

## **Report on the "Drone Manufacturing Workshop" at The Somaiya School**

The workshop on Drone Manufacturing Workshop was conducted under the supervision of Dr. Ninad Mehendale, K. J. Somaiya College of Engineering. The workshop aimed to teach students about drone manufacturing, building, and operations. The workshop was held on 25th February 2023 on our college campus at The Somaiya School.

### **1 Objectives of the Drone Manufacturing Workshop**

- To provide hands-on experience with Drone building
- Foster problem-solving skills as students follow step-by-step instructions to construct their own functional drones.
- Encourage creativity and innovation by providing opportunities for customization and personalization of the finished drones.

### **2 Outcomes of the Drone Manufacturing Workshop**

- **Enhanced Problem-Solving Skills and Teamwork:** Through hands-on experience, participants confidently assembled drones, engaging in critical thinking and problem-solving. Collaborative activities emphasized teamwork, enabling students to communicate effectively and pool their skills.
- **Grasping the Basics of Drone Technology:** The workshop effectively introduced young minds to the fundamentals of drone technology. Students acquired knowledge of essential components, aerodynamics, and flight principles, laying a strong foundation for further exploration in STEM fields.
- **Aerial Challenges for Enhanced Spatial Awareness:** Aerial challenges and flight exercises provided a thrilling experience for the kids. Engaging in piloting their drones enhanced their spatial awareness, motor skills, and precision control.
- **Sense of Achievement and Self-Confidence:** Upon completing the drone assembly and successfully flying their creations, students experienced a profound sense of accomplishment. This newfound confidence boosted their self-esteem and belief in their abilities.
- **Inspiring Future Engineers and Innovators:** The workshop's hands-on nature and exposure to technology ignited a passion for innovation and engineering among the participants. Many expressed a desire to pursue careers in the fields of robotics, aerospace, and electronics.

### 3 Financial Details

- There were a total of 11 registrations amongst which 9 were with kit and 2 were without kit.

Cost of registration of candidate with the kit: INR 4500/-

Cost of registration of candidates without the kit: INR 1500/-

The amount returned to a candidate: INR 4500/- Out of 11 One student did not attend the workshop, so the money was refunded to her, that is INR 4500/- (the student had chosen with kit option).

Total Amount Collected through 11 registrations:  $(9 \times 4500) + (2 \times 1500) - (1 \times 4500) = \text{INR } 39,000/-$

Amount Invested for the purchase of the kits to be distributed to the participants: INR 29,250/-

**Total Profit Earned: INR 9,750/-**

### 4 Future Collaboration

We look forward to the possibility of conducting similar workshops in the future, addressing various emerging technologies and innovations.

Sr. No.	Receipt No.	Merchant ID	Name of Candidates	Registration	Atom Txn. No.	Date	Amount	Mobile No.	Email ID
1.	194818	M-98855-17	JAI MILWANI	With kit	11000154226745	2/20/2023	4,500.00	9773302202	jeetumilwani@gmail.com
2.	194830	M-98857-N.A	NEEV PREMAL SHAH	With kit	11000154230981	2/20/2023	4,500.00	9819039595	neev.shah@somaiya.edu
3.	194832	M-98859-9/13	AARAV SHAH	Without kit	11000154249537	2/21/2023	1,500.00	7718801447	aarav.shah@somaiya.edu
4.	194820	M-98861-9A/19	RUDRA PARIKH	With kit	11000154318435	2/21/2023	4,500.00	7506882402	rudra.pankh@somaiya.edu
5.	194833	M-98863-7	SHAIVI AGLAWE	With kit	11000154340217	2/21/2023	4,500.00	9819162254	shaivi.a@somaiya.edu
6.	194822	M-98864-8A-21	KRISHIV ASHOK PATEL	With kit	11000154343961	2/21/2023	4,500.00	9321219813	ash_pat2003@yahoo.co.in
7.	194834	M-98865-N.A.	REEHAN SAMTANI	With kit	11000154350369	2/21/2023	4,500.00	9920082650	mahek1021@gmail.com
8.	194835	M-98866-16	DIVIJ KALRA	With kit	11000154357574	2/21/2023	4,500.00	8451941944	divij.kalra@somaiya.edu
9.	194836	M-98867-NA	ANSHUL PATIL	With kit	11000154369185	2/22/2023	4,500.00	9820230541	Pallavirajesh@yahoo.co.in
10.	194823	M-98868-Na	HEET ARPAN TURAKHIA	With kit	11000154375997	2/22/2023	4,500.00	9821377899	turakhia123@gmail.com
11.	194843	M-98871-19	HRISHIKESH SUBHASH KANEKAR	Without kit	11000154408488	2/22/2023	1,500.00	9819970787	h.kanekar@somaiya.edu
							<b>43,500.00</b>		

Figure 1: Details of Payment

## 5 Glimpses of the workshop



Figure 2: Glimpse of the workshop conducted in The Somaiya School with KJSCE representatives instructing the enrolled students on how to fly the drone that they built themselves.

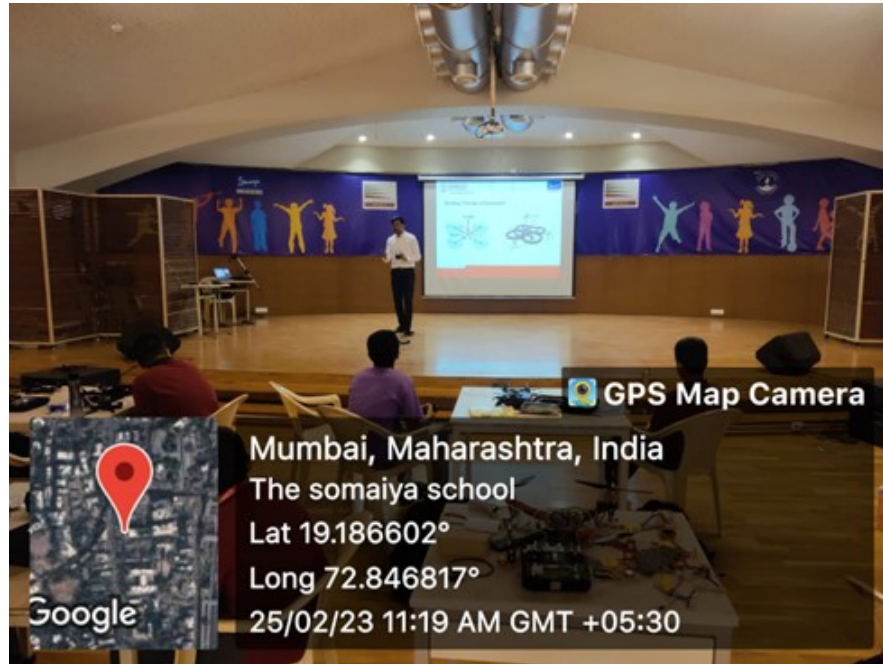


Figure 3: A glimpse of the workshop conducted in The Somaiya School with KJSCE representatives teaching the enrolled students about drone technology.

Sincerely,  
Dr. Ninad Dileep Mehendale,  
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Somaiya Vidyavihar University