



**JAYAWANT SHIKSHAN PRASARAK MANDAL'S
BHIVARABAI SAWANT INSTITUTE OF TECHNOLOGY
AND RESEARCH, Wagholi Pune**
(Approved by AICTE, NEW Delhi, Govt. of Maha. &
Affiliated to Pune university)
GAT.NO.720 (1), WAGHOLI, PUNE-NAGAR ROAD,
PUNE-412207.



TE. NO. (020)27051170 FAX. NO. (020)27052590
Department of Electronics and Telecommunication

(NBA & NAAC Accredited)

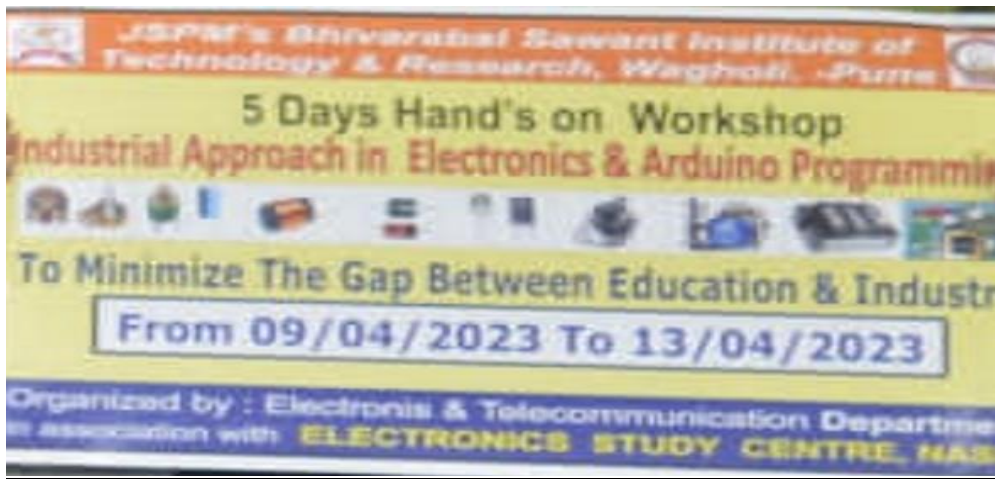


Date: 20/11/ 2023

REPORT On
5 Days workshop on
“Industrial Approach in Electronics & Arduino Programming”

Name of Event	Industrial Approach in Electronics & Arduino Programming
Organized Under	In association with Electronics Study Centre Nashik
Date of Event	9/04/2023 to 13/04/2023
Location of Event	D1 Building , E&TC Department of JSPM's Bhivarabai Sawant Institute of Technology & Research
Number of Persons Attending	63 (Girls 25 Boys 38)
Sponsoring Organization(s)	ETSA
Program Co-Coordinator Name	Dr. Y. S. Angal, HOD E&TC BSIOTR Wagholi Pune
ETSA Coordinator	Prof. Meenakshi Annamalai
Speaker Name	Prof. Sanjay Chaudhary, Director Electronics Study Centre Nashik

Sr No.	Learning objectives	Aligned PO's
1.	To minimise the gap between education & Industry	PO 12
2.	Soldering/ desoldering skills	PO, PO2, PO4, PO5, PO6, PO7, PO8, PO10, PO11, PO12
3.	Team skills	PO1, PO9, PO10, PSO-1
4.	Programming skills	PO8, PO9, PO10, PO11, PO12
5.	21 st Century Skills	PO12



Workshop Flyer on “Industrial Approach in Electronics & Arduino Programming”

JSPM’S Bhivarabai Sawant Institute of Research and Technology Department of Electronics and Telecommunication under the ETSA and in association with IETE Pune Centre Pune organized Five day workshop on “**Industrial Approach in Electronics & Arduino Programming**” on 9/04/2023 to 13/04/2023

The workshop was carried out at E&TC Department for the TE E&TC students Semester (V) Prof. Poonam Gawade, Prof. Jyshree Suryawanshi, Prof. Sneha Dhere, Prof. Manoj Sonawane acted as a faculty co-ordinator. 63 students attended the workshop. Every participant made the Registration payment of RS 2500 for the event.

Brief Information about the Expert person:

Prof. Sanjay Chaudhary is the director of Electronics Study Centre Nashik. He is a skill development trainer teacher. He has 11 Years of experience in Research & circuit designing. He is also managing the technical & Marketing Engineering role also. He acted as a senior lecturer in the TES'S BHUSAWAL ARTS, SCIENCE & P.O. NAHATA COMMERCE COLLEGE, BHUSAWAL during 1992-2012.



Photo 1 Event Inauguration in presence of Dr. T.K. Nagaraj principal, Dr. Y. S. Angal HOD & Expert Prof. Sanjay Choudhary Director Electronics study centre Nashik

Inauguration Ceremony was held on the first day. Dr. T.K. Nagaraj was present. He guided and motivated students about the challenges and innovations in E&TC Industry.

He explained the purpose for the conduction of the event for developing 21st Century skills among students and after the COVID-19 it's a bridge course for the academic gap for all students. He gave some useful tips for getting good career and achievement in university. Some of the students also shared their view for the workshop session.



