



KALYANI CHARITABLE TRUST'S
LATE G. N. SAPKAL COLLEGE OF ENGINEERING

Kalyani Hills, Anjaneri-Vadholi, Trimbakeshwar Road, Dist: Nashik - 422 212 (India)
Tel: +91 2594 220168/71, Fax: +91 2594 220174
Website: www.sapkalknowledgehub.org, E-mail: gns_engineering@sapkalknowledgehub.com



Ref: KCT's /LGNSCOE/2022-23/

Date: 09/09/2019

Notice

All the Final Year students of E &TC department are hereby informed that, 30 hours Certificate course on “CMOS Design using Microwind” is organized by Electronics & Telecommunication Engineering Department in association with IQAC at our college. All are requested to attend the program.

Speaker: Prof. Seema R. Baji

Venue: VLSI Design Lab

Day and Date: Monday, 16th September 2019 to Friday, 20th September 2019

Time: 10:00 AM onwards

Prof. S. R. Baji
Program Coordinator

Prof. (Dr.) S. S. Harak
IQAC Coordinator

Prof. S. B. Borse
HOD, E & TC Engg.

Prof. (Dr.) S. B. Bagal
Principal





KALYANI CHARITABLE TRUST'S
LATE G. N. SAPKAL COLLEGE OF ENGINEERING

Kalyani Hills, Anjaneri-Vadholi, Trimbakeshwar Road, Dist: Nashik - 422 212 (India)
Tel.: +91 2594 220168/71, Fax: +91 2594 220174
Website: www.sapkalknowledgehub.org, E-mail: gns_engineering@sapkalknowledgehub.com



Date: 12/09/2019

To,
The HOD (E & TC Department)
Late G. N. Sapkal College of Engineering,
Sapkal Knowledge Hub, Anjaneri, Nashik

Subject: Regarding permission for 30 hours Add on Program at E & TC department
on "CMOS Design Using Microwind".

Respected Sir,

With reference to above subject I, Prof. S. R. Baji going to arrange 30 hours
Add on Program at E & TC department on "CMOS Design using Microwind", for
final year students of Electronics and Telecommunication department. The program
is scheduled on 16th September 2019 to 20th September 2019 at VLSI Design Lab.

So I request you to kindly grant the necessary permission for the above
mentioned subject.

Thanking you.

Yours faithfully,

S.R. Baji

Prof. S. R. Baji
(Assistant Professor, E & TC)

*Permitted.
Suresh
12/09/19.
E & TC Dept.*




Department of Electronics & Telecommunication Engineering

Program Module and Outcome

**30 Hrs Certificate Course/Add-on Course on
“CMOS Design using Microwind”**

Sr No.	Module	Syllabus
1	Module 1	Introduction to MOS devices and their design approach
2	Module 2	Digital CMOS logic design and CMOS analog circuit designs.
3	Module 3	Use & Installation of MICROWIND 3.1 & DSCH 2.6 and develop Skills required to design & test CMOS design.

Sr No.	Module	Outcome
1	Module 1	To enrich the knowledge of students in MOS devices and their design approach
2	Module 2	Acquire the knowledge of Digital CMOS logic design and CMOS analog circuit designs.
3	Module 3	Ability to apply the knowledge to use & Installation of MICROWIND 3.1 & DSCH 2.6



Prof. S. R. Baji
Program Coordinator



Prof. S. B. Borse
HoD E& TC



Prof.(Dr.) S. B. Bagal
Principal





KALYANI CHARITABLE TRUST'S
LATE G. N. SAPKAL COLLEGE OF ENGINEERING

Kalyani Hills, Anjaneri-Vadholi, Trimbakeshwar Road, Dist: Nashik – 422 212 (India)
Tel.: +91 – 2594 – 220168/71. Fax : +91 – 2594 – 220174
Website: www.sapkalknowledgehub.org, E-mail: gns_engineering@sapkalknowledgehub.com



