

**TABLE -1 First Engineering \_Structure for Semester-I**

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credits			
		Theory	Practical	Tutorial	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
107001	Engineering Mathematics-I	03	--	01	30	70	25	--	--	125	03	--	01	04
107002/ 107009	Engineering Physics / Engineering Chemistry	04	02	--	30	70	--	25	--	125	04	01	--	05
102003	Systems in Mechanical Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
110005/ 101011	Programming and Problem Solving / Engineering Mechanics	03	02	--	30	70	--	25	--	125	03	01	--	04
111006	Workshop <sup>®</sup>	--	02	--	--	--	--	25	--	25	--	01	--	01
Total		16	10	01	150	350	25	125	--	650	16	05	01	22
101007	Audit Course 1 <sup>&amp;</sup>	02	Environmental Studies-I											

**Induction Program :** 2 weeks at the beginning of semester-I and 1 week at the beginning of semester-II

**TABLE -2 First Engineering Structure for Semester-II**

[illegible]

6. Jensen, C., Helsel, J. D., Short, D. R., (2008), "Engineering Drawing and Design", McGraw-Hill International, Singapore

### **Guidelines for Laboratory Conduction**

#### **Tutorial Session**

Can be utilized to teach the basic commands of any drafting package, by using this knowledge students shall be able to complete the five assignments on the CAD software. (Minimum 2 problems in each assignment)

Assignment 1: Construct any Engineering Curve using any method

Assignment 2: Orthographic view of any machine element along with sectional view.

Assignment 3: Draw Isometric view for given orthographic views.

Assignment 4 :Draw the isometric or Orthographic view of a product/object (For example Workshop Job prepared during the workshop practice or any product developed during the first year session).

Assignment 5: Draw the development of lateral surface of a solid/ truncated solid.

#### **Practical Session**

Draw minimum two problems on each assignment on the A3 size drawing sheet.

#### **Suggested List of Laboratory Experiments/Assignments**

Assignment 1: Construct any Engineering Curve by any method

Assignment 2: Orthographic view of any machine element along with sectional view.

Assignment 3: Draw Isometric view for given orthographic views.

Assignment 4: Draw the development of lateral surface of a solid/ truncated solid

Assignment 5: Draw the isometric or Orthographic view of a product/object (For example Workshop Job prepared during the workshop practice or any product developed during the first year session.)

### **110013: Project Based Learning**

#### **Teaching Scheme:**

**PR: 04 Hrs/Week**

#### **Credits**

**02**

#### **Examination Scheme:**

**PR : 50 Marks**

#### **Preamble:**

For better learning experience, along with traditional classroom teaching and laboratory learning; project based learning has been introduced with an objective to motivate students to learn by working in group cooperatively to solve a problem.

Project-based learning (PBL) is a student-centric pedagogy that involves a dynamic classroom approach in which it is believed that students acquire a deeper knowledge through active exploration of real-world challenges and problems. Students learn about a subject by working for an extended period of time to investigate and respond to a complex question, challenge, or problem. It is a style of active learning and inquiry-based learning. (Reference: Wikipedia). Problem based learning will also redefine the role of teacher as mentor in learning process. Along with communicating knowledge to students, often in a lecture setting, the teacher will also to act as an initiator and facilitator in the collaborative process of knowledge transfer and development.

#### **Course Objectives:**

1. To emphasizes learning activities that are long-term, interdisciplinary and student-centric.
2. To inculcate independent learning by problem solving with social context.
3. To engages students in rich and authentic learning experiences.
4. To provide every student the opportunity to get involved either individually or as a group so as to develop team skills and learn professionalism.

## NOTICE

Date:- 14/07/2023

All first-year engineering students are hereby informed that their **final term-work submission (SEM-II)** is scheduled from **Wednesday, July 19, 2023, to Thursday, July 20, 2023**. All students have to bring their all-subject certified journals on the same day without fail. The detail schedule is as follows.

Sr.No.	Day and Date	Time	Div.
1	Wednesday, 19/7/2023	10:00 AM To 12:30 PM	A
2	Wednesday, 19/7/2023	1:30 PM To 3:30PM	C
3	Thursday, 20/7/2023	10:00 AM To 12:30 PM	B
4	Thursday, 20/7/2023	1:30 PM To 3:30PM	D


**Note:** Defaulter students (**attendance less than 75%**) are not eligible for TW submission.

- At the time of submission, all college Fees should be clear.

### Procedure of submission:-

**Journal Checking** → certification → stamp and signature of HOD  
→ stamp and signature of Principal → Punching on file → signature on submission sheet.



