Day 1: Introduction to Robotics in Primary Education

Block 1: 10:00 - 11:30

• Overview of Robotics in Primary Education

- o Introduction to the use of robots in primary education.
- o Exploration of the benefits of integrating robotics into teaching.
- o Discussion on the educational goals achievable through robotics.
- o Introduction to basic robot platforms (BeeBot, BlueBot, Ozobot).

Block 2: 11:45 - 13:15

Hands-on with BeeBot and BlueBot

- o Practical session on using simple robots like BeeBot and BlueBot.
- o How to create lesson plans that incorporate these robots.
- o Example activities that engage young learners in computational thinking.

Block 3: 14:00 - 15:30

• Collaborative Activity: Co-creating Lesson Resources

- o Participants work in small groups to develop lesson plans.
- o Focus on incorporating robots to achieve specific educational outcomes.
- o Presentation of initial ideas and peer feedback.

Day 2: Advanced Robotics Tools for STEAM Learning

Block 1: 10:00 - 11:30

• Introduction to Advanced Robots (Dash, Edison, LEGO WeDo, Sphero)

- Overview of more complex robots and their applications in STEAM education.
- Emphasis on their use in fostering creativity, problem-solving, and collaboration.
- o Examples of cross-curricular integration (math, science, language).

Block 2: 11:45 - 13:15

• Hands-on with LEGO WeDo and Dash

- Interactive session focused on programming and controlling LEGO WeDo and Dash robots.
- How to design and execute activities that challenge students in problemsolving.

o Incorporating robots into existing lesson structures.

Block 3: 14:00 - 15:30

• Group Activity: Creating Interactive Learning Environments

- o Participants design interactive learning activities using advanced robots.
- o Focus on creating engaging and age-appropriate STEAM activities.
- o Group presentations and reflections on robot usage in classrooms.

Day 3: Implementing Robotics in the Classroom

Block 1: 10:00 - 11:30

• Robot-Assisted Storytelling and Creativity

- o Introduction to digital storytelling with robots (e.g., Ozobot).
- How storytelling fosters language development and creativity.
- o Demonstration of storytelling activities that use programmable robots.

Block 2: 11:45 - 13:15

• Security and Ethical Considerations in Using Robots

- o Discussion of security risks associated with robot use in education.
- o Ethical issues such as data privacy, managing screen time, and bias in AI.
- Strategies for implementing robots safely in classrooms.

Block 3: 14:00 - 15:30

• Final Activity: Designing a Robot-Enhanced Curriculum

- Participants collaborate to design a mini-curriculum that integrates various robots.
- o Focus on combining robots with STEAM learning and ethical considerations.
- Group presentations of the designed curriculum, with feedback from peers and instructors.