

# TINKERING LAB AND MAKERSPACE

PLACE TO INNOVATE THROUGH ROBOTICS | IOT &  
AUTOMATION



## TINKERING LAB & MAKERSPACE

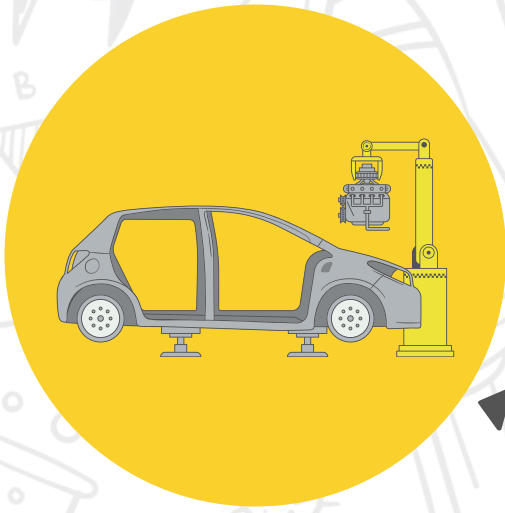


### SKILL CLUB

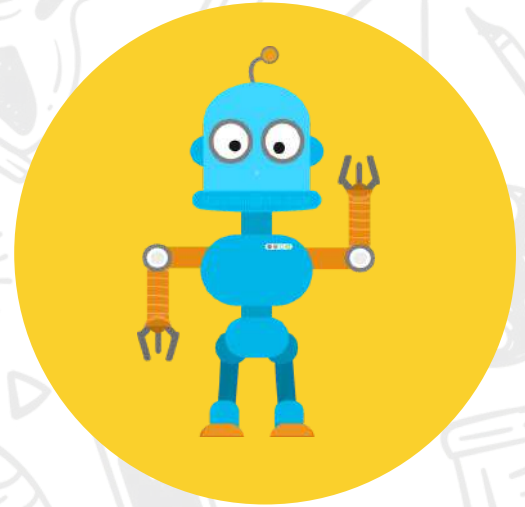


ATL Labs | PM Shri Schools | NEP Workshops STEM Programs  
Tinkering Workshops

# COMPLETE SOLUTION FOR TINKERING LAB & MAKERSPACE



**Automation**



**Robotics**

Decision Making



Programming

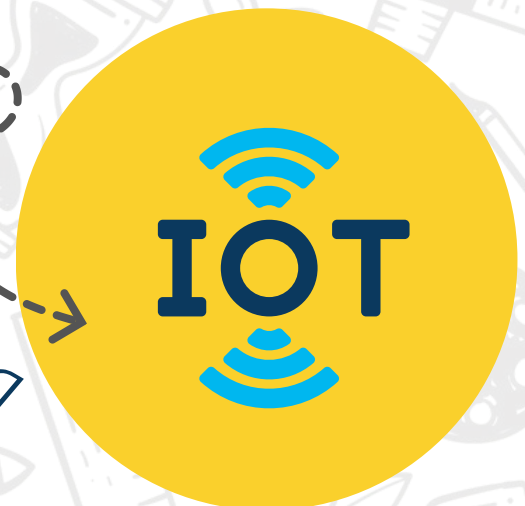
Critical Thinking

Design Thinking



**AI & Coding**

*Data Analysis and Interpretation*



**Internet of Things**

*Computational Thinking*



# MAKER SPACE

Complete infrastructure setup with tools, workstations, and crafting equipment to create a hands-on STEM and robotics learning environment for schools.



## Learn, Tinker & Build with Purpose



# MAKERSPACE AND TINKERING LAB

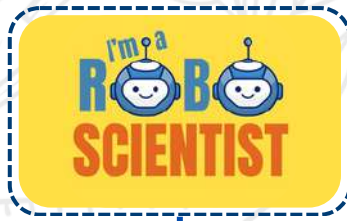


- Technology Kits + Design Thinking Program = Community Solution
- Grade-wise syllabus mapped from Grade 6 to Grade 10
- Learning Management System (LMS) access with comprehensive teacher training
- Dedicated troubleshooting and support provided through a ticket based system