**Department of Electronics and Telecommunication
Add On Program**

On

CMOS Design using Microwind

In Association with IQAC Cell, LGNSCOE Nashik

16th to 20th September, 2019

Session wise Schedule

Sr. No.	Session	Details
Monday 16/09/2019	Session I (10:00 am to 12:30 pm)	Inauguration of Program Introduction to MOS devices and their design approach.
	Session II (1:30 pm to 4:30 pm)	Digital CMOS logic design
Tuesday 17/09/2019	Session I (10:00 am to 12:30 pm)	CMOS analog circuit designs.
	Session II (1:30 pm to 4:30 pm)	Design examples like Universal gate, Half adder, MUX etc.
Wednesday 18/09/2019	Session I (10:00 am to 12:30 pm)	Use & Installation of MICROWIND 3.1 & DSCH 2.6
	Session II (1:30 pm to 4:30 pm)	Hands on Session Hands-on practice with MICROWIND 3.1 software.
Thursday 19/09/2019	Session I (10:00 am to 12:30 pm)	Professional courses on VLSI.
	Session II (1:30 pm to 4:30 pm)	Hands on Session Hands-on practice with DSCH 2.6 software.
Friday 20/09/2019	Session I (10:00 am to 12:30 pm)	Skills required to design & test CMOS design.
	Session II (1:30 pm to 4:30 pm)	Career opportunities in VLSI Industries





Electronics & Telecommunication Department

PROGRAMME REPORT

- **Title of the Program:** CMOS Design using Microwind
- **Duration of the Program:** From 16/09/2019 to 20/09/2019
- **Number of Participants:** 46
- **Details of Resource Person:**

Prof. S. R. Baji, Mobile No: 9420401130

- **Description of the Program:**

Department of Electronics & Telecommunication Engineering organized a 30 hours Add On program on CMOS Design using Microwind for Final Year Students. The resource person educated the students with the hardware, software and other resources required for CMOS Design using Microwind. The Session started with introduction to MOS devices and their design approach. Detail information was provided for digital CMOS logic design and CMOS analog circuit designs. Explained & drawn various design examples like Universal gate, Half adder, MUX etc.

Hands on practice were carried out with MICROWIND 3.1 & DSCH 2.6 software. Information provided for various VLSI Industries. Discussed various Job Opportunities and Skills required to design & test CMOS design. Session ended by sharing success stories of VLSI Engineers across World. The session was highly interactive and students enjoyed the workshop.

Objectives of the Program:

1. To demonstrate the MOS devices and their design approach.
2. To know about the details of digital CMOS logic design and CMOS analog circuit designs.
3. To implement the programming using MICROWIND 3.1 & DSCH 2.6 software.