  
**FE-HOD**  
**Dr. U.V. Shinde**  
Shinde U. V.  
First Year Engineering,  
Siddhant College of Engineering,  
Sudumbare, Tal. Chikoli Dist. Solapur-413719







Sl. No.	Roll No	Seat No.	Name of Students	M-II	PHY	BLX	PPS	EG	PBL
21	111	F190440070	DESHMUKH HARSHAL DILIP	<del>Deshmukh</del>	<del>Deshmukh</del>	<del>Deshmukh</del>	<del>Deshmukh</del>	<del>Deshmukh</del>	<del>Deshmukh</del>
22	112	F190440071	DESHMUKH JANRAVI DIPRAO	Deshmukh	Deshmukh	Deshmukh	Deshmukh	Deshmukh	Deshmukh
23	201	F190440072	DEANGAR PAVAN SANTOSH						
24	213	F190440073	DHANOKAR SAKSHI JAYDEO	Dhanokar	Dhanokar	Dhanokar	Dhanokar	Dhanokar	Dhanokar
25	214	F190440076	DHOLE ADITYA SANJAY	Dhole	Dhole	Dhole	Dhole	Dhole	Dhole
26	110	F190440078	DEONAGE SAPNA SUBHASH	Deonage	Deonage	Deonage	Deonage	Deonage	Deonage
27	114	F190440084	DEVKAR SANIKA SUNIL	Devkar	Devkar	Devkar	Devkar	Devkar	Devkar
28	215	F190440091	GADE KARTIK ARUN	Gade	Gade	Gade	Gade	Gade	Gade
29	116	F190440093	GADHAVE PREM RAJENDRA	Gadhave	Gadhave	Gadhave	Gadhave	Gadhave	Gadhave
30	117	F190440094	GAIGOLE GAURI NANDKISHOR	Gaigole	Gaigole	Gaigole	Gaigole	Gaigole	Gaigole
31	216	F190440095	GAIKAR ABHISHEK ROHIDAS	Gaikar	Gaikar	Gaikar	Gaikar	Gaikar	Gaikar
32	217	F190440097	GAIKWAD POOJA RAM	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad
33	218	F190440111	GHULE YOGRAJ HARISHCHANDRA	✓	✓	✓	✓	✓	✓
34	219	F190440112	GOLE ATHARV BHARAT	Gole	Gole	Gole	Gole	Gole	Gole
35	220	F190440118	HAJARE SANKET SADASHIV	Hajare	Hajare	Hajare	Hajare	Hajare	Hajare
36	237	F190440122	HARSHAL VILAS PAWAR	Hars	Hars	Hars	Hars	Hars	Hars
37	221	F190440125	HINGE KSHITI GOKUL	Hinge	Hinge	Hinge	Hinge	Hinge	Hinge
38	118	F190440128	HUNASNALE SNEHA RAJKUMAR	Hunasnale	Hunasnale	Hunasnale	Hunasnale	Hunasnale	Hunasnale
39	119	F190440130	INGALE MOTIRAM BABARAO	Ingale	Ingale	Ingale	Ingale	Ingale	Ingale
40	120	F190440147	JOSHI SUJAL ANIL	Joshi	Joshi	Joshi	Joshi	Joshi	Joshi
41	222	F190440148	KAD SAI SANTOSH	Kad	Kad	Kad	Kad	Kad	Kad
42	121	F190440149	KADAM RUTURAJ RAMESH	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam
43	122	F190440154	KAKADE ADITYA DATTATRAYA	Kakade	Kakade	Kakade	Kakade	Kakade	Kakade
44	223	F190440156	KALANGE PRATHAMESH VIKAS	Kalange	Kalange	Kalange	Kalange	Kalange	Kalange
45	123	F190440157	KALE GAURAV SANJAY	Kale	Kale	Kale	Kale	Kale	Kale
46	124	F190440160	KAMBLE ISHA RAJESH	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble



Sl. No.	Roll No.	Seat No.	Name of Students	M-II	PHY	BLX	PPS	EG	PBI
47	224	F190440161	KANANE ATHARVA JLE. JINORA						
48	225	F190440165	KARANDE LAX ANAND	oay	oay	oay	oay	oay	oay
49	126	F190440167	KARGUDE SANSKRUTI SHIVAJI	slti	slti	slti	slti	slti	slti
50	127	F190440173	KHAIRE NIDHI RAJENDRA	SRKhair	SRKhair	SRKhair	SRKhair	SRKhair	SRKhair
51	226	F190440175	KHANDE RAMESHWAR SANJAY	Full	Full	Full	Full	Full	Full
52	128	F190440177	KHARCHE JITENDRA GANESH	Kharche	Kharche	Kharche	Kharche	Kharche	Kharche
53	129	F190440186	KOTHAWALE MANISH MAHESH	Qs	Qs	Qs	Qs	Qs	Qs
54	130	F190440190	KURLEKAR ATHARVA SATISH	Qs	Qs	Qs	Qs	Qs	Qs
55	227	F190440192	LAKHIMALE ASHISH ANANI	shish	shish	shish	shish	shish	shish
56	131	F190440195	MANDADE MOHIT SANTOSH	Manade	Manade	Manade	Manade	Manade	Manade
57	228	F190440196	MANE SNEHAL BABAN	Mane	Mane	Mane	Mane	Mane	Mane
58	132	F190440197	MARATHE HRISHIKESH SANTOSH	Marathe	Marathe	Marathe	Marathe	Marathe	Marathe
59	229	F190440201	MOHITE APEKSHA DATTATRAYA	Mohte	Mohte	Mohte	Mohte	Mohte	Mohte
60	133	F190440208	MURTHY KRISHNA RAVIKIRAN	Murthy	Murthy	Murthy	Murthy	Murthy	Murthy
61	230	F190440209	NAGARGUJE ABHISHEK DEVUDAS	Nagarguje	Nagarguje	Nagarguje	Nagarguje	Nagarguje	Nagarguje
62	231	F190440211	NAIK VIKAS MALKHAN	Naik	Naik	Naik	Naik	Naik	Naik
63	134	F190440214	NAYAKODI LAXMI IRAGANTEPPA	Nayakodi	Nayakodi	Nayakodi	Nayakodi	Nayakodi	Nayakodi
64	246	F190440215	NICHIT SUYASH KACHARU	Nichit	Nichit	Nichit	Nichit	Nichit	Nichit
65	115	F190440218	OM PRATAP GADEKAR	Om	Om	Om	Om	Om	Om
66	113	F190440219	OM SHANKAR DESHMUKH	Omshankar	Omshankar	Omshankar	Omshankar	Omshankar	Omshankar
67	232	F190440221	PADWAL SAHIL DATTATRAY	Padwal	Padwal	Padwal	Padwal	Padwal	Padwal
68	233	F190440224	PANDEY HEMANGI UMESHCHANDRA	Hemangip	Hemangip	Hemangip	Hemangip	Hemangip	Hemangip
69	135	F190440226	PASHILKAR TANMAY KIRAN	Pashilkar	Pashilkar	Pashilkar	Pashilkar	Pashilkar	Pashilkar
70	234	F190440228	PATIL AYUSH SANJAY	Ayush	Ayush	Ayush	Ayush	Ayush	Ayush
71	137	F190440231	PATIL OMKAR JOTIBA	Patil	Patil	Patil	Patil	Patil	Patil
72	138	F190440235	PATIL SAHILKUMAR ANANDRAO	Patil	Patil	Patil	Patil	Patil	Patil