**Manufactured in our factory powered by curriculum & Training**



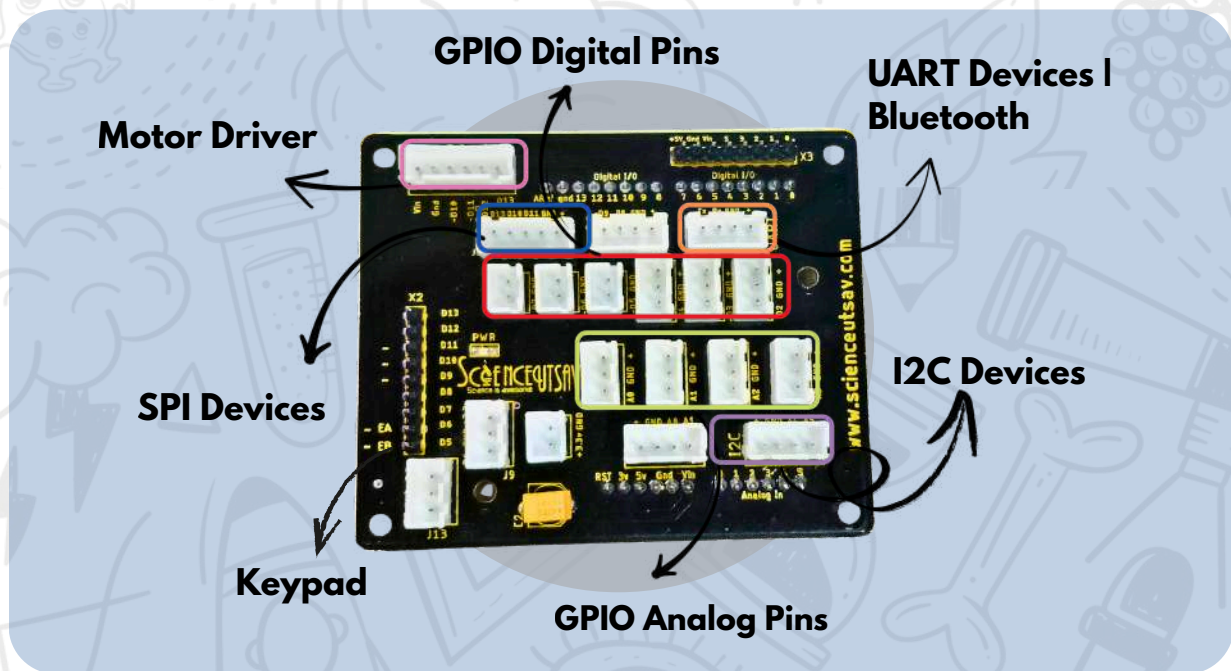


Electronic + Coding - Complicated Writing +  $\frac{\text{Tools x Ideas}}{\text{Engineering Problems}}$   
**= Community Solutions**

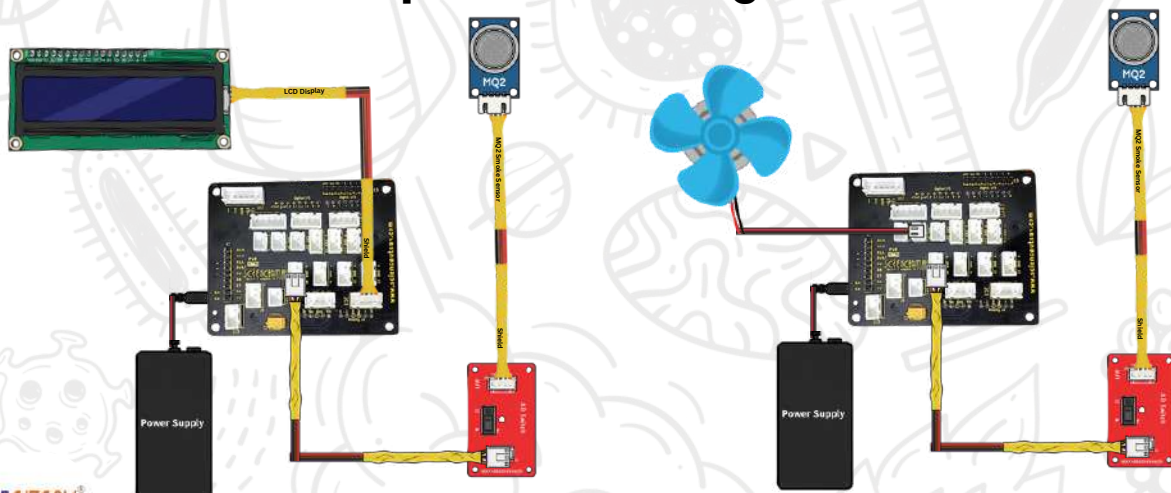
**Structure and  
Templates for  
realtime project  
building**