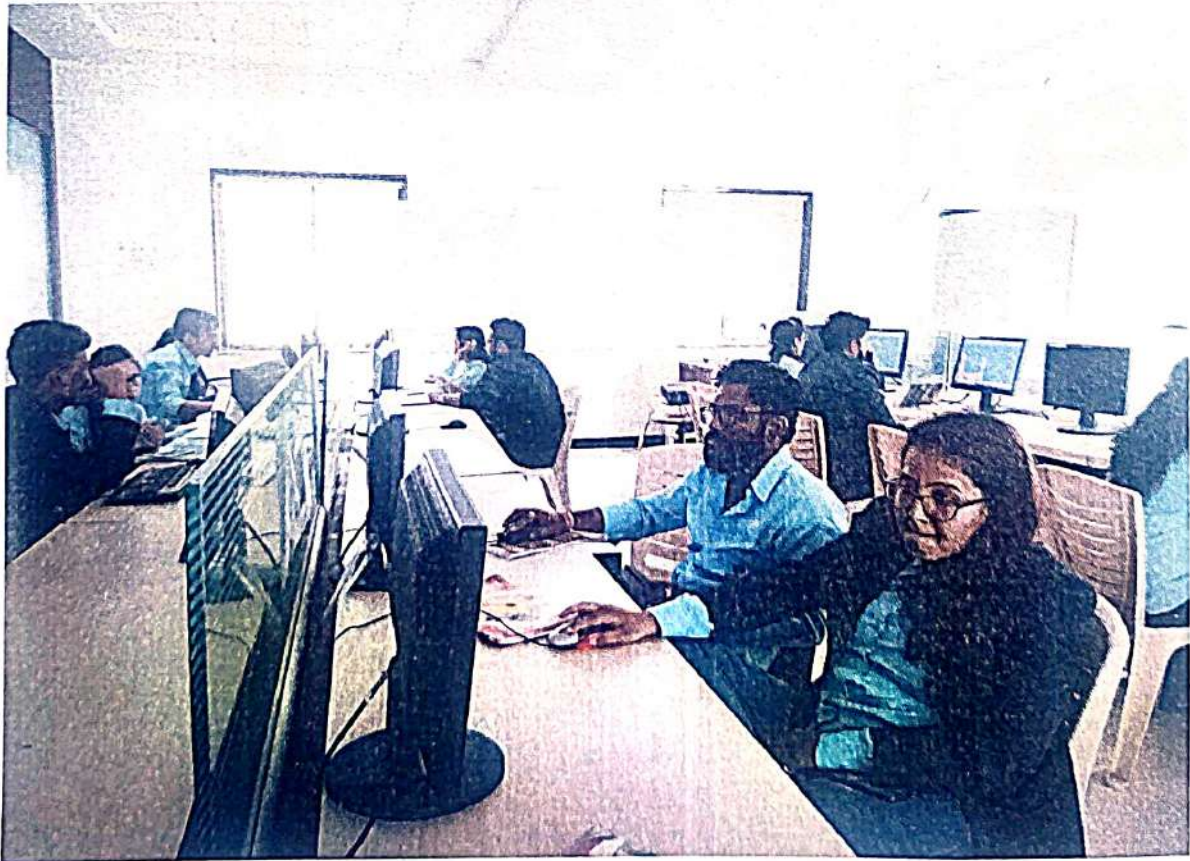


➤ **Outcome of the Program:**

Students gained knowledge of designing different types of CMOS circuits using Microwind. This program covered basic terminologies regarding digital CMOS logic design and CMOS Analog circuit designs. Participants got understanding of the VLSI Circuit Design theory course and simulation-based laboratory works.

➤ **Photographs of Event**







S.R. Baji

Prof. S. R. Baji
Program Coordinator

S. B. Borse

Prof. S. B. Borse
HOD, E&TC Dept.

S. B. Bagal

Prof. (Dr.) S. B. Bagal
Principal, LGNSCOE





Kalyani Charitable Trust's,
Late G. N. Sapkal College of Engineering



Department of Electronics & Telecommunication Engineering
in Association with IQAC

Organized

30 hours Certificate course

on

“CMOS Design using Microwind”

Dated on 16th September to 20th September 2019

Resource Person

Prof. S. R. Baji

Assistant Professor, E & TC Department

LGNSCOE, Nashik.



Department of Electronics & Telecommunication Engineering in Association with IQAC

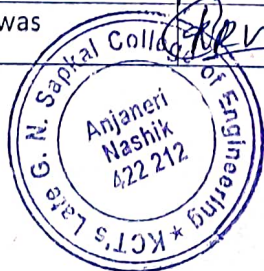
ATTENDANCE OF PARTICIPANTS (Students)

30 hours Certificate Course on "CMOS Design using Microwind"

