5.1.3 The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities 1. Soft skills, 2. Language and communication skills, 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology			
Name of the Capacity Development and Skill Enhancement programme	**Year of implementation**	**Number of students enrolled**	**Name of the agencies/consultants involved with contact details, if any**
One Day Hands-on Workshop on "Arduino Based Robotics & Automation"	1 June 2023	50	Dolphin Labs, Pune

Dr. S. R. Desai

Head, Automobile Engg. Dept.

Kasegaon Education Society's

Rajarambapu Institute of Technology, Rajaramnagar

Tal. Wala, Dist. Sangli

Report of Workshop

In Association with

Dolphin Labs, Pune

One Day Hands-on Workshop

on

"Arduino Based Robotics and Automation"

1st June 2023

A Detailed Report on One Day Hands-on Workshop

Title : Arduino Based Robotics & Automation

Category : 12th Standard Students

Date : Thursday, 1st June 2023

No. of Resource Persons : 3

No. of Participants : 60

Coordinator : Prof. Dr. S. R. Kumbhar

Workshop Objectives:

1. To promote B. Tech. (Robotics and Automation)
2. To familiarize students with hands-on experiences, the importance and scope of Robotics and Automation.

Inaugural Function:

The esteemed personalities were present on the inauguration of the workshop.

- Chief Guest Mr. Chittaranjan Mahajan, Director, Dolphin Labs, Pune
- Prof. Dr. Kalkhamkar, Head, Electrical Engg. Dept., RIT
- Prof. Dr. Mrs. S. S. More, Dr. S.R. Kumbhar and Prof. P. S. Ghatage

Session - I:

Mr. Chittaranjan Mahajan explained the basics of Robotics and Automation, followed by detailed explanation of Arduino, its programming etc.

He showcased the capabilities and potential of Arduino-based robotics & automation, and inspired participants and further ignited their passion in the exciting field of Robotics & Automation. He provided hands-on experience in building and programming Arduino-based simple robots. Participants got an opportunity to interact with robotics kits and experience the thrill of programming robots.

He also explained robot parts, robot assembly, various types of robots, line follower; object follower etc. and demonstrated various robotics systems with the help of simple examples.

Session - II:

After lunch he explained Coding and Arduino Programming, Robot Programming, Sensors-based Project Building, Android App Based Automation etc.

Session - III:

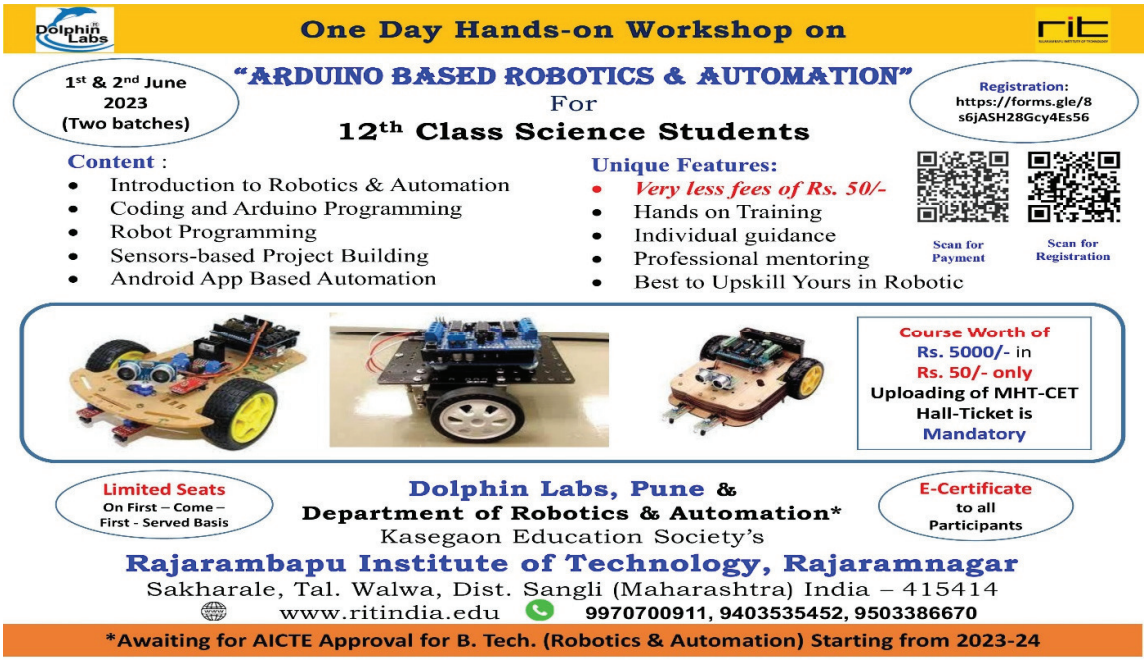
Prof. Dr. S. R. Kumbhar and Prof. Dr. Mrs. S. S. More briefed about the opportunities in Robotics and Automation and shown some videos with regard to various applications.

