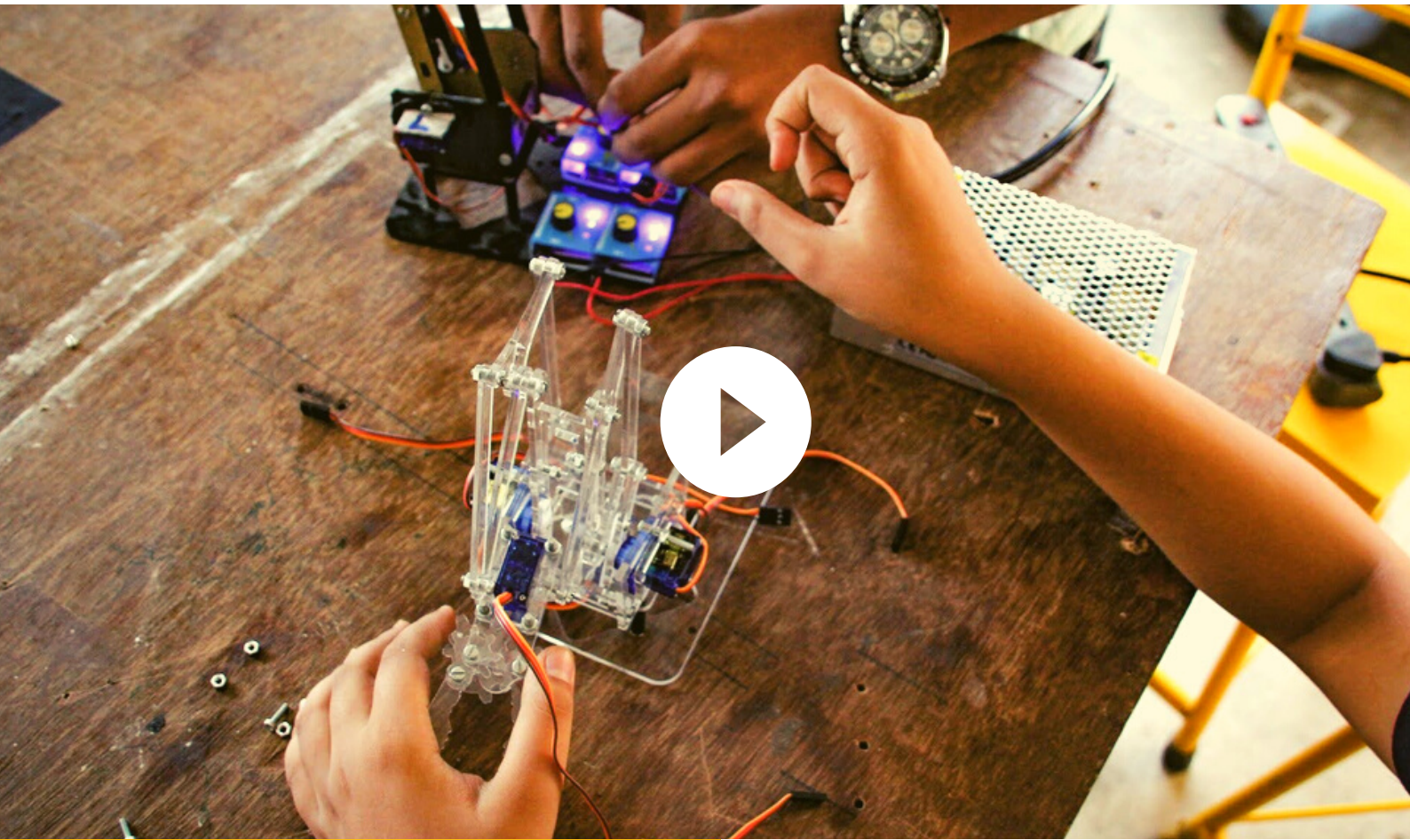


BUILD ROBOTS THAT MATTER

ELECTRONICS & ROBOTICS ONLINE WORKSHOP
SUMMER 2022





MAKE. BREAK. CREATE.

Enter the world of Electronics and Robotics by building a robot with a use case that aligns to UN Sustainable Development Goal 12 - Responsible Consumption & Production.



6 - 16 July 2022 (Sunday Off)



4: 30 pm - 7:30 pm IST



Grade 8-12 | Age 13-17



Deadline I: 15th May 22
Deadline II: 30th June 22



INR 50,000 (Inclusive of GST)



Certificate of Completion by
Maker's Asylum

[Apply Now](#)

PROGRAM HIGHLIGHTS



**Build Innovative Products
& Find Solutions to World
Problems**



**Explore the Maker
Mindset & Build a Robotic
Arm**



**Develop skills in Electronics,
Robotics & Programming**



**Avail free Tool Kit
to Build your Robot**

GET YOUR HANDS DIRTY & MAKE YOUR IDEAS HAPPEN!

