STEM

USING ROBOTICS IN THE SCHOOL CONTEXT

Your Mobility Partner

PIC Number: 948037649 Organisation ID: E10207576

Course Overview

The use of robotics in the school context has become increasingly popular in recent years, as educators have recognized the many benefits of incorporating robotics into the classroom. Overall, using robotics in the school context can be a valuable tool for enhancing STEM education, developing problem-solving and critical thinking skills, promoting collaborative learning, building creativity and innovation, and preparing students for the future.

Course Objectives

- Provide a general understanding of robotics and its applications in education.
- Introduce educators to the different types of robots and tools available for use in the classroom, and teach them how to select the appropriate equipment based on their specific teaching goals.
- Help educators develop basic programming skills that will enable them to teach their students how to program robots and create automated systems.
- Provide hands-on experience with building and programming robots, educators can effectively teach these skills to their students.
- Foster critical thinking, problem-solving, and collaborative learning skills among educators and their students through the use of robotics.
- Encourage educators to integrate robotics into existing lesson plans across various subjects, and provide guidance on how to incorporate robotics into lesson plans in a meaningful and engaging way.
- Raise awareness about the benefits of using robotics in the classroom, including increased engagement, improved critical thinking skills, and better preparation for future careers in STEM fields.

Learning Outcomes

This course delves into the integration of robotics in education, recognizing its benefits. Educators will understand how robotics enhances STEM education, fosters problem-solving, critical thinking, and creativity, and promotes collaborative learning. By course completion, participants will be well-equipped to prepare students for the future through innovative, robotics-enhanced teaching methods.

Price: All expenses can be covered through a Knowledge Acquisition (KA) subsidy within the Erasmus+ initiative. This is a 5-day training course in which Mobility Friends imposes a fee of **350€ per attendee, in courses located in the cities of the Continent and Madeira island. The fee for Azores Island is 480€ per attendee. The price includes the training course and a coffee break.**

For **groups of 5 or more people,** please contact us for pricing details.

Duration: 5-Day Course

Language: English

Schedule: The time of classes, whether in the morning or afternoon is dertemined by the provider. The schedule may vary considerably based on participants' preferences and the trainer's discretion regarding any modifications.

Certificate: A Certificate of Attendance will be awarded to participants who attend minimum of 80% of the course.

Other Services: Mobility Friends offers various services for you. We handle everything from accommodation to cultural visits and transfers. Contact us to learn how we can assist you with your travel logistics.

PLANNER

DAY 1
- Definition of robotics and its applications in education.
- Benefits of using robotics in the classroom.
- Overview of different types of robots and tools available for use in the classroom.

DAY 2
- Introduction to different types of robot hardware, such as sensors, actuators, and microcontrollers.
- Overview of programming languages used in robotics, such as Scratch, Blockly, and Python.
- Hands-on experience with programming and operating robots.

DAY 3
- Design principles for building robots that can perform specific tasks.
- Introduction to different types of robots, such as mobile robots, humanoid robots, and drones.

DAY 4
- Best practices for integrating robots into existing lesson plans across different subjects.
- Strategies for engaging students with robotics and fostering critical thinking, problem-solving, and collaborative learning skills.
- Tips for assessing student learning and progress when using robotics in the classroom.

DAY 5
- Advanced programming techniques for robots, such as machine learning and computer vision.
- Introduction to emerging trends in robotics, such as swarm robotics and soft robotics.
- Discussion of the future of robotics in education and its potential impact on the workforce.
- Feedback and evaluation of the course.

*Please note that program content may be subject to change based on input from our trainers.

Talk with Us
We are waiting for You

www.mobilityfriends.org

Apply Now

✉ trainingcourses@mobilityfriends.org

📞 +351 253 144 226

f MobilityFriends

📷 MobilityFriendsOfficial

in Mobility Friends

DGERT
ENTIDADE
FORMADORA
CERTIFICADA

MOBILITY
FRIENDS