Finally, the visit of all students was made to AICTE Idea Lab., Drone demonstrations, and Central Library.

Workshop Schedule

Time	Activity	Venue
9.10 am to 9.40 am	Registration of Participants	Video Conference Hall
9.41 am to 9.45 am	Inauguration of Workshop	
9.46 am to 9.50 am	Preamble of Workshop – Workshop Coordinator	
9.51 am to 10.00 am	Address by Chief Guest	
10.00 am to 1 pm	Session by Mr. Chittaranjan Mahajan, Dolphin Labs, Pune, with Hands-on Exercises • Introduction to Robotics & Automation • Coding and Arduino Programming • Robot Programming	EEDP Lab.
2.00 pm to 4.00 pm	Session by Mr. Chittaranjan Mahajan, Dolphin Labs, Pune, with Hands-on Exercises • Sensors-based Project Building • Android App Based Automation Session by Prof. Dr. S. R. Kumbhar & Prof. Dr. Mrs. Supriya S. More • Opportunities in Robotics & Automation • Visit to RIT Laboratories	Video Conference Hall
4.00 pm to 5.00 pm	Visit to RIT Laboratories	

Workshop Brochure



List of Participants Registered

Rajarambapu Institute of Technology, Rajaramnagar
(An Autonomous Institute affiliated to Shivaji University, Kolhapur)
Department of Robotics & Automation In Association with **Dolphin Labs, Pune**

One Day Hands-on Workshop on "Arduino Based Robotics & Automation"
(For 12th Standard Students)
Day & Date : Thursday, 1st June 2023