This is a 10-days long program that helps students explore Electronics and Robotics and integrate that with the world of sustainability!

Under the guidance of the mentors, students will learn the basics of electronics and robotics, circuits, Arduino programming, and sensor interfacing with Arduino. Students will work on projects like Circuit prototyping on a breadboard and Intruder Alarm. In the final project, students apply the skills learned by assembling and programming a robotic arm with a use case that aligns to UN SDG 12 - Responsible Consumption and Production.

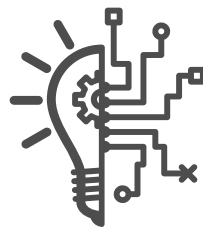


PROGRAM PROCESS

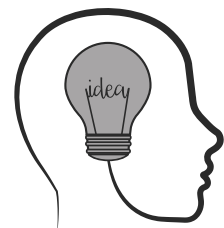
An experiential learning journey where students are taken through the process of design thinking, frugal innovation and rapid prototyping and get access to a global network of mentors to go from ideation to making their solutions!



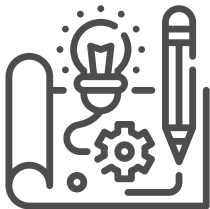
Intro to SDG 12 & Global Robotics Industry



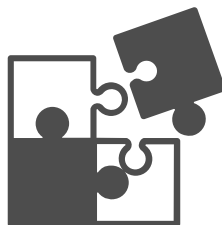
Skill Building



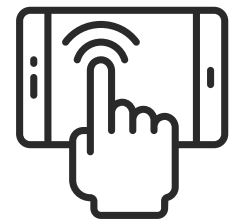
Design Thinking



Prototyping



Solution Brainstorming



Interaction Design



Pitching

DAY-WISE AGENDA

Introduction

01

- Context setting to SDG 12
- What is happening in the robotics world
- Meet your team

Skill Building & Design Thinking

02

- Types of robots & their application
- Build your kits
- Learning Reflection

Programming & Reflection

03/04

- Arduino and Programming
- Learning Reflection

Problem framing & Ideation

05

- Identify a problem statement for the robot
- Problem statement review with team
- Learning Reflection

Interaction Design

06

- Interaction design
- User testing plan
- Learning Reflection

Prototyping

07

- Solution Brainstorming
- Paper Prototyping
- Learning Reflection & Downloading Softwares

Mentor Intervention

08

- Introduction to Mentors
- Mentoring session with experts in teams

Pitching & Story Telling

09

- How to pitch effectively
- Peer Pitching in Teams

Open House

10

- Pitch Practice
- Final Presentation
- Advisory Talks and Closing Ceremony



YOUR MENTOR

VAIBHAV CHHABRA

Founder at Maker's Asylum

Vaibhav is a Mechanical engineer by training, a Maker by passion, and an Educator by choice! A graduate of Boston University, Vaibhav spent the first 2 years of his career at EyeNetra, a startup from MIT Media Labs, building portable Virtual Reality based eye diagnostic devices. While working with the rural community in India for the eye diagnostic prototype, Vaibhav founded 'Makers Asylum'. Vaibhav essentially coupled his degree with his passion to create the first community Makerspace in India. The key focus of this space has been to share the joy of making. He is also the Chair for innovation and entrepreneurship at Young Indians – Confederation of Indian Industries, a Global Shaper at the World Economic Forum, and part of the French President's Young Leaders Club.

MAKER'S ASYLUM

Fuelled by Passion, Hard work, and Maker Mindset to
Make, Break, and Create solutions

Maker's Asylum is India's first community open Makerspace in Goa that allows collaborative ideation & making. They bring interdisciplinary interventions across STEAM to foster a culture of innovation, exploration, and lifelong learning via digital and physical formats. They empower people by providing them the confidence, tools, knowledge, space, and communities they need to change the world and become globally-conscious problem-solvers.



ALUMNI SPEAK



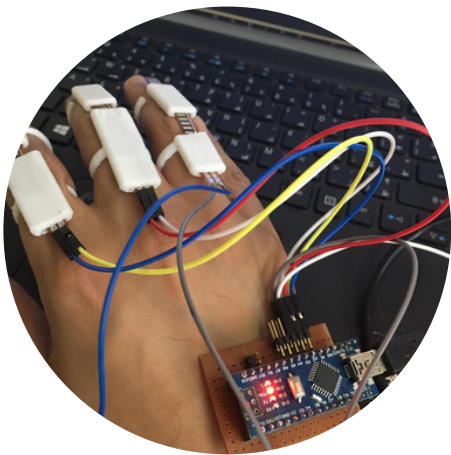
NAKUL KHAMBATI

Dhirubhai Ambani International
School Mumbai

"Surrounded by so many talented and creative entrepreneurs, I was inspired to turn an idea into a product. This led to the birth of our prototype mobile app, Bougebeta. As I worked alongside various people from different backgrounds, I realized that hard work and passion are enough to change the world. "

PROJECTS THAT HAVE COME OUT OF MAKER'S ASYLUM

Students are introduced to fundamental technology skills to help them visualize better and then work on a problem statement to go from ideation to making a tangible prototype of the solution using the skills they have gained. Take a sneak peek into some of our past projects.