Sr. No.	Roll No.	Seat No.	Name of Students	M-II	PHY	BLX	PPS	EG	PBL
99	247	F190440325	TAMBE ARUN ASHOK	Asht	Asht	Asht	Asht	Asht	Asht
100	248	F190440328	TARHALE RAJESHWAR GAJANAN	Se	Se	Se	Se	Se	Se
101	154	F190440333	THAKUR PRINCE SATISH	Prince	Prince	Prince	Prince	Prince	Prince
102	250	F190440336	THORAWADE ASHWINI TANAJI	Shrinu	Shrinu	Shrinu	Shrinu	Shrinu	Shrinu
103	155	F190440340	TUPE SHWETA NAVNATHI	Shrinu	Shrinu	Shrinu	Shrinu	Shrinu	Shrinu
104	251	F190440341	TURE SHAHIR SANJAY	Shahir	Shahir	Shahir	Shahir	Shahir	Shahir
105	252	F190440342	VAIDYA SURAJ DATTATRY S.D. Vaidya	Shahir	Shahir	Shahir	Shahir	Shahir	Shahir
106	156	F190440344	VARE PRATIK HALU						
107	157	F190440345	VARE SHRIDHAR LANKU	Shridhar	Shridhar	Shridhar	Shridhar	Shridhar	Shridhar
108	203	F190440348	VISHAL BAPU WAGHMORE	VB	VB	VB	VB	VB	VB
109	253	F190440352	WAGHMARE TANUJA SHRAVAN	Wagh	Wagh	Wagh	Wagh	Wagh	Wagh
110	158	F190440354	WALUNJ NIKHIL KUNDAN	Wagh	Wagh	Wagh	Wagh	Wagh	Wagh
111	254	F190440357	WAROLE SANKET RATNAKAR	Sanket	Sanket	Sanket	Sanket	Sanket	Sanket
112	249	F190440361	YASH MUKUNDA TEKALE	Yash	Yash	Yash	Yash	Yash	Yash
113	256	F190440364	YEDKE YOGITA ASHRUBA	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita
114	257	F190440366	YEOLE SHREYA KISHOR	Shreya	Shreya	Shreya	Shreya	Shreya	Shreya
SUBJECT TEACHER NAME & SIGN									



DR. U. V. SHINDE

HOD

Shinde U. V.

First Year Co-ordinator

Siddhant College of Engineering,

Sudumbare, Tal. Mayal, Pune - 412 105.



