JUNIOR SCOUTS

Age Range: 10 – 12

Cycle Overview

The **Junior Scouts** program helps learners **go beyond basic concepts**, learning how to plan and express ideas using flowcharts, make robots respond to buttons and sensors, and design interactive projects.

They also discover how AI helps machines understand instructions, explore how colors and numbers work in digital systems, and learn how to stay safe online. By experimenting with real-world applications, they develop creativity, confidence, and teamwork, preparing them for more advanced technology learning.

Skills and Competencies

- **Competency:** Solving challenges strategically, developing algorithmic reasoning for efficient solutions, and creating innovations through imagination and adaptability.
- **Future Skills:** Digital Literacy; Innovation; AI Understanding; Ethical Technology Use
- **Judgment Skills:** Decision Making; Risk Awareness; Online Safety
- **Technical Skills:** Programming; Robotics; Digital Security; Computational Design

Levels' Distribution			
Fields	**Level 1**	**Level 2**	**Level 3**
Computer Sciences	✓ Expressing Algorithms using Flow Charts	✓ Booleans in Conditions	✓ Operators
Robotics	✓ Button Triggered Events	✓ Ultrasonic, Color and Touch Sensor	Basic Line Following Algorithm
AI	✓ Prompt Engineering	✓ AI Tools	✓ AI in everyday life
Design	✓ Scene Design	✓ Robot Design	✓ Design using loops
Sciences & Math		✓ Binary Division and Waves	✓ RGB encoding
Network & Security	✓ CIA pillars and types of hackers	✓ Device communication using protocols	✓ OSI Model