REGISTRATION DETAILS

Sr. No.	Name of Student	Name and Address of College / School	Name of Native Place	Mobile Number	Email ID	Registration Fees Paid	Signature
1.	Sanket Uttam Khot	K V 3- EME Centre Bairagarh, Dt. Bhopal, MP	Manikwadi	7976266571	sanketkhot2505@gmail.com	Yes	
2.	Riddhita Raghunath Tingare	Samaj Vikas Vidyalaya, Sagaon	Sarud	8087101798	riddhitatingare17@gmail.com	Yes	
3.	Gavade Samarth Jayakar	K.B.P. College, Islampur	Islampur	9657052242	gavadesamarth123@gmail.com	Yes	
4.	Rajdeep Yuvraj Nikam	Kirloskar Junior College, Kirloskarwadi	Takari	7249579422	nikamrajdeep70@gmail.com	Yes	
5.	Harshad Ashok Lohar	K.B.P. College, Islampur	Islampur	8956112740	vandanalohar50@gmail.com	Yes	
6.	Ritesh Vinayak Jambhale	K.B.P. College, Islampur	Islampur	7972294897	riteshjambhale2005@gmail.com	Yes	
7.	Madhura Rahul Londhe	K.B.P. College, Islampur	Islampur	8830234741	londherahul051@gmail.com	Yes	
8.	Amulya Vaiju Kalkhambkar	Annasaheb Dange International School (ADIS), Islampur	Islampur	9422660990	amulya.vsk11@gmail.com	Yes	
9.	Sushil Amit Mane	Sadguru Junior College, Islampur	Sangli	9765586064	amitmane1974@gmail.com	Yes	
10.	Tambe Akshada	Sunpharma Highschool, Ahmadnagar	Borgaon	9923050540	tbandopant@gmail.com	Yes	NO
11.	Ritesh Janardan Paymal	Yashwant Junior College, Kodoli	Chikhalwadi, Tal.- Shirala	7066099323	riteshpaymalo5@gmail.com	Yes	
12.	Vishwanath Patil	Brilliant Academy and Jr. College, Karad	Karad	9096399679	patilvishwanath066@gmail.com	Yes	NO
13.	Shreyash Sachin Desai	Brilliant Academy and Jr. College, Karad	Goware,Tal.- Karad	7499093656	shreyashdesai1716@gmail.com	Yes	
14.	Rajvardhan Ajitrao Jagtap	Azad Highschool, Kasegaon	Kasegaon	9834384466	rajjagtap20320@gmail.com	Yes	
15.	Prachi Sudhakar Dodke	K.B.P. College, Islampur	Islampur	8010476546	dodkeprashant123@gmail.com	Yes	
16.	Navanath	KBPJR College, Nerle	Nerle	7387013216	navanathsuryawanshi7@gmail.com	Yes	
17.	Aditya Adhikaro Thorat	Brilliant Academy and Jr. College, Karad	Ond, Karad	9975874764	adityathorat.2005@gmail.com	Yes	
18.	Sanket Mahesh Patil	K.B.P. College, Islampur	Islampur	8421187757	Patilsanket9533@gmail.com	Yes	
19.	Akash Vijay Patil	K.B.P. College, Islampur	Islampur	9420946656	akashvijaypatil07@gmail.com	Yes	
20.	Chinmayee Shaktikumar Patil	Anekant English Medium School Jaysingpur	Jaysingpur	9021295604	patilsnehas2708@gmail.com	No	
21.	Prathamesh Bhaskar Disale	Krushna Mahavidyalay Rethare BK	Lavandmachi	8799946061	prathameshdisale560@gmail.com	Yes	
22.	Priti David Chopade	Rajarshi Chhatrapati Shahu College, Kolhapur	Kolhapur	8805505378 9699043227	Bablya9105@gmail.com	Yes	
23.	Atharv Ashwin Chavan	Kirloskar Junior College, Kirloskarwadi	Dudhondi	9764458668	catharv1985@gmail.com	Yes	
24.	Atharv Jayawant Thorat	New English School Nandgaon, Karad	Karad	9422402901	atharvthorat211@gmail.com	Yes	

