



# MECH-IT-EASY

"Making STEM learning easy"



**Nepal's First 3D Printing STEM Program**  
for Grades 6 to 10

**Designed by Mechanical Engineers. Built for Nepali Schools.**

✓ Curriculum Aligned

✓ Engineer Designed

✓ Made for Nepal

# THE PROBLEM

## Students Memorize Science. They Never Experience It.

### No hands-on learning

Students learn theory but never apply it to real objects or machines.

### Curriculum is abstract

Pulleys, gears, and circuits stay on paper — never in students' hands.

### Skills gap at graduation

Students graduate without the practical skills Nepal's economy needs.



# OUR SOLUTION

## We Make Science Something You Can Hold.

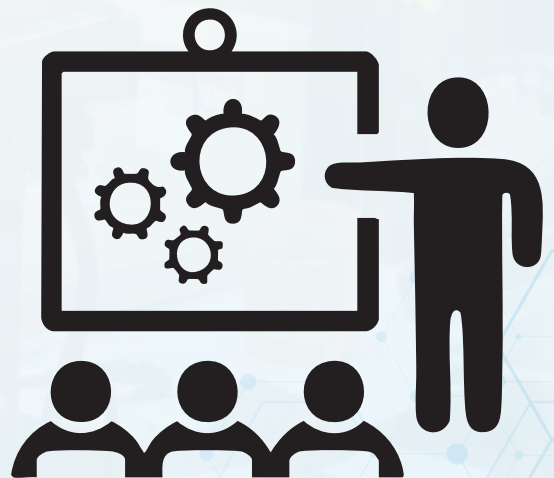
### Curriculum Aligned

Every kit maps exactly to Nepal's CDC science syllabus for Grades 6–10.

### Support Backed

Spare parts, teacher training, and 3-month post-setup support included.

## MECH-IT-EASY kits



### Engineer Designed

Built by mechanical engineers — not imported toys adapted for Nepal.

# WHAT WE OFFER

## Our STEM Kits

Two precision-engineered kits. Aligned to Nepal's CDC curriculum. Built to last in a classroom.

### KIT 01

#### Electromagnetism Kit

Grade 8–9

##### WHAT STUDENTS DO:

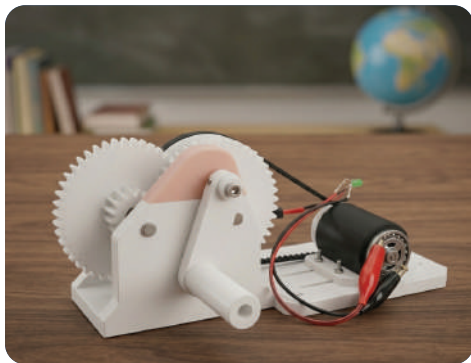
Build a working motor, rotate a hand-crank to observe electrical and mechanical energy conversion, and test how changing coil turns and magnet count affects motor speed using 3D-printed components assembled by hand.

##### CURRICULUM LINK:

Nepal CDC: Electricity & Magnetism Unit

##### KEY CONCEPTS:

- Energy conversion: electrical to mechanical
- Working principle of an electromagnet
- How motors and generators operate
- Effect of coil turns and magnets on speed



Includes spare parts for components most likely to fail

### KIT 02

#### Mathematics Visualizer Kit

Grade 8–9

##### WHAT STUDENTS DO:

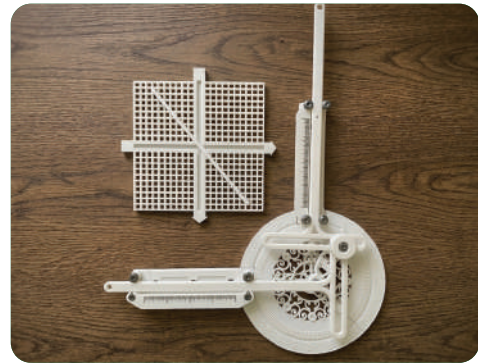
Plot and visualize straight lines in every orientation using a coordinate kit, then rotate a handle on a unit circle model to watch a pointer trace live sine and cosine values from  $0^\circ$  to  $360^\circ$  seeing trigonometry move in real time.

##### CURRICULUM LINK:

Nepal CDC: Coordinate Geometry & Trigonometry Unit

##### KEY CONCEPTS:

- Equation of a straight line and its orientations
- Sine and cosine as rotating values, not static numbers
- Relationship between angle and trigonometric output
- Visual and physical understanding of abstract functions



Includes spare parts for components most likely to fail

# OUR PLANS

## Choose Your Plan

Three ways to bring Mech-It-Easy into your school. Each plan builds on the previous one.