# SIDDHANT COLLEGE OF ENGINEERING

TALGAON CHARGAN RD, BODHIMBE, PUNE-421004

DEPARTMENT OF FIRST YEAR ENGINEERING

A.Y. 2022-23

**DIVISION - C & D**

**Termwork /Practical Submission Record**      Date:- 19/07/2023

Sr. No	Roll No	Seat No.	Name of Students	M-II	CHEM	BEE	EM	EG	PBL
1	401	F190440002	ABHESHEK THAKUR	Abhy	Abhy	Abhy	Abhy	Abhy	Abhy
2	405	F190440004	ADANE VAININAVT MATHURKAR	Adane	Adane	Adane	Adane	Adane	Adane
3	303	F190440007	AMBIKE SHAJIDUL MILIND	Shardul	Shardul	Shardul	Shardul	Shardul	Shardul
4	302	F190440009	ANARTHI RUCHIKA DATTATRAYA	Tika	Tika	Tika	Tika	Tika	Tika
5	351	F190440011	ATUL MANOJ SINGH	Atul	Atul	Atul	Atul	Atul	Atul
6	304	F190440015	BADE GURUDATTA KRUSHNA	Bade	Bade	Bade	Bade	Bade	Bade
7	305	F190440020	BARBADE MOHIT ASHOK	At	At	At	At	At	At
8	306	F190440024	BAVASKAR RITESH VIJAY	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh
9	307	F190440026	BEHERA OMKAR BANAMALI	Omkar	Omkar	Omkar	Omkar	Omkar	Omkar
10	403	F190440028	BHANDARI PRASEN BABLU	P.Bhandari	P.Bhandari	P.Bhandari	P.Bhandari	P.Bhandari	P.Bhandari
11	308	F190440030	BHAWAR TUSHAR SAMPAT	Tushar	Tushar	Tushar	Tushar	Tushar	Tushar
12	402	F190440033	BHOJANE BHAKTI BHASKAR	Bhoyat	Bhoyat	Bhoyat	Bhoyat	Bhoyat	Bhoyat
13	309	F190440025	BHOSALE AVISHKAR SHRIKANT	A.Bhosale	A.Bhosale	A.Bhosale	A.Bhosale	A.Bhosale	A.Bhosale
14	404	F190440039	BHUNDE YASH NANDU	Y.N.Bhunde	Y.N.Bhunde	Y.N.Bhunde	Y.N.Bhunde	Y.N.Bhunde	Y.N.Bhunde
15	310	F190440054	CHAITANYA PAIGUDE	Paigude	Paigude	Paigude	Paigude	Paigude	Paigude
16	311	F190440055	CHANGAN SHUBHAM SUDHAKAR	Shubham	Shubham	Shubham	Shubham	Shubham	Shubham
17	312	F190440056	CHARU SHARMA	✓	✓	✓	✓	✓	✓
18	406	F190440062	CHAVHAN ATHARVA SUDHAKAR	Chavhan	Chavhan	Chavhan	Chavhan	Chavhan	Chavhan
19	301	F190440064	CHIRAG RAMESHCHANDRA AGRAWAL	Chirag	Chirag	Chirag	Chirag	Chirag	Chirag
20	314	F190440066	DHIFALE SIDDHARTH ASHOK	Sad	Sad	Sad	Sad	Sad	Sad
21	317	F190440067	DAMARE OMKAR RAJENDRA	Omde	Omde	Omde	Omde	Omde	Omde
22	316	F190440072	DEVKAR NEHA DASHARATH	Devkar	Devkar	Devkar	Devkar	Devkar	Devkar



Sl. No.	Roll No.	Seat No.	Name of Students	M-H	CHEM	BEE	EM	EG	PBI
23	407	F190440073	DEVRE DARNISH DINESH	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
24	409	F190440079	DHORAIKAR SHUBHAMDEEP	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
25	518	F190440081	DEKSHA POPAT GAIKWAD	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
26	410	F190440082	DIYALE HEMANT PARSHURAM	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
27	411	F190440083	DORALE VAISHNAV BABURAO	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
28	412	F190440086	DONUR PREETWAL ASHOK	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
29	319	F190440090	GADGE AVANTIKA RAJU	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
30	320	F190440098	GAFARE BHUPESHNATH	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
31	413	F190440101	GARGOTE RAJGURU NAVANATH	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
32	414	F190440102	GASGE BHAGVAN AJINATH	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
33	415	F190440104	GAVHANE RUTHIJA MAHADEV	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
34	321	F190440106	GAWARI KESHAV GOVIND	<u>Left</u>	<u>Left</u>	<u>Left</u>	<u>Left</u>	<u>Left</u>	<u>Left</u>
35	416	F190440107	GAWATE SARTHAK DATTATRAY	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
36	323	F190440108	GEHAT ABHISHEK SAKHARAM	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
37	324	F190440110	GHORPADE RUTUJA RAJENDRA	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
38	438	F190440114	GORDE SURAJ SHARAD	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
39	325	F190440116	GUND HARSHAD SUNIL	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
40	419	F190440121	HANWANTE SAYALI SANJAY	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
41	327	F190440123	HEBADE MAYUR JIVAN	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
42	328	F190440124	HINGANE SAKSHI SHIVPRAKASH	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
43	329	F190440127	HULAWALE YASH AJIT	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
44	330	F190440131	JADHAV DHANASHREE GAJANAN	<u>Left</u>	<u>Left</u>	<u>Left</u>	<u>Left</u>	<u>Left</u>	<u>Left</u>
45	331	F190440132	JADHAV ANJALI DNYANORHA	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
46	420	F190440133	JADHAV ASHOK BHAGWAT	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
47	332	F190440136	JADHAV MADHURA ANIL	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
48	333	F190440137	JADHAV PARTH GOPAL	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>
49	421	F190440138	JADHAV PRATIKSHA KRISHNA	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>	<u>Pur</u>