**Perfect kit for  
prototyping the  
ideas**

**Customised LMS  
for coding and  
electronics**



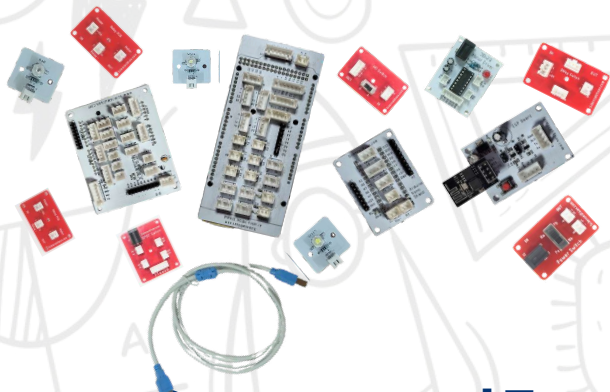
## Sample Circuit Diagrams



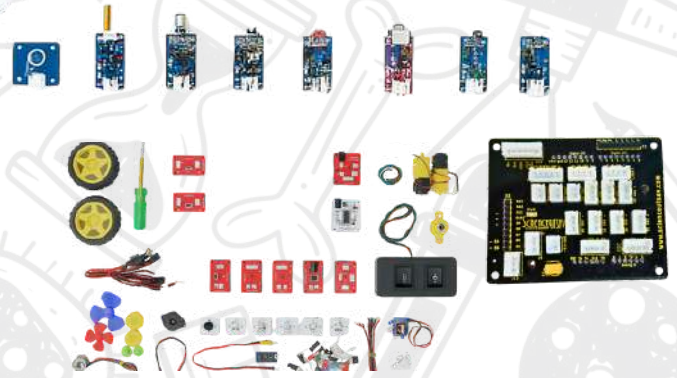


# WHAT KIT HAS IN IT?

## Microcontroller and Shield



## Sensor-Based IoT Kit

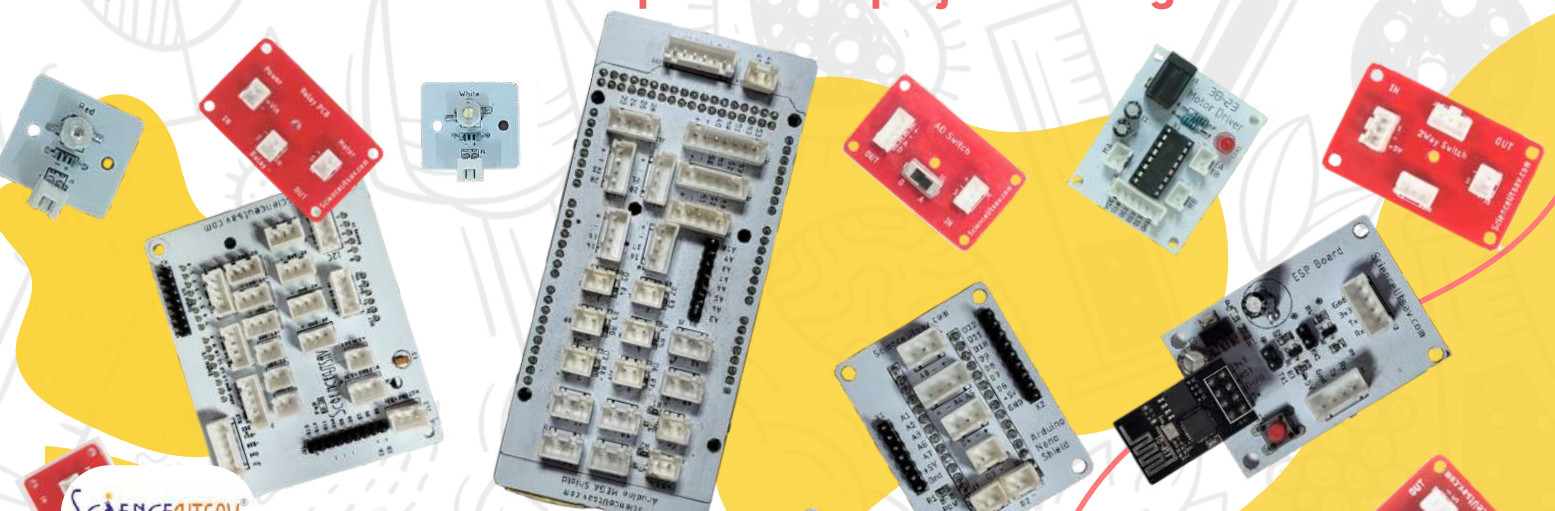


## Structure and Templates for prototyping



- SOPs for Lab Usages
- LMS for Teachers
- Teacher Training

- Customised **Microcontroller Shield** for easy connection
- Input devices such as **Sensors** and **Switches**
- Output devices including **Motors, Displays, Buzzer, Speakers and LEDs**
- Communication modules like **Wi-Fi, Bluetooth, and RF**
- **I2C, SPI, UART** and other serial communication devices
- Additional essential **components** for project building







## Designed for Innovation

Supports hands-on learning in IoT, robotics, automation, and design thinking, aligned with modern curriculum needs.