Sr. No.	Name of Participants	Sign (16 Sept 2019)	Sign (17 Sept 2019)	Sign (18 Sept 2019)	Sign (19 Sept 2019)	Sign (20 Sept 2019)
1	BADGUJAR DHANASHRI PUNDLIK	<i>Dhanyaj</i>	<i>Dhanyaj</i>	<i>Dhanyaj</i>	<i>Dhanyaj</i>	<i>Dhanyaj</i>
2	BHASRE AMOL KRISHNA	<i>AKB</i>	<i>AKB</i>	<i>AKB</i>	<i>AKB</i>	<i>AKB</i>
3	ESAI NEHA GHANSHYAM	<i>ESAI</i>	<i>ESAI</i>	<i>ESAI</i>	<i>ESAI</i>	<i>ESAI</i>
4	GAWALI PRATIK RAMESH	<i>Pratik</i>	<i>Pratik</i>	<i>Pratik</i>	<i>Pratik</i>	<i>Pratik</i>
5	JADHAV AKSHAY DATTU	<i>AD</i>	<i>AD</i>	<i>AD</i>	<i>AD</i>	<i>AD</i>
6	JADHAV KALPESH SUDHAKAR	<i>KS</i>	<i>KS</i>	<i>KS</i>	<i>KS</i>	<i>KS</i>
7	KAREKAR HIMANI SANTOSH	<i>HS</i>	<i>HS</i>	<i>HS</i>	<i>HS</i>	<i>HS</i>
8	NAIDU ARVIND SUNDARRAJAN	<i>AS</i>	<i>AS</i>	<i>AS</i>	<i>AS</i>	<i>AS</i>
9	NAWALE SURAJ DILIP	<i>SD</i>	<i>SD</i>	<i>SD</i>	<i>SD</i>	<i>SD</i>
10	NEMADE PRAGATI KIRAN	<i>Premade</i>	<i>Premade</i>	<i>Premade</i>	<i>Premade</i>	<i>Premade</i>
11	PAWAR NIKITA ANIL	<i>Nawar</i>	<i>Nawar</i>	<i>Nawar</i>	<i>Nawar</i>	<i>Nawar</i>
12	PAWAR SNEHAL CHUDAMAN	<i>Fawar</i>	<i>Fawar</i>	<i>Fawar</i>	<i>Fawar</i>	<i>Fawar</i>
13	POTINDE HITENDRA PRABHAKAR	<i>Hotinde</i>	<i>Hotinde</i>	<i>Hotinde</i>	<i>Hotinde</i>	<i>Hotinde</i>
14	SARATE YOGESH TULSIDAS	<i>YS</i>	<i>YS</i>	<i>YS</i>	<i>YS</i>	<i>YS</i>
15	SHARMA REEMA DEVENDRA	<i>Reema</i>	<i>Reema</i>	<i>Reema</i>	<i>Reema</i>	<i>Reema</i>
16	BHAMARE KAJAL NAMDEV	<i>Bhmare</i>	<i>Bhmare</i>	<i>Bhmare</i>	<i>Bhmare</i>	<i>Bhmare</i>
17	PATIL ASHWINI NARAYAN	<i>Natil</i>	<i>Natil</i>	<i>Natil</i>	<i>Natil</i>	<i>Natil</i>
18	JADHAV KAJAL DINKAR	<i>Jadhav</i>	<i>Jadhav</i>	<i>Jadhav</i>	<i>Jadhav</i>	<i>Jadhav</i>
19	DEOKAR SHUBHAM MADHUKAR	<i>SD</i>	<i>SD</i>	<i>SD</i>	<i>SD</i>	<i>SD</i>
20	SHINGANE KUNAL RAJESH	<i>KRS</i>	<i>KRS</i>	<i>KRS</i>	<i>KRS</i>	<i>KRS</i>
21	GAIKWAD SWAPNIL KESHAV	<i>Gaikwad</i>	<i>Gaikwad</i>	<i>Gaikwad</i>	<i>Gaikwad</i>	<i>Gaikwad</i>
22	JAGTAP DEVIDAS	<i>DS</i>	<i>DS</i>	<i>DS</i>	<i>DS</i>	<i>DS</i>



