



COURSE TITLE:

Computational Thinking, AI and Digital Competences in the Primary Classroom

DATES: Monday 1, Tuesday 2, Wednesday 3 February 2027

TRAINER/S: Roberta Trapani Maggi & Natalie Lombardi Calleja

TARGET AUDIENCE: Primary Educators

VENUE: Secretariat for Catholic Education, Conference Hall, 36 Triq Idmejda, Balzan

COURSE DESCRIPTION:

This three-day course is designed to support primary educators in developing the knowledge, skills and confidence to integrate computational thinking and Artificial Intelligence (AI) into teaching and learning. Participants will explore practical, classroom-ready approaches through hands-on activities, including unplugged tasks, educational robotics and the use of age-appropriate AI tools. The course promotes a cross-curricular, student-centred approach that fosters creativity, critical thinking and problem-solving. Through a practical experience, participants will also observe effective classroom practices that integrate digital literacy and transversal skills, enabling them to reflect on and apply innovative strategies within their own educational contexts.



LEARNING OUTCOMES:

By the end of this course, participants will be able to:

- Understand key concepts of computational thinking and apply these within the primary classroom.
- Design and facilitate engaging coding activities, using both unplugged methods and educational robotics, to promote creativity and problem-solving among young learners.
- Explain the fundamentals of Artificial Intelligence (AI), including how AI works and its relevance in everyday life and education.
- Identify and use age-appropriate AI tools, incorporating them effectively into classroom practice to support digital literacy and innovation.
- Promote ethical and responsible use of AI.
- Observe and reflect on effective classroom practices while recognising strategies that foster digital literacy and transversal skills.
- Develop practical ideas for implementation, adapting observed and learned strategies to their own teaching contexts.

COURSE PROGRAMME:

DAY 1: Computational Thinking in the Primary Classroom

Throughout the day, participants will engage with computational thinking approaches into the classroom. Participants will grasp core algorithmic concepts, acquire a working knowledge of coding and discover ways to foster student-led creativity and problem-solving. Through a blend of tactile unplugged activities and hands-on exploration with educational robotics, participants will explore a cross-curricular approach to teaching and learning in the primary classroom.



DAY 2: AI in the Primary Classroom

This day introduces participants to the world of Artificial Intelligence (AI) in an accessible and practical way. Participants will explore what AI is, how it works and its growing role in everyday life and education. Through interactive activities, hands-on practice and classroom examples, educators will develop a foundational understanding of AI concepts and tools suitable for young learners. This will support the participants with integrating age-appropriate AI experiences into their teaching to support creativity, problem-solving and digital literacy development. Ethical considerations, including safe and responsible use of AI will also be addressed.

DAY 3: Professional Immersion

Throughout the day, participants will take part in a practical experience, observing a variety of classroom activities that promote digital literacy and transversal skills. Participants will gain insight into how these areas can be effectively integrated through hands-on, student-centered practices. The experience will also highlight the importance of creativity and expression, showcasing how digital and creative abilities may be blended to promote innovation, critical thinking and collaboration in primary education setting.

REGISTRATION:

For provisional bookings please register [HERE](#).