### MOST POPULAR

#### PLAN 1 — STARTER Kits Only

5 sets — covers one full class

- ▶ Class Room Science & Maths Kit Bundle (10 Kits total)
- ▶ Teaching manuals for teachers
- ▶ Spare parts included per set
- ▶ Annual refill available @ 15% Discounted Rate)

**Best for: Schools wanting to**

- ▶ explore hands-on STEM with minimal commitment.



Get Started

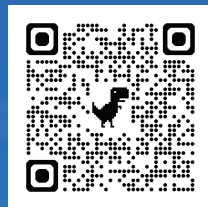
#### PLAN 2 — LAB SETUP Kits + Mech-It-Easy Lab

One-time complete setup

- ▶ Everything in Starter Plan
- ▶ FDM 3D Printer (Bambulab A1 Mini) (Other Options also available)
- ▶ 5 kg PLA Filament starter stock
- ▶ Hand tools (calipers, pliers, screwdrivers, hex keys)
- ▶ Safety kit (goggles, extinguisher)
- ▶ Branded Lab Signboard
- ▶ 3-day teacher training workshop

**Warranty & Support**

Official Bambulab's Warranty



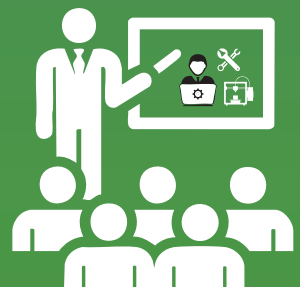
Set Up Your Lab

#### PLAN 3 — FULL PROGRAM Kits + Lab + Teaching

Complete 3-month program

- ▶ Everything in Lab Setup Plan
- ▶ 3-month Grade 9 teaching contract
- ▶ 2 visits per week per group
- ▶ 2 hours per session
- ▶ Delivered by our engineers
- ▶ Student completion certificates
- ▶ End-of-program showcase event

**Best for: Schools wanting a fully managed digital fabrication program — no extra hiring needed.**



Start the Program

# PLAN 2 & 3 DETAIL

## Your School's Own Digital Fabrication Space

Set up once. Used every week. A permanent edge for your students.



### FDM 3D Printer

Students design in TinkerCAD and print real physical objects on the Creality Ender 3D printer.



### Lab Signboard

Branded Mech-It-Easy signboard installed on your lab wall – your school's innovation identity.



### Full Hand Tool Set + Safety Equipment

Screwdrivers, pliers, calipers, hex keys, utility knives, Goggles, fire extinguisher, first aid kit.



### Post-Setup Support

3 months of email and phone support. Annual maintenance package available (NPR 8,000/year).

## Proven Experiences

### Digital Fabrication Lab Setup at Balaju School of Engineering & Technology (BSET)



### 3-Day Teacher Training Included

Printer operation, basic maintenance, sourcing ready-made 3D models online, print settings, and hands-on practice prints.

### Warranty & Support

Full manufacturer warranty and support by Bambu Lab, plus two complimentary on-site service visits per year by our team.

# PLAN 3 DETAIL

## The 3-Month Grade 9 Teaching Program

A fully managed digital fabrication curriculum delivered by mechanical engineers at your school.

### MONTH 1

#### TinkerCAD/ Fusion 360 Foundations

- Interface navigation
- Basic 3D shapes
- Dimensioning objects
- First print session



### MONTH 2

#### Applied Design Challenges

- Design linked to curriculum
- Print and test models
- Iterate and improve
- Measure real results



### MONTH 3

#### Student Project Sprint

- Each student designs a project
- Prints their design
- Presents to the class
- Mini showcase event



#### Why Grade 9?

We specifically work with Grade 9 not Grade 10. Grade 10 students face the SEE board exam, and we respect that their academic schedule cannot be disrupted. Grade 9 students are mature enough to grasp 3D design and free to fully engage with the program.



Session Structure	Details
Target Students	Grade 9
Group Structure	Group A and Group B
Visits Per Week	2 visits (one day per group)
Session Duration	2 hours per session
Monthly Teaching Hours	16 hours per month
Program Duration	3 months
Software Used	TinkerCAD/Fusion 360 (3D design) and Bambustudio(print preparation) — both free
What Students Take Home	A physical 3D-printed object they designed themselves
Delivered By	Our mechanical engineering founders — not outsourced

All participating students receive an Aakaran Tech Certificate of Completion at the end of the program.

**Note:** Session structure, group size, and teaching hours are flexible and will be arranged in coordination with the school based on available time slots and student numbers.

# WHO WE ARE

## Built by Engineers, For Your Students.

Three mechanical engineers who believe Nepali students deserve to build, not just memorize.