Sl. No	Roll No	Seat No	Name of Students	M-H	CHEM	BEE	EM	EG	PBL
30	422	F190440141	JAGTAP PRANAV GUNESH	Pis	Pis	Pis	Pis	Pis	Sanj
31	423	F190440142	JADAGREDAR SUHAIB NAZIM	Shubh	Shubh	Shubh	Shubh	Shubh	Shubh
32	424	F190440143	JAGUDE SIDDI SHANKAR	Pargude	Pargude	Pargude	Pargude	Pargude	Pargude
33	425	F190440146	JAYACHE NAGESH BALAJI	Shubh	Shubh	Shubh	Shubh	Shubh	Shubh
34	426	F190440153	KAGANE NIKITA ANBOK	Onk	Onk	Onk	Onk	Onk	Onk
35	427	F190440158	KALE PRIYANKA SUKHDEV	Priyanka	Priyanka	Priyanka	Priyanka	Priyanka	Priyanka
36	334	F190440159	KALOKHE MKUNAL MOHAN	Elunad	Elunad	Elunad	Elunad	Elunad	Elunad
37	428	F190440161	KANEKAR NIDHI SURENDRA	Borokar	Borokar	Borokar	Borokar	Borokar	Borokar
38	429	F190440168	KARMALKAR NEHA YOGESH	Neha	Neha	Neha	Neha	Neha	Neha
39	430	F190440171	KEDAR ANSHWINTI RADHIKRUSHNA	Akedar	Akedar	Akedar	Akedar	Akedar	Akedar
40	335	F190440176	KHANDLOTE MEHUL SURESH	MEHUL	MEHUL	MEHUL	MEHUL	MEHUL	MEHUL
41	336	F190440181	KHILE BHARATI SARJERAO	Khile	Khile	Khile	Khile	Khile	Khile
42	431	F190440182	KOCHAREKAR GAYATRI SATYAVIJAY	Gayatri	Gayatri	Gayatri	Gayatri	Gayatri	Gayatri
43	337	F190440188	KULKARNI ADITYA SUDHIR	Aditya	Aditya	Aditya	Aditya	Aditya	Aditya
44	432	F190440203	MORE DIVYA MACHINDRA	Divya	Divya	Divya	Divya	Divya	Divya
45	433	F190440210	NAGARGOJE OMKAR RAOSAHEB	O.R.Nagargoje	O.R.Nagargoje	O.R.Nagargoje	O.R.Nagargoje	O.R.Nagargoje	O.R.Nagargoje
46	434	F190440212	NANDAN GUPTA	N	N	N	N	N	N
47	435	F190440213	NARKHEDE PRANAV MANOJ	P.Narkhede	P.Narkhede	P.Narkhede	P.Narkhede	P.Narkhede	P.Narkhede
48	338	F190440220	ONKAR SANTAY TAKALE	Onkar	Onkar	Onkar	Onkar	Onkar	Onkar
49	436	F190440227	PATIL ATHARVA SHARAD	Patil	Patil	Patil	Patil	Patil	Patil
50	338	F190440229	PATIL BALIRAM RAMESH	Bali	Bali	Bali	Bali	Bali	Bali
51	437	F190440230	PATIL DEVESH SATYAWAN	Dev	Dev	Dev	Dev	Dev	Dev
52	339	F190440234	PATIL RHRUSHIKESH VIKAS	P.Ratil	P.Ratil	P.Ratil	P.Ratil	P.Ratil	P.Ratil
53	340	F190440238	PAWADE RUTUJA VITTHAL	P.Pawade	P.Pawade	P.Pawade	P.Pawade	P.Pawade	P.Pawade
54	341	F190440243	PAWAR OMKAR SADASHIV	Omkar	Omkar	Omkar	Omkar	Omkar	Omkar
55	438	F190440247	PILLAI JOSHUA JABA	Joshi	Joshi	Joshi	Joshi	Joshi	Joshi
56	452	F190440250	PRATHAMESH DNYANESHWAR THIGALE	Prigale	Prigale	Prigale	Prigale	Prigale	Prigale



