



April 2022 - Learning how to code.

How can we teach the children to code, if we do not have the skills ourselves, as teachers? At our school, we have educated teachers who can guide us when a class is working with coding or other things regarding technology. We also have a plan for when and what the different classes and levels/grades are to be taught about coding. In 3. grade we work with coding through World Robot Olympiad (WRO)



WORLD ROBOT OLYMPIAD™

World Robot Olympiad (WRO) is a learning course in technology understanding and an international competition in the design and programming of robots. In the Robot Olympiad, we work with two categories: RoboMission and Future Innovators.

Every year there is a new theme for the tasks. The themes are always based on one or more of the UN's World Goals. With WRO, we want to inspire children and young people to be curious about how technology and science can be used in society.

In RoboMission, the children must build and program a robot that can solve a variety of tasks on a track in time. The focus is on the following learning objectives:

- General understanding of programming and basic knowledge of robots (control and navigation).
- General engineering knowledge (to be able to build a robot that can lift / push objects of a certain size and shape).
- To be able to develop a strategy so that the specific missions can be solved most appropriately.
- Computational thinking (eg, experimenting / trying out, troubleshooting, collaboration, etc.).

The theme for 2022 is My Robot My Friend.

This year's theme and challenges revolve around how robots can help us humans in the home, in the healthcare sector and in connection with rescue work. How can robots and humans work together in a meaningful and safe way?

Robots in the home:

Looking for robotic solutions that can perform tasks in and around the home and help and relieve the people who live there.

Rescue robots:

Looking for robotic solutions that can help and relieve the rescue crew or that can perform rescue work all by themselves.

Robots in the healthcare sector:

Looking for robotic solutions that can streamline work and / or help and relieve staff in the healthcare sector.

This year the 3. graders will mainly be working with building and coding rescue robots.

The WeDo task for schooling is to put out a forest fire and save trees and people from the burning areas.



The two classes will each have four days where the children in groups will work on coding their robot, so it can solve as many rescue tasks as possible in two minutes. On the fifth day, there will be a competition, and the ten groups with the highest score will move forward to compete against other schools.

During this week we cancel the children's normal schedule, so they work with coding for the entire week.

To participate in the competition the schools must register, in Denmark this is free, but the schools must buy the equipment, we use Lego We Do among others.



The World Robot Olympiad (WRO) is a worldwide non-profit organization with more than 85 member countries, you can read more at: <https://wro-association.org/>

The guide to WRO 2022 is uploaded - unfortunately it is in danish, but it is possible to see the track the children have to guide their robot through.