## Complete Kit Solution

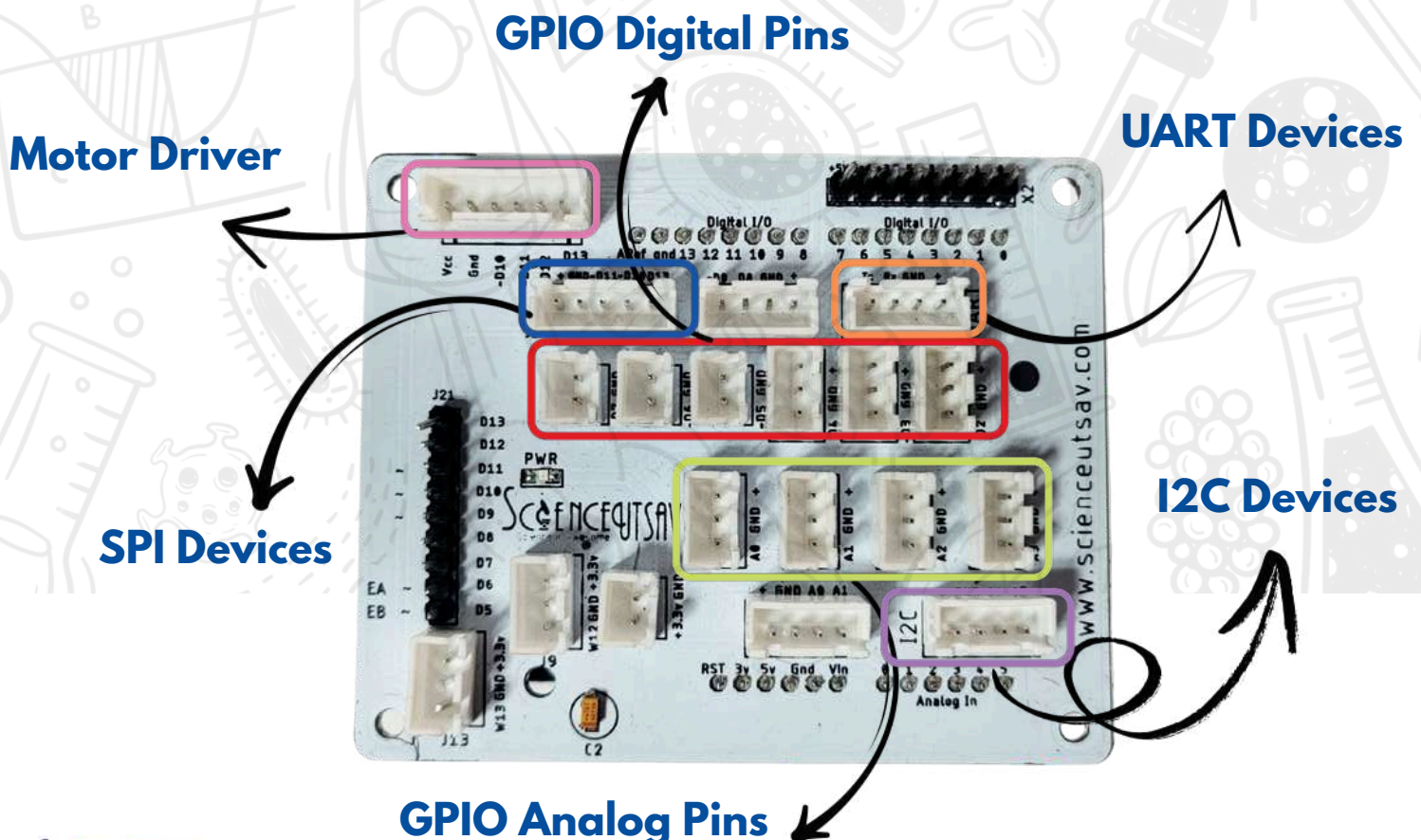
Comes with everything needed: PCB shield, microcontroller, sensors, motors, RMC cables, and sample project guides.



## Modular & Scalable

Flexible design allows for future expansions and upgrades without needing a redesign.

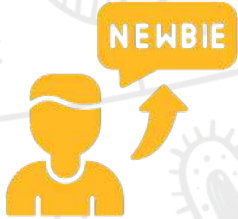
## WHY CHOOSE OUR ROBOTICS + IOT + AUTOMATION KIT?





## Plug & Play Prototyping

Custom-designed **PCB** with **RMC** (Relimate Connector) ports allows sensors and output devices to be connected instantly—no breadboard or jumper wire hassle.



## Beginner-Friendly Design

Ideal for classrooms and STEM labs—clean wiring for easy, organized learning.



## Universal Communication Support

- Includes dedicated ports for:
- I2C Devices (e.g., displays, RTC)
- SPI Devices (e.g., SD cards)
- UART Devices (e.g., Bluetooth, Wi-Fi modules)
- Motor Driver Connection



## Custom RMC Cables Included

Pre-built RMC cables for all major sensors and output components ensure quick and error-free connections every time.