**Founder 1**  
Mechanical Engineer

*"I believe science should be experienced, not just memorized, that is what turns fear into curiosity."*



**Founder 2**  
Mechanical Engineer

*"Mech-It-Easy empowers today's students to become tomorrow's problem solvers."*



**Founder 3**  
Mechanical Engineer

*"3D printing is the bridge between imagination and reality. Every student deserves that bridge."*



### Curriculum Aligned

Every kit maps to Nepal's CDC science syllabus for Grades 6–10.



### Engineer Designed

Not imported kits. Designed specifically for Nepali classrooms by mechanical engineers.



### Made for Nepal

We understand your school's schedule, your students, and your budget.



### Support Backed

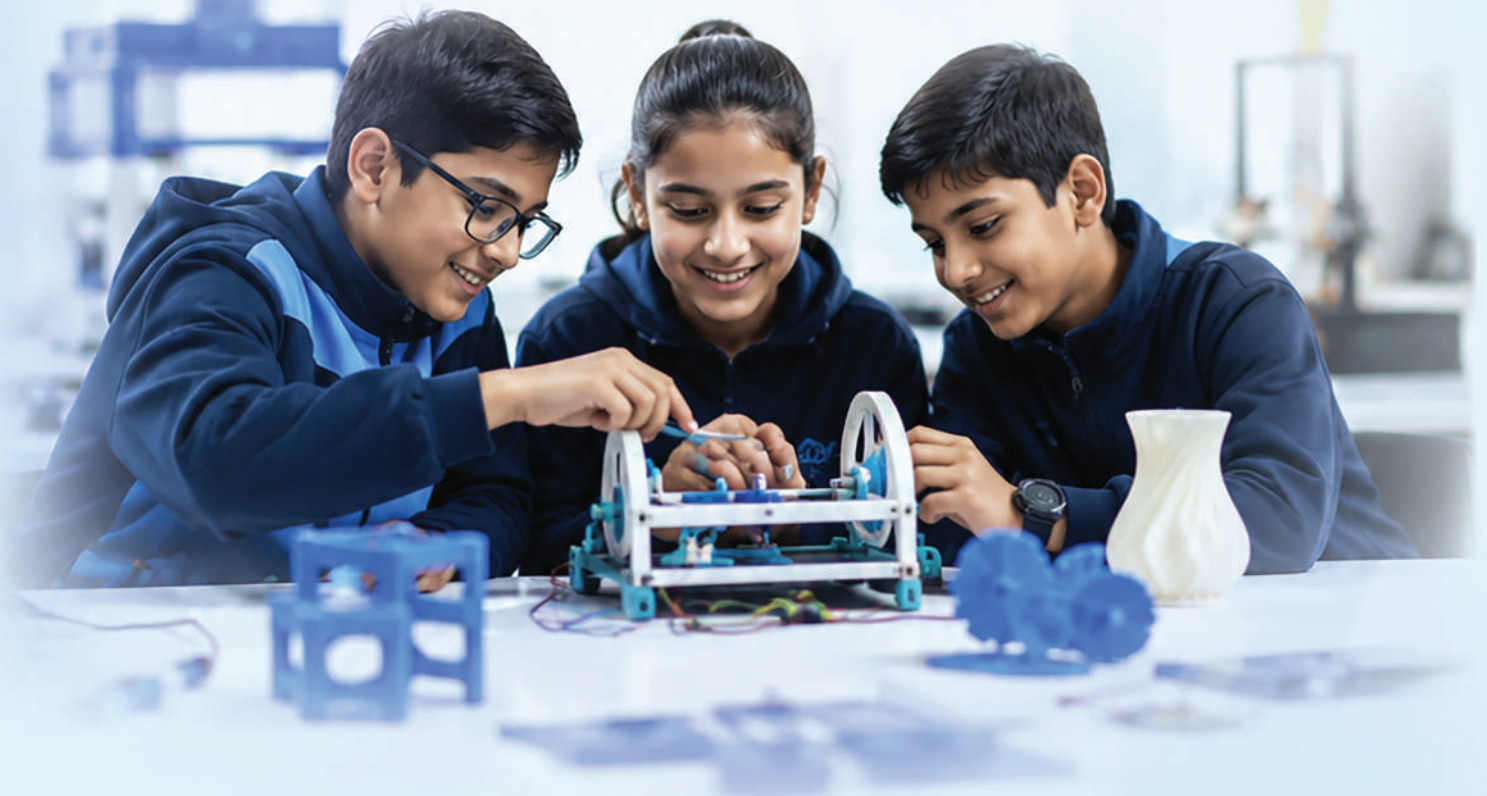
Spare parts, training, and 3 months of post-setup support with every plan.

## Let Your Students Try It First.

We offer a FREE 30-minute demo session at your school. Let the students use the kit and see it work & learn Science & Maths Concepts. No commitment required.

# “Where Students Learn by **Creating**”

Empowering young minds through  
hands-on STEM Learning and innovation.



*Let's build the future, together.*



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