26.	Mehreen Arif Momin	Azad Chowk, Islampur	Islampur	9421740868	mominmeherin@gmail.com	Yes		
27.	Varad Subhash Vadule	Jath Highschool, Jath	Jath	8805822559	udaypadole@gmail.com	Yes		
28.	Amish Subhash Padole	Jath Highschool, Jath	Jath	9404481683	amishpadole@gmail.com	Yes		
29.	Kavyanjali Kishor Kamble	Aanasaheb Patil Vidyalay, Tisangi, Pandharpur	Sangli	9096971952	kavyanjalikamble29@gmail.com	Yes		
30.	Chinmay Nandkishor Jadhav	Kolhapur	Vashi	9511232350	Nandkishorjadhav800@gamil.com	Yes		
31.	Disha Shivpratap Hambirc	Modern Education Society, Vita	Vita	9960543179		Yes		
32.	Sakshi Prashant Patil	Ligade Patil College, Karad	Karad	9921778513	sarthakpatil119@gmail.com	Yes		
33.	Mehak Dilip Jadhav	B. M. Rote College, Kolhapur	Vita, Sangli	7558581402	mehekjadhav522@gmail.com	Yes		
34.	Amit Ramesh Patil	Shraddha Junior College of Science	Sangli	9011923775	rp942752@gmail.com	Yes		
35.	Ashwini Ramchandra Jankar	Rajashri Chatrapati Shahu College, Kadamwadi, Kolhapur	Kadamwadi Kolhapur	7385171110	ramajankar110@gmail.com	Yes		
36.	Atharv Anand Dubal	Ligade Patil Junior College, Karad	Karad	7385149218	dubalatharv21@gmail.com	Yes		
37.	Shreyas Sanjay Malgoundi	Sambhajirav Mane Girl's High school and Jr College, Rukadi	Yedemachindra	7249335491	shreyasmalgoundi@gmail.com	Yes		
38.	Harshvardhan Patil	Sainik School Satara, Satara	Islampur	7588058795	6276harshvardhanpatil@gmail.com	Yes		
39.	Harshal Uttam Patil	Ligade Patil Junior College, Karad	Islampur	9322125569	harshalpatil9312@gmail.com	Yes		
40.	Sahil Tukaram Patil	A.D.C., Malwadi	Dudhondi	7666434329	sahilpatil8657933899@gmail.c	Yes		

41.	Arjun jayavant Patil	Sanjay Ghodawat	Kolhapur	9960983715	Jayavant.4327@gmail.com	Yes	NO
42.	Prathamesh Raju patil	New English School, Shirala	Bioor Shirala	9699368189		Yes	
43.	Amruta Sandeep Salunkhe	KRP College, Islampur	Kasegaon	7972366322	amrutasalunkhe0505@gmail.com	Yes	
44.	Neha Sachin Dixit	Vidyamandir Jr. Ccollege, Urun Islampur	Urun Islampur	7038521318	nehadixit0810@gmail.com	Yes	
45.	Bhagyashree Ramesh Sawant	Wategaon	Kasegaon	9373262877	sawantbhagu2005@gmail.com	Yes	
46.	Om Jitendra Dhanal	Sambhajirao Mane Junior College, Rukadi	Kolhapur	8459929711	omdhanal80@gmail.com	Yes	
47.	Yash Raut	SGM College, Karad	Islampur	9561612619	yashraut4013@gmail.com	Yes	
48.	Saad Salim Nadaf	Sambhajirao Mane Junior College, Rukadi	Rukadi	7385804244	saadnadaf0088@gmail.com	Yes	NO
49.	Prathamesh Shivaji Mali	Krishna Mahavidalya Rethare Budruk	Lavanmachi	9975903179	Sunnymali303@gmail.com	Yes	
50.	Gayatri Shantanu Ghalsasi	Vidyamandir Junior College, Islampur	Narshingpur	7249435172	gayatrighalsasi251@gmail.com	Yes	G.S Ghalsasi
51.	Sarth Pawar	R.L.PU College, Belgavi	Belgaum	9741331323	sarthpawar8295@gmail.com	Yes	
52.	Om Popat Mali	Abijeet Dada Kadam Jr. College, Palus	Rethare Harnakasha	8668990062	om542058@gmail.com	Yes	
53.	Pranit Pravin Kadam	Swami Ramanand Junior College, Burli	Dudhondi	9130341449	pranitkadam2005@gmail.com	Yes	

K. E. Society's

Rajarambapu Institute of Technology, Rajaramnagar

(An Autonomous Institute affiliated to Shivaji University, Kolhapur)

Department of Robotics & Automation In Association with **Dolphin Labs, Pune**

One Day Hands-on Workshop on "**Arduino Based Robotics & Automation**"

