Unbox Tinkering Teacher Training Programme

'Unbox Tinkering' – Atal Tinkering Labs Teachers' Training Atal Tinkering Lab is Atal Innovation Mission (AIM), NITI Aayog's flagship initiative to promote innovation and creativity amongst high school students. The Government of India is establishing Atal Tinkering Labs in schools which are open innovation workspaces to introduce students to latest technologies of 3D printing, IoT, microelectronics, robotics, drones and 21st century skills of collaboration, critical thinking, design thinking, ethical leadership and so on. Tinkering is a new concept in India, and it requires continuous handholding facilitated by a sustained engagement with subject experts. In this regard, AIM, NITI Aayog keeps organizing regular ATL teacher training programs in different states of India, in association with several partners, where selected school teachers are trained on the philosophy of ATL and latest technology tools.

The training programs include a series of discussion and simulation sessions which allow interactive and open learning and exchange of new ideas. AIM, NITI Aayog has created a standard teacher training agenda for all ATLs. It is advised that each training session may include 50 teachers, and shall be facilitated by 3-4 trainers, to ensure a seamless experience. The training programs are organized through virtual sessions along with self-learning modules to enable familiarization of the ATL facility to the teachers. The detailed agenda is as follows:

Mode	Topics Covered	Delivery Mode	Duration
Live Training Day 1	1. Introduction of trainers and teachers 2. ATL Introduction 3. How to complete the course, Login Procedure and status procedure 4. Tinker Circuit	Live webinar/training through online platform	1hr 30 mins 3:00 - 4:30
Self Learning Day1	Module 1 : ATL Introduction and important components in the website Module 2: Basics of Electronics Module 3: Sensors and Actuators	Online resource	
Live Training Day 2	1. Clarification of doubts on module 1,2,3 2. Introduction to computational thinking, arduino and Interface	Live webinar/training through online platform	1hr 30 mins 3:00 - 4:30
Self Learning Day 2	Module 4: Computational Thinking Module 5: Arduino Intro Module 6 Arduino IDE Interface	Online Resource	
Live Training Day 3	1. Clarification of doubts on Module 4,5,6 2. Arduino basics - Coding basics 3. New Modules Available on AIM	Live webinar/training through online platform	1hr 30 mins 3:00 - 4:30
Self Learning Day 3	Module 6: Arduino Basics Module 7: Safety and Security	Online resource	
Live Training day 4	1. Clarification of doubts on Module 7,8 2. 3D Printer working and tools 3. Deisgn thinking	Live webinar/training through online platform	1hr 30 mins 3:00 - 4:30
Self Learning Day 4	Module 8: Design Thinking Intro Module 9: Tools Module 10: 3D Printer	Online resource	
Live Training Day 5	1. Clarification of doubts on Module 9,10 2. Raspberry Pi 3. Design thinking Continuation 4. Introduction to Hackathon and importance of Business Pitch	Live webinar/training through online platform	1hr 30 mins 3:00 - 4:30
Self Learning Day 5	Module11: Design thinking - Prototype Module 12: Raspberry PI Module 13: Business Pitch	Online resource	
Live Training Day 6	1. Guide Teacher on Hackathon / Prototyping	Live webinar/training through online platform	1hr 30 mins 3:00 - 4:30
Closing Ceremony	1. Certification for teachers	Live webinar/training through online platform	45 Mins