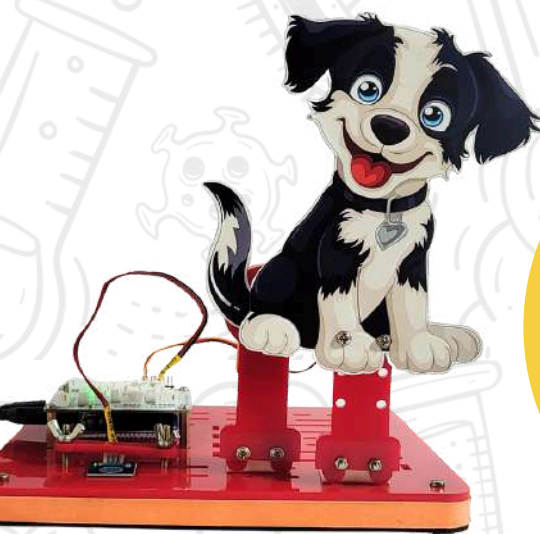
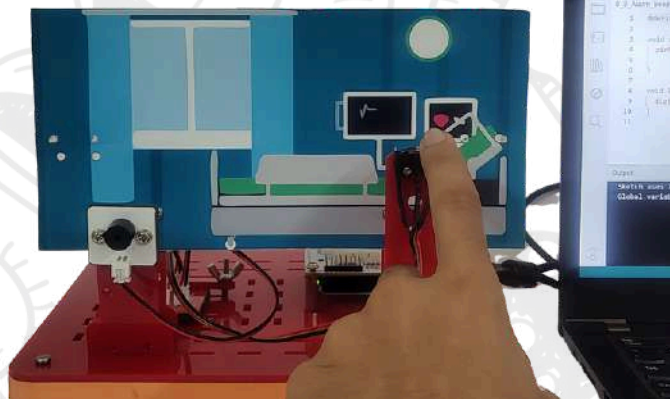
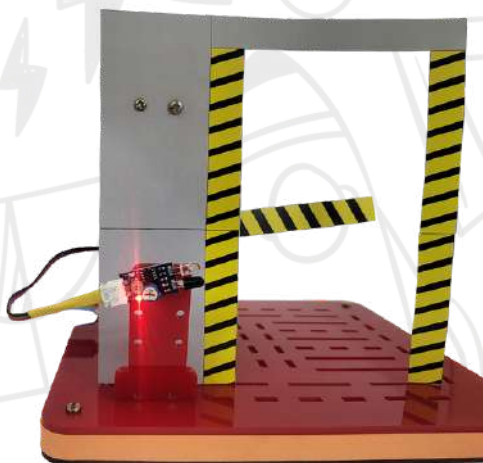


## No Breadboard Mess

Replaces the traditional breadboard setup with a clean, structured interface that enhances the prototyping experience and project durability.



