

Robotics and Artificial Intelligence

For Middle School



Name & Surname

:



School

:



Class

:



School Year

:



MSM - MEDIAS
EDITION & DIFFUSION



PREFACE

Computer science, robotics and artificial intelligence nowadays play an increasingly important role across many fields of knowledge and innovation. To help middle school students develop a strong foundation in these areas, it is essential to provide them with appropriate educational resources that prepare them for emerging technological challenges.

With this in mind, and in line with the pedagogical guidelines of the ministry of education on integrating artificial intelligence in education, we designed the book.

Computer Science, Robotics, and Artificial Intelligence for Middle School.

This textbook aims to help learners develop skills that go beyond the mere acquisition of knowledge. It adopts an innovative pedagogical approach that integrates digital technologies to enrich the learning experience. Where appropriate, artificial intelligence tools can support interactive learning, learner progress analysis, and personalized educational activities.

Each unit follows a clear and engaging **learning sequence** :

1



Starter Activity : An augmented reality activity delivered through the **Robot.AI_MS1** mobile app captures learners' attention and introduces the main concepts of the unit.

2



Discover and Remember : Key concepts are presented through clear explanations supported by examples and visual aids.

3



Practice : Guided activities and exercises allow learners to practise the concepts using appropriate learning tools.

4



Further Exploration : Mini-projects encourage learners to apply the concepts covered to practical and real-world situations.

5



Self-Assessment : Augmented reality-enhanced quizzes allow learners to check their understanding and reinforce what they have learned.

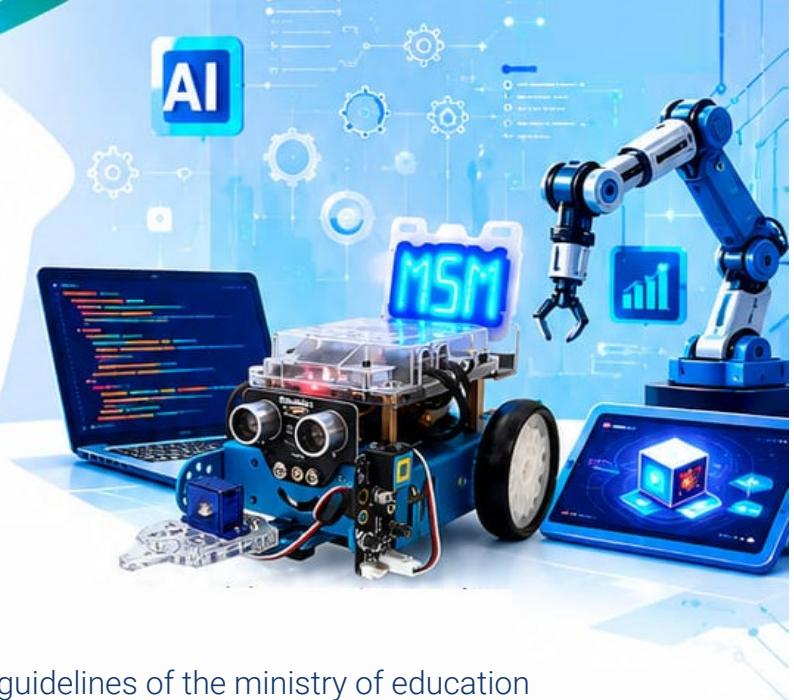


Additional resources and digital tools
are available at:

<https://www.msm-medias.com>



We hope this textbook will help learners develop the skills they need to understand emerging technologies and use artificial intelligence **thoughtfully, confidently, and responsibly**.



Illustrations

: freepik.com and pikbest.com
imagine.art
gemini.google.com
Chatgpt.com
Claude.ai
copilot.microsoft.com

Webography

: <https://python.developpez.com/tutoriels/apprendre-programmation-python/les-bases/>
<https://openclassrooms.com/fr/courses/7168871-apprenez-les-bases-du-langage-python>
www.microsoft.com
www.python.org
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