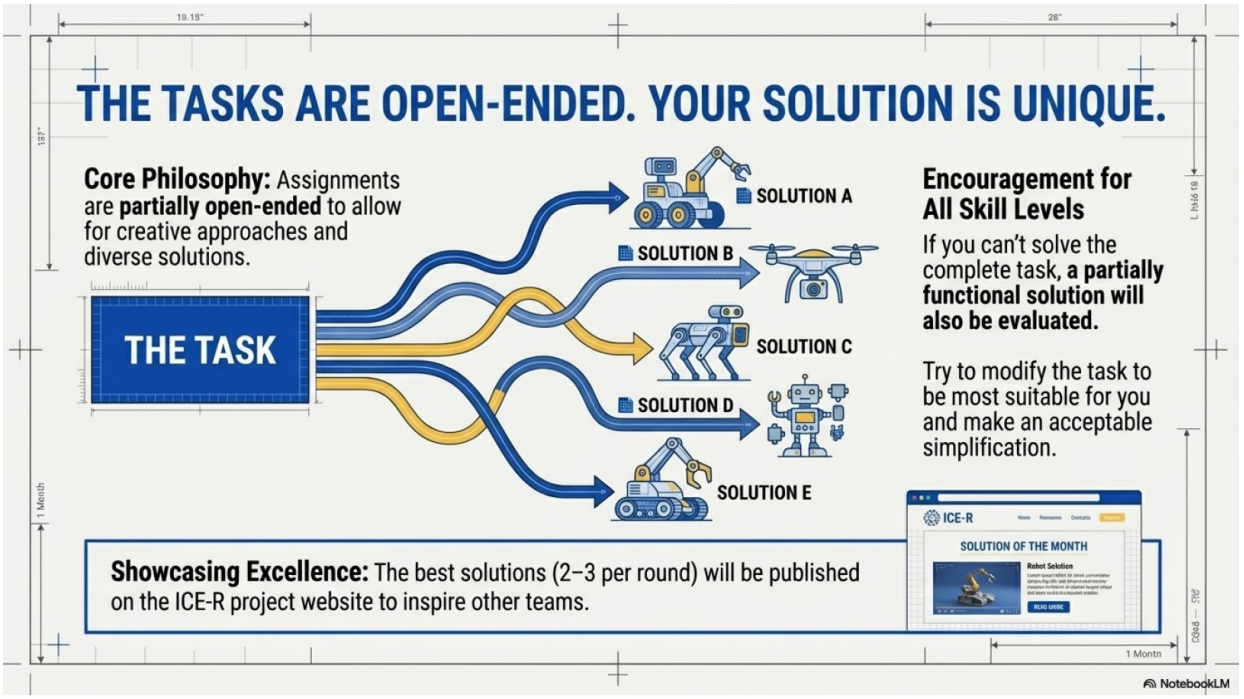
Photos

Minimum 2 photos from the process of the solution (can be also drawings, testings etc) and one team photo.

Code

Complete program listing (either the screenshot, or text).

Learn from the best: selected solutions of each task will be published so you can learn from other teams and gain more experiences.



Your secret weapon: AI consultant

Registered teams get optional acces to a special AI tool (chatbot) for consultations

✓ How can help

- Explaining complex principles
- Finding errors in your code or design
- Suggesting potential approaches

✗ What it want't do

Will not provide ready-made, complete answers, nor the full code.

⚠ Disclaimer: AI Chatbot is an experimental tool; use it on your own risk.
The organizer has no responsibility for the responses of AI. Its use is entirely voluntary.
Data entered into the chatbot are not public and are not used to train AI.

Are you ready?

REGISTER NOW!

Information required

- Team name
- School name
- Team members names
- Coach's full name, date of birth and e-mail.

Contacts and further info

Project website: https://icerobotics.online

Coordinator e-mail: richard.balogh@stuba.sk

Summary

The RoCoCo (Robot Corresponding Competition) is a competition organized by the ICE-R project team designed to develop logical thinking, technical skills, and teamwork among high school students using mBot2 robots. Structured around four correspondence rounds, the league invites teams up to 7 students, guided by an adult coach, to address partially open-ended assignments that encourage creative engineering and programming solutions. To participate, teams must submit comprehensive deliverables in English via Google Classroom, including a technical description, video demonstration, photo documentation, and the complete program code written in mBlock or Python. Entries are assessed by an independent jury based on functionality, creativity, and documentation quality, with the competition offering access to an experimental AI consultant tool and culminating in a final results announcement in May 2026.