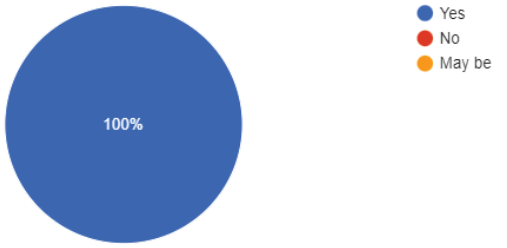
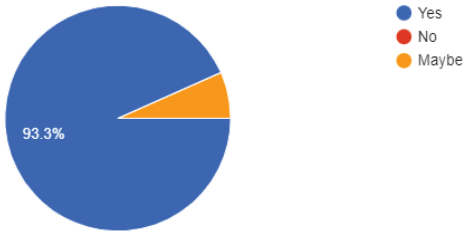
(For 12th Standard Students)

Day & Date : Thursday, 1st June 2023

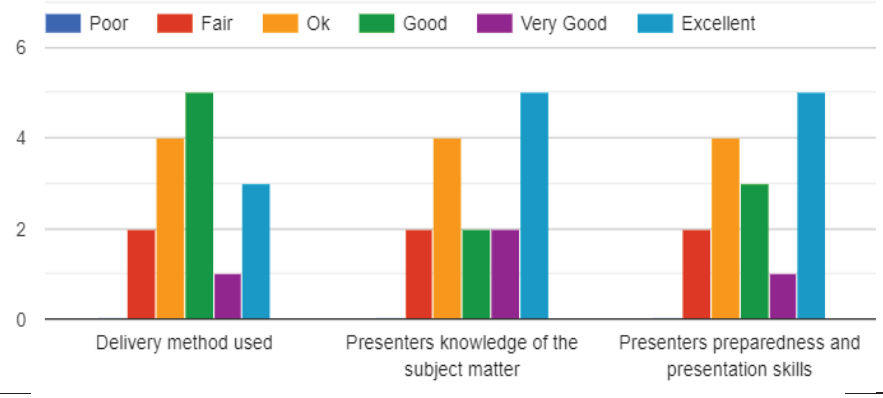
REGISTRATION DETAILS (On-The-Spot)

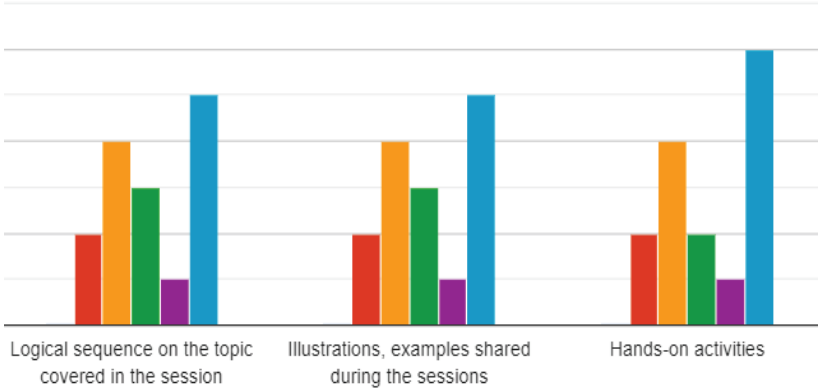
Sr. No.	Name of Student	Name and Address of College / School	Name of Native Place	Mobile Number	Class	Registration Fees	Signature
1	Sankalp Tanaji Tathe	Adarsh Balak Mandir Highschool Islampur	Islampur	9552958734	10	50	
2	Jyotiraditya A. Dhinde	Annasaheb dange	Islampur	9823554891	12th	50	J.A.Dhinde
3	Om C. Joshi	ADIS	Islampur	9834378125	12th	50	
4	Prabhanjan P. Dhotty	ADIS, Islampur	Islampur	9960483540	12th	50	
5	Maya A. Dhavalikar	Priyandeep International School	Islampur	9404743044	6th	50	
6	Shubham Sudhakar Desai	Gat Mane college Rukadi	Rukadi	8421403009	12th	50	
7	Gauri Satyajit Patil	Aadarsh Balak Mandir	Islampur	9970700710	9th	50	G. S. Patil
8	Aditya Vijaykumar Sutar	Adarsh Balak	Islampur	9765850890	10th	50	Online
9	Shraddha Prashant Jadhav	Islampur.	Islampur	9168334740	12th	50	
10	Ketan M. Bhosale	RIT. Islampur	Islampur	7666882925	FY. ME	50	
11	Adwait Kulkarni	SSD GURU	Islampur	8624938578	12th	50	
12	Mane Ayush	Y.C College	Islampur	7666377710	12th	50	