Sr. No.	Name of Participants	Sign (16 Sept 2019)	Sign (17 Sept 2019)	Sign (18 Sept 2019)	Sign (19 Sept 2019)	Sign (20 Sept 2019)
23	Kure Balvant Vishwanbhar	<i>Balv</i>	<i>Balv</i>	<i>Balv</i>	<i>Balv</i>	<i>Balv</i>
24	Wagh Manish Devidas	<i>Wagh</i>	<i>Wagh</i>	<i>Wagh</i>	<i>Wagh</i>	<i>Wagh</i>
25	Datir Dipali Vishnu	<i>D.Vishnu</i>	<i>D.Vishnu</i>	<i>D.Vishnu</i>	<i>D.Vishnu</i>	<i>D.Vishnu</i>
26	Rajguru Anuja Attmanand	<i>Anuja</i>	<i>Anuja</i>	<i>Anuja</i>	<i>Anuja</i>	<i>Anuja</i>
27	Jadhav Vishal Tulshidas	<i>J.V.Tulshidas</i>	<i>J.V.Tulshidas</i>	<i>J.V.Tulshidas</i>	<i>J.V.Tulshidas</i>	<i>J.V.Tulshidas</i>
28	Kure Balvant Vishwanbhar	<i>Balv</i>	<i>Balv</i>	<i>Balv</i>	<i>Balv</i>	<i>Balv</i>
29	Nikam Hrutuja Satish	<i>N.H.Satish</i>	<i>N.H.Satish</i>	<i>N.H.Satish</i>	<i>N.H.Satish</i>	<i>N.H.Satish</i>
30	Nikam Saurabh Shankar	<i>S.Shankar</i>	<i>S.Shankar</i>	<i>S.Shankar</i>	<i>S.Shankar</i>	<i>S.Shankar</i>
31	Sable Shubnam Dattaatray	<i>Sable</i>	<i>Sable</i>	<i>Sable</i>	<i>Sable</i>	<i>Sable</i>
32	Shinde Akash Sanjay	<i>Shinde</i>	<i>Shinde</i>	<i>Shinde</i>	<i>Shinde</i>	<i>Shinde</i>
33	Thakare Sonali Chhabilal	<i>Thakare</i>	<i>Thakare</i>	<i>Thakare</i>	<i>Thakare</i>	<i>Thakare</i>
34	Mahatme Vishal Rameshwar	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>
35	Arote Mansi Sanjay	<i>Arote</i>	<i>Arote</i>	<i>Arote</i>	<i>Arote</i>	<i>Arote</i>
36	Bamnodkar Lokesh Vilas	<i>Bam</i>	<i>Bam</i>	<i>Bam</i>	<i>Bam</i>	<i>Bam</i>
37	Barathe Aniket Vilas	<i>Barathe</i>	<i>Barathe</i>	<i>Barathe</i>	<i>Barathe</i>	<i>Barathe</i>
38	Borse Jugal Jaganath	<i>Borse</i>	<i>Borse</i>	<i>Borse</i>	<i>Borse</i>	<i>Borse</i>
39	Dhone Kiran Narayan	<i>Dhone</i>	<i>Dhone</i>	<i>Dhone</i>	<i>Dhone</i>	<i>Dhone</i>
40	Jadhav Aniket Ajit	<i>Jadhav</i>	<i>Jadhav</i>	<i>Jadhav</i>	<i>Jadhav</i>	<i>Jadhav</i>
41	Jadhav Rahul Arun	<i>Rahul</i>	<i>Rahul</i>	<i>Rahul</i>	<i>Rahul</i>	<i>Rahul</i>
42	Jagtap Sandesh Vijay	<i>Jagtap</i>	<i>Jagtap</i>	<i>Jagtap</i>	<i>Jagtap</i>	<i>Jagtap</i>
43	Jamadar Umesh Sanjay	<i>Jamdar</i>	<i>Jamdar</i>	<i>Jamdar</i>	<i>Jamdar</i>	<i>Jamdar</i>
44	Joshi Shubham Sanjay	<i>Joshi</i>	<i>Joshi</i>	<i>Joshi</i>	<i>Joshi</i>	<i>Joshi</i>
45	Kadam Mohini Abhiman	<i>Kadam</i>	<i>Kadam</i>	<i>Kadam</i>	<i>Kadam</i>	<i>Kadam</i>
46	Khairnar Rajeshwari Vishwas	<i>Khair</i>	<i>Khair</i>	<i>Khair</i>	<i>Khair</i>	<i>Khair</i>