# PRODUCT OUTCOME



**Best Kit for  
Tinkering Lab  
Activities**



# PRODUCT OUTCOME

**Obstacle  
Avoiding  
Robot**



**Edge  
Avoiding  
Robot**



**Light  
Following  
Robot**



**Human  
Following  
Robot**



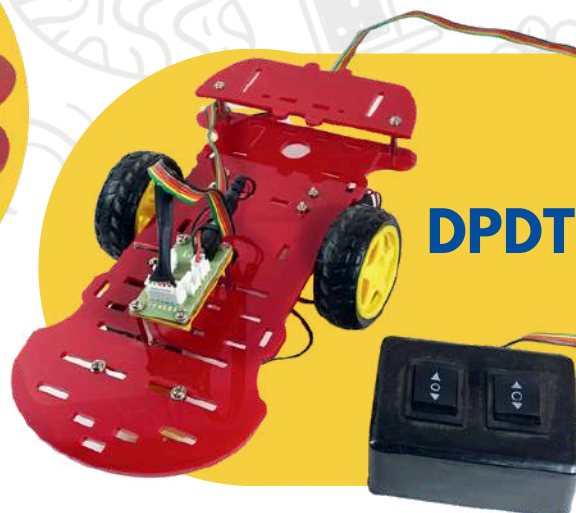
**Line  
Following  
Robot**



**Bluetooth  
Controlled  
Robot**



**DPDT Robot**





# PRODUCT OUTCOME



**Trek Robo**



**Slippy**



**Triky**

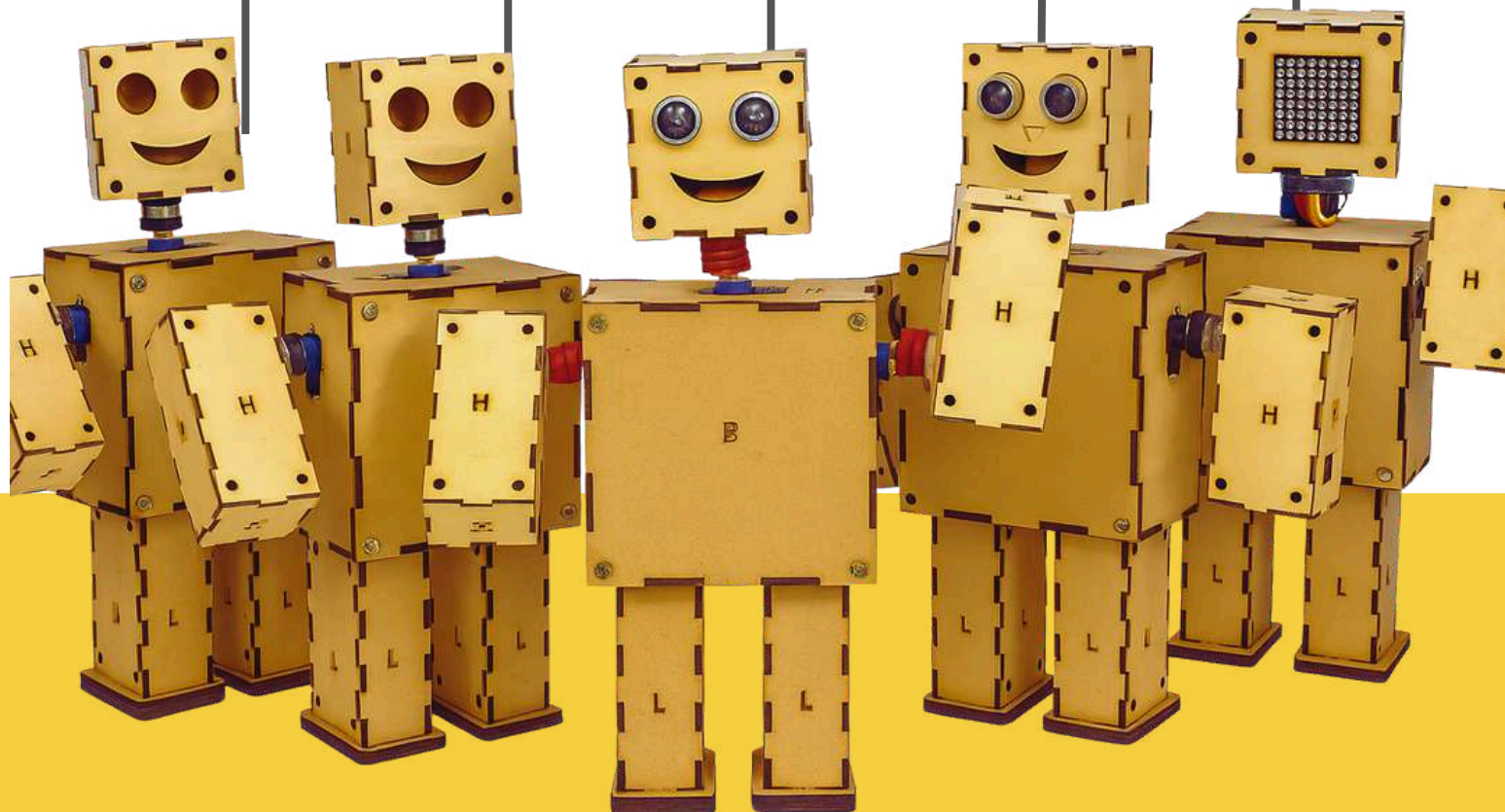
**Dancing  
Robot**

**Don't come  
near me**

**Shy Robot**

**Mist Robo**

**Smiley**



# TRAINING AND DELIVERY

**a. Learning Platform will be provided to every school where all the required content, joining links for sessions, study material, assessments, etc.,**


### Frequently Asked Questions

Tentative Schedule

NOTE: Tentative schedule is subjected to be changed

[Click here for schedule](#)


Hover on the images below and you will find the Next and Previous page buttons on top of the image. Click on these buttons to navigate the FAQ Files



**HOW TO OPEN THE PORTAL AND REGISTER FOR C-STEM Workshops**

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VJ HOW TO OPEN THE PORTAL AND REGISTER FOR PROGRAM



**How to Access C-STEM Sessions & Related Resources**

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How to Access C-STEM Sessions & Related Resources

### School-Registration

Select Region \*

Region

Knowledge Center JNV District \*

Select School Name

Note: "School Name" field below is only for students from associated schools. If you are a student from the parent JNV, you may skip this field.