Feedback of Participants

Whether your got acquainted with basics of 'Robotics & Automation"'?	Whether you will comprehend some of the key terms used in "Robotics & Automation"?
	

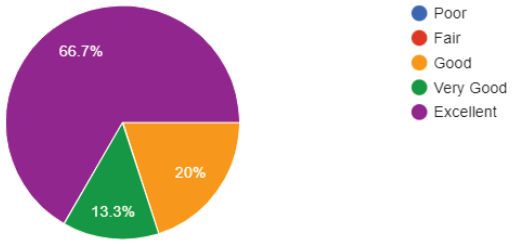
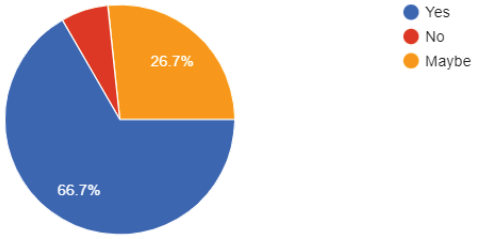
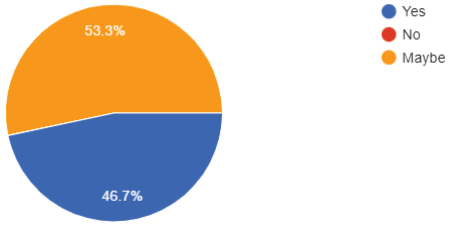
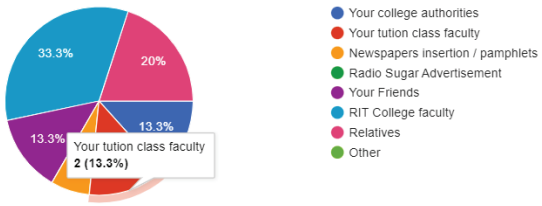
Please rate the sessions conducted in the workshop on following points....





Which activities you liked much during various sessions in the workshop? May elaborate in detail.

Hand on project, Coding, Motions and flame sensing robotics practical was the part which I enjoyed most. It was fun !, Training, Hand on projects, Robotics, Robotic, Starting the robot car, About programming and automation, Nice session, Staff, IR Sensor Robot, Yess. I like it the session must be like the autonomous in various activities.

How you will rate this workshop in overall?	Whether you want to receive more training in this regard?
	
Whether you are interested to join for B. Tech. (Robotics & Automation)?	From where you got the information about this workshop?
	

Certificate

Kasegaon Education Society's

Rajarambapu Institute of Technology, Rajaramnagar

Sakharale, Tal. Walwa, Dist. Sangli - 415 414

(An AutonSanket Uttam Khotomous Institute Affiliated to Shivaji University, Kolhapur)

Department of Robotics & Automation*, RIT and Dolphin Labs, Pune

Certificate

This is to certify that Mr./Miss. **Sanket Uttam Khot** has attended & participated in **One Day Hands-on Workshop** on "**Arduino Based Robotics & Automation**" conducted by Department of Robotics & Automation Department in association with Dolphin Labs, Pune on **1st June 2023**.

Mr. Chittaranjan Mahajn	**Dr. S. R. Kumbhar**	**Dr. Mrs. Supriya S. More**
Director - Dolphin Labs, Pune	Workshop Coordinator	Dept. of Robotics and Automation

*Awaiting for AICTE Approval for **B. Tech. (Robotics & Automation)** Starting from 2023-24