Analysis Report of Program Feedback Form

Title: 30 hours program on Certificate Course "CMOS Design using Microwind"

Sr. No.	Parameters	Scale→	1	2	3	Sample Size	Average Rating Out of 3
			Qty	Point wise weightage	Qty		
1	Did you find the workshop is useful?	Qty	2	8	8	18	2.33
		Point wise weightage	2	16	24	42	
2	Did it fulfil your expectation?	Qty	1	7	10	18	2.50
		Point wise weightage	1	14	30	45	
3	Did the workshop improve your knowledge about the topic discussed?	Qty	1	5	12	18	2.61
		Point wise weightage	1	10	36	47	




 Asst. Professor & Head
 Dept. of Electronics & Telecom. Engineering
 Late G. N. Sapkal College of Engineering
 Anjaneri, Nashik-422212

Late G. N. Sapkal College of Engineering
Department of Electronics & Telecommunication Engineering
FEEDBACK OF PARTICIPANTS

Title of the Program/Event: 30 hours Certificate course on “CMOS Design using Microwind”

Department of Electronics & Telecommunication Engineering in Association with IQAC

Name of Participant: Sagtap Devidas

Name of the Faculty: Mechanical / Civil / Electrical / E&TC / Computer / Other

1.	Did you find the Workshop is useful?	1	2	3
			✓	
		1-not useful ; 2-To some Extend ; 3-Very useful		
2.	Did it fulfill your expectation?	1	2	3
			✓	
		1-not useful ; 2-To some Extend ; 3-Very useful		
3.	Did the Workshop improve your knowledge about the topic discussed?	1	2	3
				✓
		1-not useful ; 2-To some Extend ; 3-Very useful		
3.	Suggestion to further improvement:			

Date: 20/09/2019



DT
Signature of Participants

Late G. N. Sapkal College of Engineering
 Department of Electronics & Telecommunication Engineering
FEEDBACK OF PARTICIPANTS

Title of the Program/Event: 30 hours Certificate course on “CMOS Design using Microwind”

Department of Electronics & Telecommunication Engineering in Association with IQAC

Name of Participant: Jadhav Kajal D

Name of the Faculty: Mechanical / Civil / Electrical / E&TC / Computer / Other

1.	Did you find the Workshop is useful?	1	2	3
				✓
		1-not useful ; 2-To some Extend ; 3-Very useful		
2.	Did it fulfill your expectation?	1	2	3
				✓
		1-not useful ; 2-To some Extend ; 3-Very useful		
3.	Did the Workshop improve your knowledge about the topic discussed?	1	2	3
				✓
		1-not useful ; 2-To some Extend ; 3-Very useful		
3.	Suggestion to further improvement:			

Date: 20/09/2019



Jadhav
Signature of Participants

Late G. N. Sapkal College of Engineering
Department of Electronics & Telecommunication Engineering
FEEDBACK OF PARTICIPANTS

Title of the Program/Event: 30 hours Certificate course on “CMOS Design using Microwind”

Department of Electronics & Telecommunication Engineering in Association with IQAC

Name of Participant: Bhaskar Amal K.