School Name (For Associated JNVs, Kendriya Vidyalayas, Army Public Schools, and State Govt. schools)

Type the Associated School's Name, Eg. - JNV Jamnagar, KV Khurai

Enter Number of Students attending \*

Note: If individual student attending, enter 1

Choose the Topic \*

Choose session you want to watch

Mode of attending session/Quiz \*

Choose your mode

[Submit](#)

**b. Content: Content related to the Kit is curated based on the 5E Principle**

SOURCES OF LIGHT – TORCH LIGHT ( EXPLORER 1 )

[Home](#)

### Curriculum

Before You Start: Important Guidelines

- [Understanding Explorer Kit](#) [Preview](#) ✓
- [Instructions & Safety: Essential Guidelines](#) [Preview](#) ✓

Torch Light - Explorer

- [Objectives](#) [Preview](#) ✓
- [Engage : Light](#) [Preview](#) ✓





# **PROGRAM EXECUTION – WORKFLOW**

## **1. User friendly Tech lab setup**

**Simplified Tech kits for IoT, Automation and Robotics**

## **2. Coding (Both Syntax & Block based)**

**5E methodology to introduce programming**

## **3. Project Building using Tempates & Structure**

**Structures and templates for project prototyping**

## **4. Tinkering Lab for Skill development**

**Design Lab and project building tools for project building**

## **5. Design Thinking Workshops**

**Approach to learn problem discovery**

## **6. Learning Management System & Training**

**Customised Curriculum delivered grade-wise through LMS**

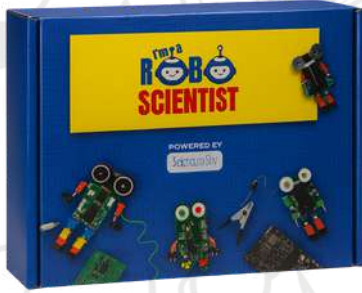