Photo 2 Principal Dr. T. K. Nagraj Guiding students during inauguration ceremony

Electronics Study Centre
ELECTRONICS STUDY CENTRE
An ISO 9001:2008 Certified
 402, 'Olive Arcade, besides Metro Moll, Tapowan link road,
 Station Road, Nasik Road. 9370940465, 7304040465, 9890940465
 Website- www.escworkshop.in email - escelectronics@gmail.com

Date: 19/05/2023

Fee Structure for Work Shop-

Sr. No.	Course	Duration of course No. of days	Fees for each student Rs	No of students in one batch
1	Industrial Approach in Electronics & Arduinio Programming	5	2500/-	80

Table 1 Workshop structure and registration charge details

Workshop Agenda-

Day	Time	Program	Topic
1	9.30am To 10 am	Registration	Latest Color PP size photo required
	10 am To 1 pm	Morning session	Component Identification & Testing Practice
	1 pm To 2 pm	Lunch Break	-----
	2 pm To 5 pm	Evening Session	Component Identification & Testing Practice
2	9 am To 1pm	Morning session	Component Identification & Testing Practice
	1 pm To 2 pm	Lunch Break	-----
	2pm To 5 pm	Evening Session	PCB study types - Designing Art work etching Assembling, Soldering, desoldering Tips, Technique, Practice
3	9 am To 1pm	Morning session	Project Construction & Testing
	1 pm To 2 pm	Lunch Break	-----
	2pm To 5 pm	Evening Session	Discussion, Feedback

Table 2 Day 1 to 3 schedule

Day	Time	Program	Topic
4	10 am To 1 pm	Morning session	Introduction about Hardware, software its necessity with each other. Diff. Types of Aurdino boards (Pro mini, Nano, Uno, Mega, lieo nardo, etc), their introduction, scope, limitation, comparision with each other and microcontroller Aurdino Software Installation in each Laptop.
	1 pm To 2 pm	Lunch Break	-----
	2 pm To 4 pm	Evening Session	Aurdino board connectivity with ESC std Aurdino development board, to laptop, Identification of input output ports VCC, ground Classification of Input / Output., Analog/ Digital dcives Introduction to Aurdino Library, its instructions Interfacing LED, Switch as 1) LED ON/OFF with delay 2) LED ON by switch 3) LED ON/ OFF by switch 4) LED ON with delay 5) LED OFF with delay 6) Buzzer ON by switch 7) Buzz OFF by switch 8) Buzz On/OFF with delay 9) Relay On by switch 10) Relay OFF by a switch
5	9 am To 1pm	Morning session	Reading Analog value from any sensor 11) POT,LDR/ Thermistor, and its typical application. 12) soil moisture sensor and its typical application. Enable serial communication using Aurdino 13) Interfacing 16/2 LCD display and its two different program to display particular word for particular time 14) IR sensor and its program
	1 pm To 2 pm	Lunch Break	-----
	2pm To 3 pm	Evening Session	15) GSM module and its program to send message in bulk on particular Nos.
	4pm to 4.45pm		Students Feedback and reviuue

Table 3 Day 4 and 5 Arduino Programming schedule details

Day-wise workshop Details :

Day 1 :

- ✓ Use of Digital technology including Projector as well as camera
- ✓ Basic components and explanations
- ✓ Testing of the Electronics components with the help of Digital multimeter as shown in this photograph.
- ✓ A group formation of 2 students for the components testing and assessment
- ✓ An innovative QA session were held



Photo 3 Digital multimeter

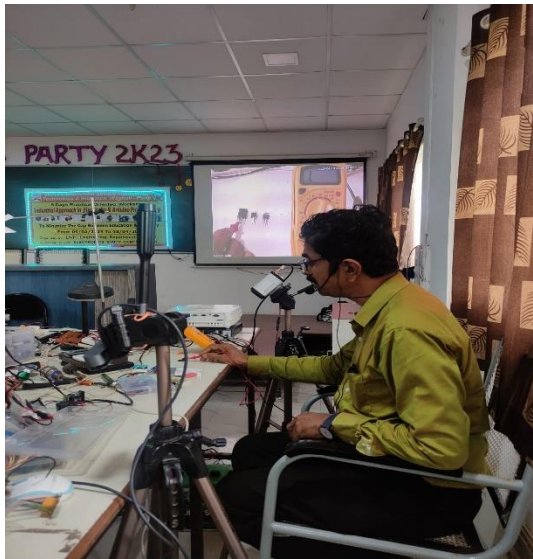


Photo 4,5 and 6 Day 1 Prof. Sanjay Chaudhary with workshop participants

**Day2 :
Component Identification Task**

PCB Types

Soldering & Desoldering



Photo 7, 8 & 9 Student Engagement in Electronic material testing

**Day3:
Project work
Feedback**



Photo 10, 11, 12 & 13 Student engagement in project team work task

**Day 4:
Arduino Basics**



Photo 14, 15, 16 & 17 Day 4 Arduino programming

Day 5

Arduino Task



Photo 18, 19, 20 & 21 Student performing the challenging task by the workshop co-ordinator



Photo 22 Workshop participants in presence of Dr. Y. S. Angal HOD, Prof. Sanjay Choudhary Director Electronics study centre Nashik and staff co-ordinators

Workshop Attendance:

JSPM's Bhivarabai Sawant Institute of Technology & Resesarch Wagholi.