Name of the Department: Mechanical/Civil/Electrical/E&TC/Computer/Other

1.	Did you find the Workshop is useful?	1	2	3
		I-not useful ; 2-To some Extend ; 3-Very useful		
2.	Did it fulfill your expectation?	1	2	3
		I-not useful ; 2-To some Extend ; 3-Very useful		
3.	Did the Workshop improve your knowledge about the topic discussed?	1	2	3
		I-not useful ; 2-To some Extend ; 3-Very useful		
3.	Suggestion to further improvement:			

Date: 20/09/2019



(Signature)
Signature of Participants

Late G. N. Sapkal College of Engineering
Department of Electronics & Telecommunication Engineering
FEEDBACK OF PARTICIPANTS

Title of the Program/Event: 30 hours Certificate course on “CMOS Design using Microwind”

Department of Electronics & Telecommunication Engineering in Association with IQAC

Name of Participant: Patil Ashwini N

Name of the Department: Mechanical/Civil/Electrical/E&TC/Computer/Other

1.	Did you find the Workshop is useful?	1	2	3
			✓	
1-not useful ; 2-To some Extend ; 3-Very useful				
2.	Did it fulfill your expectation?	1	2	3
			✓	
1-not useful ; 2-To some Extend ; 3-Very useful				
3.	Did the Workshop improve your knowledge about the topic discussed?	1	2	3
			✓	
1-not useful ; 2-To some Extend ; 3-Very useful				
3.	Suggestion to further improvement			

Date: 20/09/2019



Patil
Signature of Participants



Kalyani Charitable Trust's
**LATE G. N. SAPKAL
COLLEGE OF ENGINEERING**



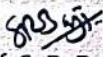
Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik.


Department of Electronics & Telecommunication Engineering


CERTIFICATE

This is to certify that Shingane Kunal Rajesh has completed 30 hours Program on "CMOS Design using Microwind" organized by Electronics & Telecommunication Department of Late G. N. Sapkal College of Engineering in Association with IQAC from September 16, 2019 to September 20, 2019.




Prof. S. R. Baji
Program Coordinator


Prof. S. B. Borse
Head of Department


Prof. (Dr.) S. B. Bagal
Principal



Kalyani Charitable Trust's
**LATE G. N. SAPKAL
COLLEGE OF ENGINEERING**



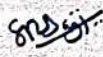
Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik.


Department of Electronics & Telecommunication Engineering

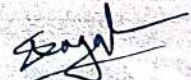
CERTIFICATE

This is to certify that Patil Ashwini Narayan has completed 30 hours Program on "CMOS Design using Microwind" organized by Electronics & Telecommunication Department of Late G. N. Sapkal College of Engineering in Association with IQAC from September 16, 2019 to September 20, 2019.




Prof. S. R. Baji
Program Coordinator


Prof. S. B. Borse
Head of Department


Prof. (Dr.) S. B. Bagal
Principal



Kalyani Charitable Trust's
**LATE G. N. SAPKAL
COLLEGE OF ENGINEERING**




Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik.


Department of Electronics & Telecommunication Engineering


CERTIFICATE

This is to certify that Bhasre Amol krishna has
completed 30 hours Program on "CMOS Design using Microwind" organized by Electronics &
Telecommunication Department of Late G. N. Sapkal College of Engineering in Association with IQAC
from September 16, 2019 to September 20, 2019.




Prof. S. R. Baji
Program Coordinator


Prof. S. B. Borse
Head of Department


Prof. (Dr.) S. B. Bagal
Principal



Kalyani Charitable Trust's
**LATE G. N. SAPKAL
COLLEGE OF ENGINEERING**



Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik.

Department of Electronics & Telecommunication Engineering

CERTIFICATE

This is to certify that Pragati Kiran Nemade has
completed 30 hours Program on "CMOS Design using Microwind" organized by Electronics &
Telecommunication Department of Late G. N. Sapkal College of Engineering in Association with IQAC
from September 16, 2019 to September 20, 2019.



Prof. S. R. Baji
Program Coordinator

Prof. S. B. Borse
Head of Department

Prof. (Dr.) S. B. Bagal
Principal