MAKE IT LOUD

SDG 4 : Quality Education

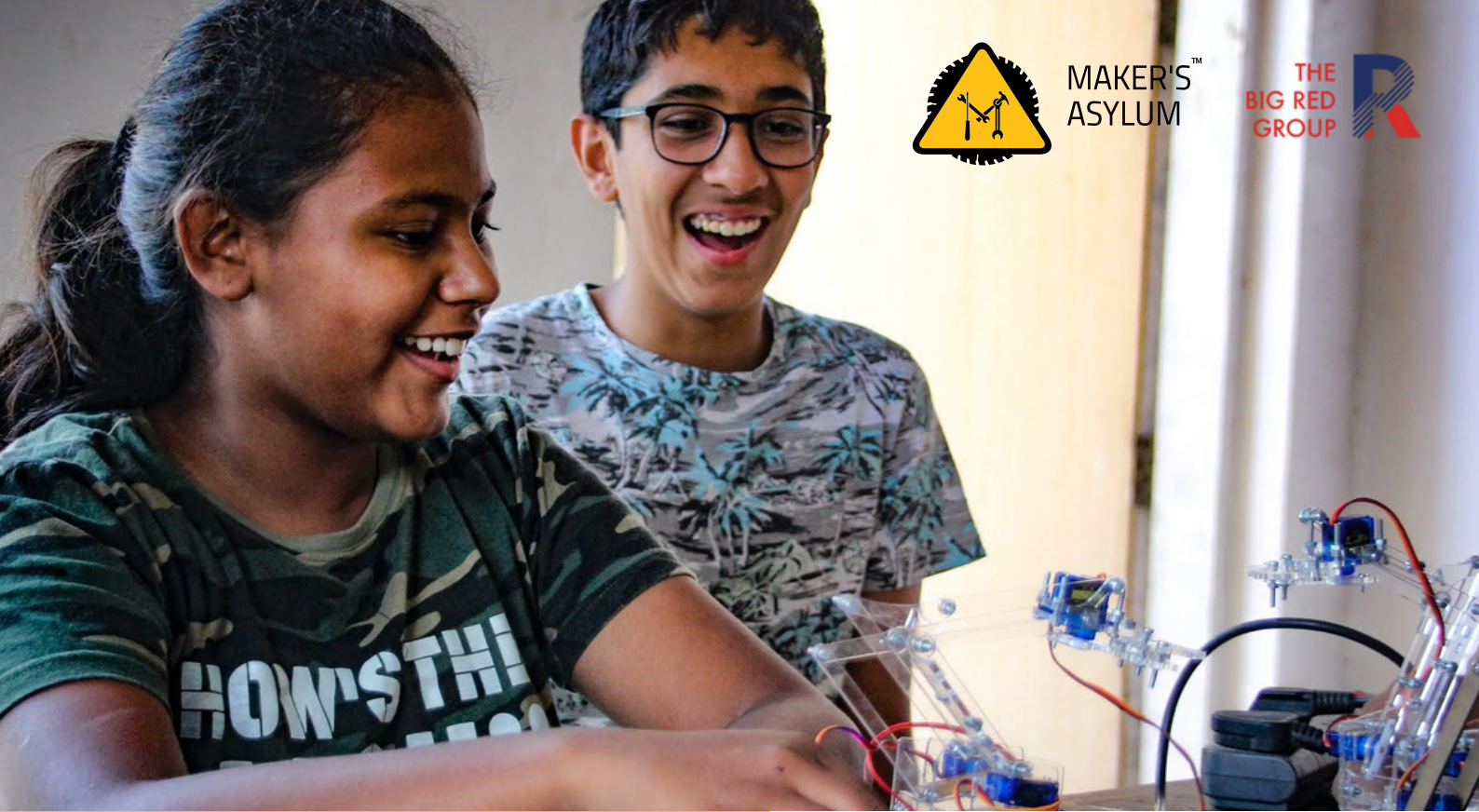
A hand designed for students with Speech Difficulties to express themselves using Sign Language in their class / school.



CHARGION

SDG 12 : Responsible Consumption and Production

“Charglon” prolongs the mobile device’s battery life and saves electricity due to Energy leaks when the device overcharges.



MAKER'S™
ASYLUM



WHO SHOULD PARTICIPATE?

- You want to build robots but don't know where and how to start
- Instead of lectures, you want to work on a project & get hands-on-learning experience
- You want to create a positive social impact and find solutions to problems
- You want to learn about robotics but have no prior knowledge

BE PART OF A
TRIBE OF YOUNG
BUILDERS &
CHANGEMAKERS

[Join Now](#)