

STEM LEARNING SYSTEM (MEDIUM)

Order Code - STEM-002



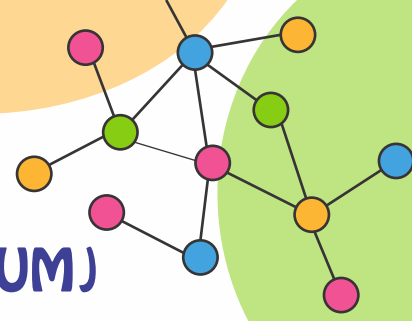
- This kit is designed for schools to be able to roll out well structured STEM/Robotics/AI education programs. This is an awesome medium kit that offers modular Electronics, Robotics & Coding blocks. The kit can be used both with and without coding making the first step very easy for students. It has 45 blocks containing coding block, power supply, various inputs, sensors, outputs, motors, blocks for logic gates and much more. The kit also has plastic construction components.
- The kit support Block coding, C++ & Python. The coding can be done using Windows, Android and iOS PCs/tablets
- The kit comes with well structured 24 sessions of video curriculum that is available in LMS (learning management service). We also conduct teacher training programs.
- Education topics covered: Electronics, Robotics, AI & IoT

Specification

- Contains 45 Module & Accessories
- It contain one Programmable Block called – NetLogic (WIFI & Bluetooth both)
- Basic electronics components like Light, Buzzer, NOT Gate, High Speed Motor, Push Button, Pulse Delay etc
- Two ON/OFF Motors with Mounted BO & Servo motor & Parts
- Some sensors like Light Sensor, Obstacle Sensor, Motion Sensor, Tilt Sensor, Sound Sensor & Moisture Sensor
- Rechargeable Battery with Charge & Cable & U-Right also






Sample Projects









- Automatic door alarm
- Pre-programmed path robot
- Cliff avoiding robot
- Obstacle avoiding robot
- Digital Key
- Salt-water conductivity.....and many








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Component	Qty	Details
	1	USB Rechargeable Battery
	2	Battery Power Block – Supply power to rest of the blocks
	2	Motor Blocks – make lot of robotics and other interesting projects with it
	1	High Speed DC Motor
	1	Buzzer – Give Sound to your projects.
	1	Light – Make your project shine and light
	1	Connectivity Sensor
	1	Copy block
	1	Motion Sensor – sense Motion to make decisions

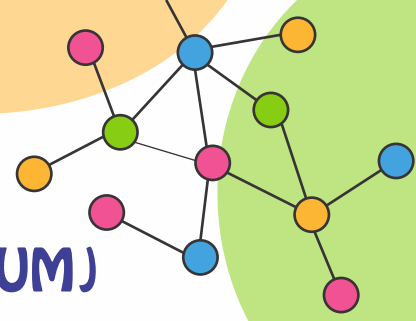
Component	Qty	Details
	1	Obstacle Sensor – Make your projects to take decision by sensing things around it
	1	Sensor Base – Connect variety of sensors to this base
	1	Light Sensor – Make your projects to sense light around it & take decisions
	1	Moisture Sensor – Sense moisture to make decisions
	1	NOT – Logic gate that give inverted output of its input
	1	Dimmer – Allows output to be increased or decreased as per project need
	1	Limit Switch – Provides door bell like push switch functionality
	1	Pulse Delay – Add timer function to your project to make smart decisions

Component	Qty	Details
	1	NetLogic – Code your kit Use Drag-n-drop coding/C++/python With Wi-Fi Connect to internet & explore the world of IoT
	1	Push Button – Provides door bell like push switch functionality
	1	Servo Motor + Driver
	1	Submersible water pump
	1	Switch
	1	U-Right: make your circuit compact with it
	1	Place your Cretile flexibly with wire

Construction Kit Component	Qty	Details
	2	Base Plate
	18	Connector
	4	Connector
	2	Motor Coupler
	1	Remover Tool

Construction Kit Component	Qty	Details
	6	1x5 Strip
	4	1x11 Strip
	1	Wheel Shaft
	3	Gear Wheels
	1	Big Gear
	1	Shaft

Construction Kit Component	Qty	Details
	2	Free Pipe
	3	Robotic Wheels
	2	Moving Connectors
	4	Free connectors



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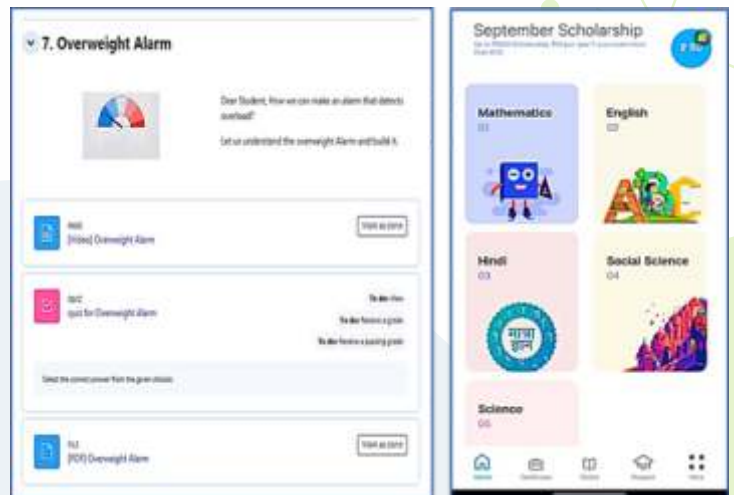
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Component	Qty	Details
	2	Robotic Wheel – Give power to your projects to move around
	1	Fan – Give power to your projects to blow air around
	1	Cretite pulley
	2	3 pin wire to connect sensor
	2	2 pin wire to motors
	1	USB
	1	Adapter
	1	Small Wheel

Component	Qty	Details
	1	AND Gate
	1	OR Gate
	1	Toggle
	1	Pipe

LMS FOR TEACHER'S & STUDENT'S

Student View



Teachers View

[Teacher Resource] 7.Overweight Alarm

[48 Minutes] To understand the another use of obstacle sensor, by making students aware of weighing machine, and concept of overweight alarm.

Goal of the project is to understand the how can we make weight measuring instrument and use it for real world applications.

100 [20 Minute] Understanding the concept Mark as done

- [18 minutes] Teacher will explain about different uses of obstacle sensor and ask questions to students about how can weighing machine be automated
- [3 minutes] Students will share project ideas for Overweight alarm
- [7 minutes] Teacher will explain the functionality of each module in the project

100 [20 Minutes] Understanding of working Model Mark as done

- [5 Minutes] Teacher will ask questions to students about functionality of project and gradually divide the project functionality, for each part of the project. Teacher will lead students to identify parts required for the project.
- [5 minutes] Students will assemble the circuit of Overweight Alarm
- [10 minutes] Students build the structure of project using construction blocks

- Learning Resources – Videos & Documents
- Quizzes
- Scholarship
- Teaching Resources
- Session Power Point presentations
- Monitor students progress