No.	Roll No.	Seat No.	Name of Students	M-II	CHEM	BEE	EM	EG	PBL
77.	446	F190440251	PRATIK SHASHINDRA SHINDE	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik
78.	441	F190440253	PULAKI SHRADDDHA RATNAKAR	Shradddha	Shradddha	Shradddha	Shradddha	Shradddha	Shradddha
79.	343	F190440255	RAKSHI SHIRINATH PRAVIN	Rakshi	Rakshi	Rakshi	Rakshi	Rakshi	Rakshi
80.	441	F190440256	RAKSHI TANUJA GUJARI	Rakshi	Rakshi	Rakshi	Rakshi	Rakshi	Rakshi
81.	442	F190440257	RASAL MORESHWAR NANDKUMAR	Rasal	Rasal	Rasal	Rasal	Rasal	Rasal
82.	343	F190440259	RASKAR VRUSHALI UTTAM	Raskar	Raskar	Raskar	Raskar	Raskar	Raskar
83.	344	F190440260	RATHOD PAYAL TULSHIRAM	Payal	Payal	Payal	Payal	Payal	Payal
84.	443	F190440261	RAUT PRADNYA SHAM	Raut	Raut	Raut	Raut	Raut	Raut
85.	444	F190440262	REDDY SRUSHI BIBHISHAN	Reddy	Reddy	Reddy	Reddy	Reddy	Reddy
86.	345	F190440265	SABALE VEDANG DACASAHIL	Sabale	Sabale	Sabale	Sabale	Sabale	Sabale
87.	346	F190440267	SADIWAD VISHWAJEET DATTU	Sadiwad	Sadiwad	Sadiwad	Sadiwad	Sadiwad	Sadiwad
88.	439	F190440268	SAKORE PRATIK VILAS	Sakore	Sakore	Sakore	Sakore	Sakore	Sakore
89.	313	F190440273	SANKET VILAS DESHMUKH	Sanket	Sanket	Sanket	Sanket	Sanket	Sanket
90.	445	F190440279	SAUDAGAR SKOLIN ALE ABASH	Saudagar	Saudagar	Saudagar	Saudagar	Saudagar	Saudagar
91.	347	F190440281	SAYYED MOHAMMAD HANIF ILANI	Sayyed	Sayyed	Sayyed	Sayyed	Sayyed	Sayyed
92.	348	F190440292	SHENDGE AMIT BAHAN	Shendge	Shendge	Shendge	Shendge	Shendge	Shendge
93.	349	F190440294	SHINDE DIKSHA NILESH	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde
94.	417	F190440301	SHINGDE GAYATRI BALAJI	Gayatri	Gayatri	Gayatri	Gayatri	Gayatri	Gayatri
95.	447	F190440303	SHIVEKAR SWAPNIL NANDU	Shivekar	Shivekar	Shivekar	Shivekar	Shivekar	Shivekar
96.	322	F190440304	SHRAVANI AJAYSING GAYDEAR	Shravani	Shravani	Shravani	Shravani	Shravani	Shravani
97.	313	F190440306	SHRUTIKA ARUN CHAUDHARI	Shrutika	Shrutika	Shrutika	Shrutika	Shrutika	Shrutika
98.	350	F190440308	SINGH ANKIT HARJAL	Singh	Singh	Singh	Singh	Singh	Singh
99.	448	F190440311	SINGH YASHPAL SUMANTKUMAR	Singh	Singh	Singh	Singh	Singh	Singh
100.	449	F190440314	SONAWANE SHREYA RAKHAMAJI	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane
101.	450	F190440321	SYED REHAN ALI SAJJID ALI	Syed	Syed	Syed	Syed	Syed	Syed
102.	352	F190440322	TADAKALE KARBASAPPA DATTATRAY	Tadkale	Tadkale	Tadkale	Tadkale	Tadkale	Tadkale
103.	451	F190440323	TAKALKAR RUSHIKESH SUNIL	Takalkar	Takalkar	Takalkar	Takalkar	Takalkar	Takalkar



Sr. No	Roll No	Seat No	Name of Students	M-II	CHEM	BEE	EM	EG	PBL
104	334	F190440326	TAMBOLEKAR SHRUTI BALVANT	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>
105	326	F190440329	TARLEKAR VARSHAGAJANAN	<del>Varsh</del>	<del>Varsh</del>	<del>Varsh</del>	<del>Varsh</del>	<del>Varsh</del>	<del>Varsh</del>
106	335	F190440335	THORAT SHREYASH RAJESH	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>	<del>Shruti</del>
107	356	F190440337	TIKANDI LALIT RAMDAS	<del>Lalit</del>	<del>Lalit</del>	<del>Lalit</del>	<del>Lalit</del>	<del>Lalit</del>	<del>Lalit</del>
108	453	F190440347	VIDHATE YASH RAMDAS	<del>Yash</del>	<del>Yash</del>	<del>Yash</del>	<del>Yash</del>	<del>Yash</del>	<del>Yash</del>
109	455	F190440351	VYAVAHARE PRAVEN GOVARDHAN	<del>Pra</del>	<del>Pra</del>	<del>Pra</del>	<del>Pra</del>	<del>Pra</del>	<del>Pra</del>
110	337	F190440359	YADAV PRASHANT BRIJESH	P. Yadav	P. Yadav	P. Yadav	P. Yadav	P. Yadav	P. Yadav
111	454	F190440360	YADAV SURAJ RAMPRAKASH	Suraj	Suraj	Suraj	Suraj	Suraj	Suraj
112	408	F190440368	ZANIAD DIKSHA SATISH	Diksha	Diksha	Diksha	Diksha	Diksha	Diksha
113		F190440266	SADAVARTE BHUSHAN VISHNU	<del>Bhushan</del>	<del>Bhushan</del>	<del>Bhushan</del>	<del>Bhushan</del>	<del>Bhushan</del>	<del>Bhushan</del>
SUBJECT TEACHER NAME & SIGN									



  
 DR. U. V. SHINDE  
 HOD  
 Shinde U. V.  
 First Year Co-ordinator  
 Siddhant College of Engineering,  
 Surumbare, Tal. Maval, Pune - 412 117

**SIDDHANT COLLEGE OF ENGINEERING,**  
**SUDUMBARE, PUNE.**



**PROJECT BASED LEARNING WORKBOOK**

**FIRST YEAR ENGINEERING DEPARTMENT**

Name Of Student: Siddhi Shankar Taigude

Div. D Roll. No. 424 Exam. Seat No. F190440143



# CERTIFICATE

Certified that, Mr/Miss.....Siddhi Shankar Jaigude.....

Roll. No:.....424..... Examination No.:...F190440143..of Division.....D.....

Batch....D2... has carried out activities required for Project Based learning under my guidance.  
His/her performance is satisfactory.

