



ROBO-ARCADE

MINDSTORMS EV3 & SCRATCH EDITION



LESSON ONE

- Introduction to robotics
- Characteristics of robots
- MINDSTORMS robotics
- MINDSTORMS EV3 hardware
- Project 1 – Building
- EV3 – Scratch Programming

LESSON TWO

- SCRATCH Studio user interface
- Types of SCRATCH blocks
- SCRATCH 3.0 blocks categories
- MINDSTORMS EV3 Extension
- EV3 connection settings
- Project 1 - Programming

LESSON THREE

- Robots uses & types
- X and Y coordinates
- Projects 2 & 3
- Algorithms
- Flowchart
- Variables & Scoring

LESSON FOUR

- Understanding Algorithms
- EV3 Input and Output blocks
- Project 4
- Pseudocode
- Build your own game - 1

LESSON FIVE

- Projects 5 & 6
- EV3 Motor Blocks
- SCRATCH – EV3 Blocks summary
- Build your own game - 2

BONUS LESSON

- Additional Projects
- Levels Development
- Regularly used SCRATCH blocks
- Build your own game - 3