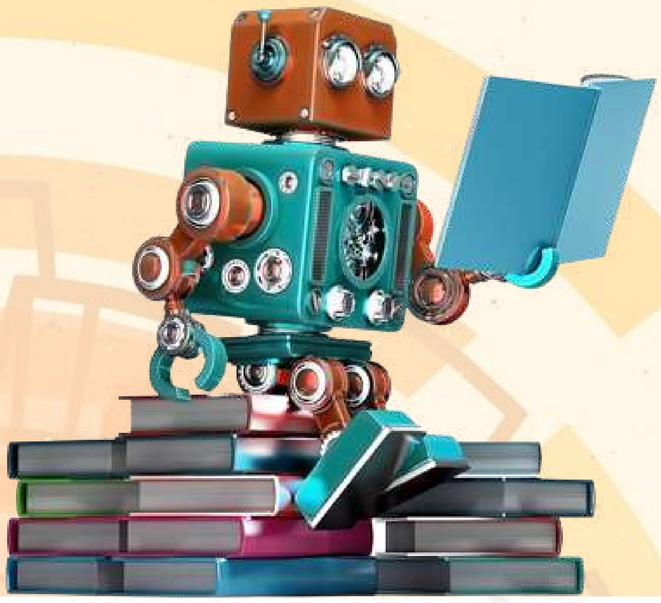

Skillovation

BE SKILLFUL TO INNOVATE

ROBOTICS SYLLABUS

School Robotics & Coding - Advanced

Sessions 1 - 24

1 — Robotics Mechanism
- ✓ Electronic
- ✓ Algorithms
- ✓ Mechanism
- ✓ Functioning

2 — Robotics Components
- ✓ Robotics Parts
- ✓ Protocols
- ✓ Interfaces
- ✓ Specifications

3 — Robotics Programming
- ✓ Programming
- ✓ Logics
- ✓ Algorithm
- ✓ Programming Models

4 — Robotics Hardware
- ✓ Mechanism
- ✓ Functioning
- ✓ Interface
- ✓ Logics

5 — Robotics Applications
- ✓ Robot Basics
- ✓ Domain Uses
- ✓ Applications
- ✓ Requirement Analysis

6 — Robotics Simulation
- ✓ Model Design
- ✓ Error Simulation
- ✓ Testing s/w
- ✓ Virtual Model Designing

7 — Robotics Communication
- ✓ Serial Interface
- ✓ Data Exchange
- ✓ Connecting h/w
- ✓ Transrecieve Modelling

8 — Student Attendance System
- ✓ Design digital students attendance system to replace manual attendance

9 — Traffic Lights Designing
- ✓ Design traffic light and understand its working with logic

10 — Electronic Voting Machine
- ✓ Design electronic voting machine andunderstand the voting mechanism

11 — Digital Notice Board Design
- ✓ Design a digital notice board and display message remotely

12 — Quiz Competition Design
- ✓ Design quiz competition and perform fastest finger first

13 — Unboxing Advanced Kit
- ✓ Unboxing kit and understand various modules and sections in the kit

14 — Wireless Comunication
- ✓ Learning & interfacing various wireless modules such as WIFI, Bluetooth etc.

15 — LCD Interfacing
- ✓ Interface LCD and check the display mechanism

16 — Relay Interfacing
- ✓ Interface relay and check various auto switching operations

17 — Wi Fi Interfacing
- ✓ Interface WIFI module and design IOT operations

18 — Bluetooth Interfacing
- ✓ Interface bluetooth module and design wireless bluetooth technology control applications

19 — Home Automation Design
- ✓ Design a home automation project and control home applications smartly

20 — Door Security System
- ✓ Implement door security with the help of automation

21 — IOT Interfacing
- ✓ Design IOT mechanism for applications

22 — AI Interfacing
- ✓ Implement AI interfaces to make automation products smart

23 — Voice Controlled Apps
- ✓ Design and control automation application using voice commands

24 — Skillovation Research
- ✓ Learn many advance and live projects with skillovation