Date: 20/7/23

  
Sign.Of Guide

  
Head of Department



Shinde U. V.  
First Year Coordinator  
Siddhant College of Engineering,  
10th, Tej Nagar, Pune - 412 105.

# INDEX

Sr.No.	Title Of activity	Page No.	Date	Remark
1]	Introduction.	1	12/05/23	} <u>Pali</u>
2]	Apparatus	4	26/05/23	
3]	Producers	5	9/06/23	
4]	Working	8	23/06/23	
5]	Conclusion.	9	07/07/23	

Date: 20/7/23

Pali 20/7/23  
Sign. Of Guide



# PROJECT ABSTRACT

Project Title: Electric Car.


Project Domain: Engineering Mechanics.

**Abstract:** An electric car is a plug-in electric automobile that is propelled by one or more electric motors using the energy stored in rechargeable batteries the electric car can be charged at a variety of charging centres installed in public places & houses In the article ,we have provided detailed steps to Help you build your own electric car.

**Siddhant College Of Engineering, Sudumbare, Pune.**  
**Department of First Year Engineering**  
**Project Based Learning**  
*Project Review*

Sr. No.	Parameters/ Check list	Yes/No (✓)	Remark if any
1	Requirement Specifications/ Information Gathering	✓	} <u>good</u>
2	Problem Formulation	✓	
3	Methodology ( Details of Materials, Procedures, Technology, etc., used)	✓	
4	Design and Development of Model if any	✓	
5	Recording of Observations/ Experimental Analysis	✓	
6	Demonstration of Project Model/ Hypothesis	✓	
7	Concluding Remarks	✓	
8	Future Scope	✓	



9	Any other parameter relevant to project ( Please specify)		
<p><b>Remark:</b></p> <div style="text-align: right; margin-top: 100px;">   <b>Guide's Signature</b> </div>			
<p><i>Note: Guide can modify this list as per his perception about the project. This is only suggestive list for time to time project review.</i></p>			

## PROJECT BASED LEARNING (PBL)

Teaching Scheme ( Hours/ Week)				Examination Scheme and Marks						Credits			
TH	PR	TUT	Total	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
—	04	—	—	—	—	25	50	—	75	—	02	—	02

### Rationale:

*“I Hear and I Forget, I See and I Remember, I Do and I Understand”*

Engineering is more about doing and it has technical, social and economic aspects. Thus for holistic development of students in addition to cognitive (*applying brain*) domain of students, development of Psychomotor (*observing, doing, smelling, touching, etc.*) and affective (*emotion*) domains are equally important. In short, development of Head, Hand and Heart of budding engineer would create exotic results. This is the motivation behind introducing the PBL.

PBL is a student-centric pedagogy which offers active exploration of a real world challenges and problems. As student himself is putting his efforts it triggers the process of thinking towards the formulation of problem and finding the best possible solution in terms of technical , ecological, economical feasibility. This can be most rewarded style of learning.



PBL workbook: PBL workbook will reflect accountability, punctuality, technical writing ability and work flow of the project. Continuous Assessment Sheet (CAS) is to be maintained by mentors.

Group of students may demonstrate knowledge and skills by developing a product and/or report and/or presentation. The components of assessment will be

1. Individual Assessment: On the basis of individual capacity, role and involvement in the project.
2. Group Assessment: Distribution of work, Team spirit, Intra-team communication and intimacy.
3. Documentation and Presentation: Report of minimum 10 pages and PPTs.
4. Parameters of Evaluation/Assessment: Project Report (PR Out of 50 Marks)

Sr. No.	Parameter	Weightage (%)	Marks	Remark
1	Idea Inception of Project	05	2.50	
2	Outcome of PBL ( Individual and Team Assessment) Problem solving skills/ solution provided/ Final Product	50	25.00	—
3	Documentation Requirement gathering, formulation of problem, design & modeling, execution, use of	25	12.50	—

	technology, final report and other relevant documents if any.			
4	<b>Demonstration</b> Presentation, User Interface, Usability, etc.	10	05.00	} good
5	<b>Publication/ Contest Participation</b> Paper, Patent, Conference, etc.	05	02.50	
6	<b>Awareness</b> Social, Ethical, Ecological, Legal, Safety Measures	05	02.50	
	<b>TOTAL</b>	<b>100</b>	<b>50.00</b>	

#### 5. Workbook Continuous Assessment Sheet (CAS): TW Out of 25 Marks

Sr. No.	Parameter	Weight age (%)	Marks	Remark
1	Attendance/ Punctuality	20	05	
2	PBL Workbook	20	05	
3	Quantum of Participation as team member	20	05	
4	Initiative	20	05	
5	Attitude	20	05	
	<b>Total</b>	<b>100</b>	<b>25</b>	



## Activity Details

Activity Assigned in Brief	Started on	Completed on
Introduction.	12/05/23	
	9:00 AM.	10:45 AM.

Details (to be written by individual student))

- 1] A battery electric vehicle is Pure electric vehicle is a type of electric vehicle that exclusively uses chemical energy stored in rechargeable battery packs with no secondary source of propulsion.
- 2] BEVS Use Electric motors and controllers instead of internal combustion engines.
- 3] It is a Fuel saving vehicle.
- 4] It Uses less electricity For charging.