## **7. Creative Ideation**

**Community problem solving with kiddo engineering skills**

## **8. Hackathon and Showcase**

**Project Showcase, Exhibition and Certification**

# PROGRAM EXECUTION – WORKFLOW



**Hassle Free  
Lab tools and Kits**



**Tech Know-How**



**Problem Discovery  
workshop**



**Design thinking  
Methods**



**Hands-On Skills**



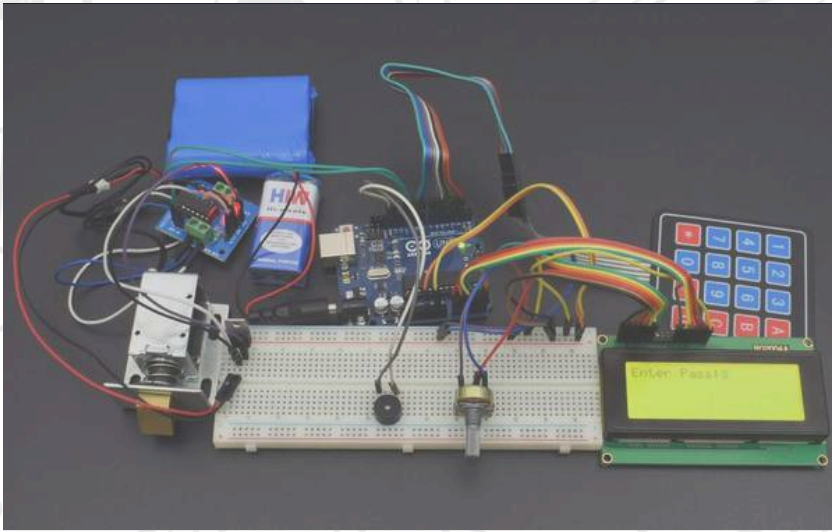
**Creative Ideation**

**Community problem solving  
with innovations**

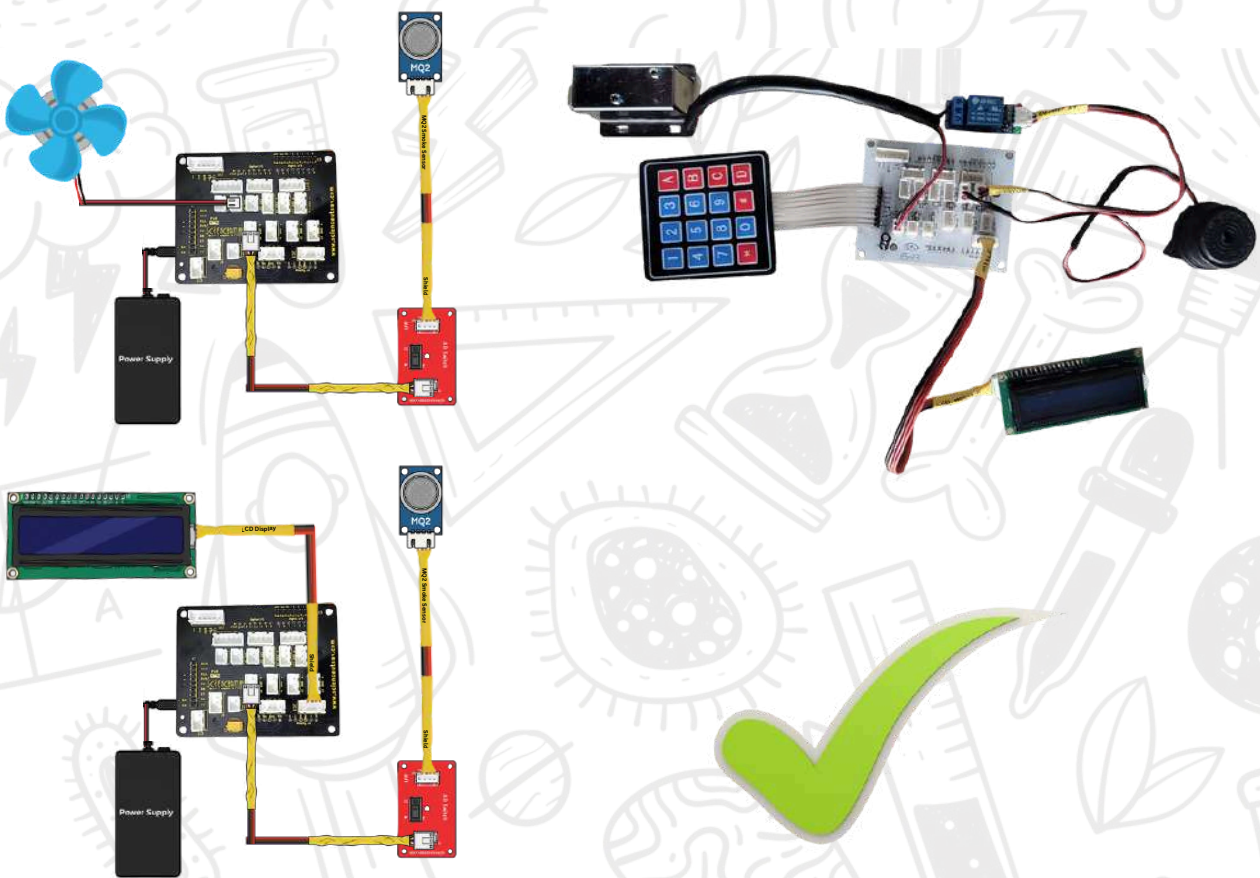


# "HASSLE-FREE INNOVATION"

➤ **Usual way** of connecting components to build a project



➤ **Effortless way** to connect parts and build with the I'm a RoboScientist Kit



**Connection made easy using RMC based plug and play components**

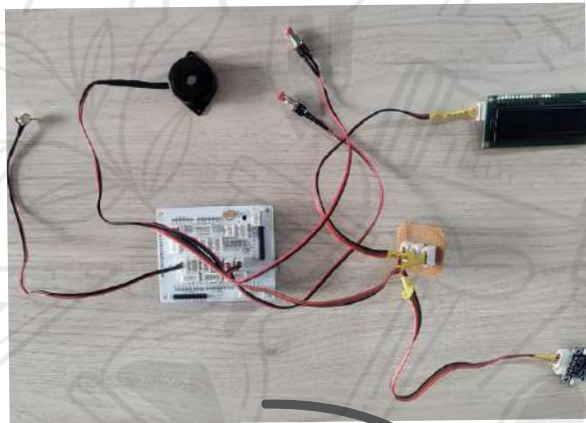
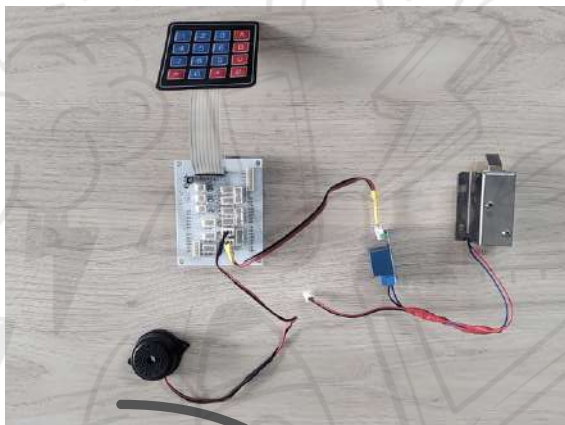


# THINK-TINKER-TRANSFORM

**From ideas to innovations  
Students tackle real problems**



**Market ready prototypes to solve realtime  
community problems !!**



**Prototype  
to  
Product**





# USP OF ROBOSCIENTIST

Inhouse  
**manufacturing**

**15 years of legacy** in creative  
pedagogy both in STEM and  
Robotics

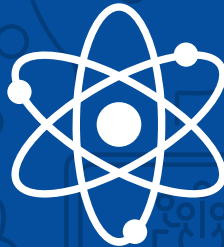
Inhouse design team to cater  
**customized** kits for your  
curriculum

Up to **50%** off for the schools  
for the wholesale supply

Gradewide curriculum  
with **200+** STEM kits

Supply to **350+**  
schools every year

# THANK YOU



**WE DON'T JUST TEACH SCIENCE.  
WE LET KIDS TOUCH IT, BUILD IT,  
AND OWN IT.**



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