5 Days Workshop "Industrial Approach in Electronics & Arduino Programming" 09-13/04/2023

Organized by Electronics & Telecommunication Engineering Department

Certificate Issue Record

Sr. No.	Name of the student	Class	Roll No.	Sign of Student
1	Aadhav Saket Dattatray	TE	3201	
2	Attar Nameera Mehommad Rafik	TE	3203	
3	Bhoite Abhijit Shanaji	TE	3204	
4	Borhade Shivam Pandurang	TE	3205	
5	Borse Anshulika Yavraj	TE	3206	
6	Dahiwal Ajinkya Sunil	TE	3207	
7	Daphal Chetan Shahaji	TE	3208	
8	Deshpande Chaitra Vijay	TE	3209	
9	Dhake Tilakchand Umakant	TE	3210	
10	Dhamani Aekagra Mukund	TE	3202	
11	Figredo Ispurleen Peter	TE	3258	
12	Gadekar Jaywant Bhimrao	TE	3271	
13	Gardare Kiran Ganesh	TE	3211	
14	Gat Sheetal Babaji	TE	3212	
15	Gawali Shubham Sunil	TE		
16	Gole Aishwarya Suhas	TE		
17	Hargude Aishwarya Anil	TE		
18	Jade Meghsham Sanjay	TE	3215	
19	Jagtap Ajay Shesherao	TE	3216	
20	Joshi Bhargavi Dinesh	TE	3217	
21	Kand Akansha Ramdas	TE	3264	
22	Kand Siddhi Vikas	TE	3263	
23	Kekan Prajakta Pandurang	TE	3218	
24	Kharate Satyam Machindra	TE	3219	
25	Koli Pradeep Deepak	TE	3220	

JSPM's Bhivarabai Sawant Institute of Technology & Resesarch Wagholi.

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Certificate Issue Record

Sr. No.	Name of the student	Class	Roll No.	Sign of Student
26	Kuwar Sakshi Jayesh	TE		
27	Lagad Pratik Dhondiba	TE	3222	
28	Lanke Aditya Sanjay	TE	3223	
29	Londhe Prutviraj Suresh	TE	3275	
30	Mane Abhay Sudhakar	TE	3224	
31	Mane Rutuja Kallas	TE	3226	
32	Matkar Amar Chatrabhuj	TE	3227	
33	Mulani Mustkin Mahibut	TE	3228	
34	Narute Harshad Dhanaji	TE	3229	
35	Narwade Kunal Dilip	TE	3230	
36	Patil Priyanka Bagurao	TE	3231	
37	Patil Yuvraj Rajaram	TE	3250	
38	Patil Vishwatej Dattatraya	TE	3232	
39	Patil Vyankatesh Kamlesh	TE	3233	
40	Pawar Shubham Ashok	TE	3244	
41	Petkar Sayali Dhanraj	TE	3234	
42	Randive Kishori Ramdas	TE	3235	
43	Raut Dnyaneshwari Shivshankar	TE	3236	
44	Sakhare Swapnil Tanaji	TE	3237	
45	Salunkhe Janhavi Subhash	TE		
46	Sawargave Rajnandini Dinkar	TE	3239	
47	Shaikh Arman Sameer	TE	3266	
48	Shaikh Parvej Yasin	TE		
49	Shaikh Ujef Samad	TE	3241	
50	Shelke Vaibhav Tukaram	TE	3242	

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Certificate Issue Record

Sr. No.	Name of the student	Class	Roll No.	Sign of Student
51	Shinde Abhay Pramod	TE	3243	Abhi.
52	Sonavane Amruta Ashok	TE	3245	Sonavane
53	Sonawane Kalpesh Yuvraj	TE	3246	Kalpesh
54	Sontakke Divya Dnyaneshwar	TE	3261	Divya
55	Tambe Ekta Dinesh	TE	3247	Ekta
56	Tamhane Vaishnavi Vinod	TE	3248	Vaish
57	Taye Pratik Ramesh	TE	3250	Pratik
58	Tengale Adesh Laxman	TE	3251	Adesh
59	Thakare Vaishnavi Jagadeo	TE	3252	Vaish
60	Tupsoundare Rajnandini Rajkumar	TE	3254	Rajnandini
61	Vadak Komal Vijendra	TE	3255	Komal
62	Waghmode Mahesh Namdev	TE	3256	Mahesh
63		TE		
64		TE		

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Director
Electronics Study Centre
Nashik

Electronics Study Centre
402, Olive Arcade, Beside Walmart Mall
Tapovan Road, Nashik-422011

Coordinator
Workshop

S.D. Dhare

P.V. Gawade

Y. S. Alag
E & T.C. Engg. Department
JSPM's BSIOTR Wagholi
Electronics & Telecommunication Dep
Bhivarabai Sawant Institute of
Technology & Research
Wagholi, Pune-412 207