

COURSE TITLE

ROBOTICS IN YOUR CLASSROOM

Presentation

Robotics is drawing new paths in the learning mode, encouraging the development of creative processes through game and experimentation, while completing the curricular development of the classroom with projects of creative engineering, educational robotics and code programming. Explore and adapt the possibilities that they have as a creative, communicative and learning tools!

Come and develop projects where you can unleash the creative capacity of your students & start enjoying the world of creative engineering!

The **objectives** of the course are:

- To learn and practice the operation of different sensors and motors.
- To understand the operation and construction of basic engineering mechanisms.
- To learn and apply basic concepts of block programming.
- To obtain educational resources through science and technology projects applicable to the classroom.
- To analyse the development of the projects and their adaptation to the classroom.

Target group

The training course is addressed to primary and secondary school teachers, VET teachers, VET trainers, adults' teachers, managers and employees of enterprises as well as social and youth workers of non-profit organization and public entities.

Course language

This course can be provided both in English and Spanish.

Methodology

The methodology used in the course consists mostly on practical tasks with the teacher's explanation of specific contents related to the objectives of the course.

Constant feedback from the teacher will ensure that the concepts, tools and methods are acquired by all participants.

Course structure & contents

Day 1	<ul style="list-style-type: none">• Introduction to Robotics. Connections and installation.• Practice with LEGO WeDo 2.0. Session of code programming.
Day 2	<ul style="list-style-type: none">• Programming with Mindstorms EV3 as a team• Creation of projects, connection & software installation.
Day 3	<ul style="list-style-type: none">• Introduction to Makeblock, Littlebits and Arduino• Code programming
Day 4	<ul style="list-style-type: none">• Arduino installation and operation• Examples of STEM projects.
Day 5	<ul style="list-style-type: none">• Testing the projects created.• Handing out the Certificates of Participation.• Farewell dinner & live music.

NOTE: This training course can be funded using Erasmus+ grants (under Key Action 1). In case you need help with the application process, please, let us know.