  
 Remark & Signature of Guide with date

**Savitribai Phule Pune University, Pune**  
**S.E. (Electronics / E&TC Engineering) 2019 Course**  
 (With effect from Academic Year 2020-21)

**Semester-IV**

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit			
		Theory	Practical	Tutorial	In-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total
204191	Signals & Systems	03	-	01	30	70	25	-	-	125	03	-	01	04
204192	Control Systems	03	-		30	70		-	-	100	03	-	-	03
204193	Principles of Communication Systems	03	-	-	30	70	-	-	-	100	03	-	-	03
204194	Object Oriented Programming	03	-	-	30	70	-	-	-	100	03	-	-	03
204195	Signals & Control System Lab		02				50			50		01		01
204196	Principle of Communication Systems Lab	-	02	-	-	-	-	50	-	50	-	01	-	01
204197	Object Oriented Programming Lab	-	02	-	-	-	-	-	50	50	-	01	-	01
204198	Data Analytics Lab		02				-		25	25		01		01
204199	Employability Skill Development	02	02	-	-	-	50	-	-	50	02	01	-	03
204200	Project Based Learning <sup>η</sup>	-	04				50		-	50		02		02
204201	Mandatory Audit Course 4 <sup>&amp;</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>		<b>14</b>	<b>14</b>	<b>01</b>	<b>120</b>	<b>280</b>	<b>175</b>	<b>50</b>	<b>75</b>	<b>700</b>	<b>14</b>	<b>07</b>	<b>01</b>	<b>22</b>

**Abbreviations:**

In-Sem: In semester

End-sem: End semester

TH : Theory

TW : Term Work

PR : Practical

OR : Oral

TUT : Tutorial

**Note: Interested students of S.E. (Electronics/E&TC) can opt any one of the audit course from the list of audit courses prescribed by BoS (Electronics & Telecommunications Engineering)**





C. A. Y. M. E. Trust's

Siddhant College of Engineering.

Department of Electronics and Telecommunication Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & ACSBTE)

At. Post - Sudumbare, Tal. - Maval, Dist. - Pune. PIN - 412 109. ☎ 02114-661904

SEM-II (2022-23)

Class: - SE (E & TC)

Date: 15<sup>th</sup> Feb 2023

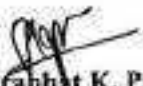
### Notice (PBL Group Formation)

All the Students of SE E & TC (2022-23) are hereby informed to form their project Based learning (PBL) groups for Second year. The last date of Project group submission is 22<sup>th</sup> Feb 2023, Wednesday.

Note:

1. Project groups should be of 3 to 4 members only.
2. Once Project group is submitted no changes will be entertained.
3. While filling Google form write your full name in given sequence only, with correct mail ids and mobile numbers which will be used for further communication throughout the year.
4. To avoid further consequences try to form the project groups with the students with proper understanding and discussion. No disputes or other queries except project work will be entertained by Project Guide, Project Coordinator or HOD.
5. After project group formation search for project topics which will be selected by panel members after presentation of selected topics

  
Prof. Geetanjali Argade  
Dept. PBL coordinator  
(8605431518)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The ESTE Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

# CAYMET'S

Siddhant College of Engineering, Sudumbare

Department of Electronics and Telecommunication Engg

CLASS: SE(E & TC) 2019 PAT

SEM: II

Date: 8/10/2023

Subject: Project Based Learning

Subject Teacher: Prof. Geetanjali Argade

Sr. No.	Name of the Candidates	Project Title	Sign
1	Burange Snehalata Lakshma	Design and Fabrication of Dual side shaper Machine	Burange
	Shivani Manaji Yadav		Shivani
	Kajal Salunkhe		Kajal
	Manish pravin salunke		Manish
2	Dipali C Parab	Solar Tracking System	Dipali
	Samiksha Dhuri		Samiksha
	Ketaki Sodage		Ketaki
3	Pratiksha Bandu Goukonde	Multipurpose Glass Cleaning Robot Using Machine Learning	Pratiksha
	Shrutika Ramesh Pawar		Shrutika
	Anjali Shinde		Anjali
4	Supriya Karande	Smart onion storage	Supriya
	Bhushan ratnakant rokade		Bhushan
	Karan Kishor Jadhav		Karan
5	Sakshi Mahantesh Babanaga	Automated hydroponic plant growth system using IoT	Sakshi
	Ajay Shivaji Dalvi		Ajay
	Rutuja Suresh yadav		Rutuja
6	Atharva Sanjay Sawant	Women's Safety Device With GPS Tracking & Alert	Atharva
	Rahul Lokhande		Rahul
	Vaishnav Barne		Vaishnav
	Rushikesh Ekade		Rushikesh
7	Prajwal Kakade	MEMS Gas Sensor	Prajwal
	Akash Jaiswara		Akash
	Nikhil kulkarni		Nikhil
8	Rahul Dasharath Mugale	RFID attendance system	Rahul
	Atharva Jayant Gawade		Atharva
9	Sakshi Dinkar Kadlag	IOT Based Garbage Monitoring system	Sakshi
	Reshma Gaikwad		Reshma
	Shrikrushna		Shrikrushna
	Rohit dagdu mane		Rohit
10	Phalguni Bandichhode	Piezoelectric energy harvesting vai shoe sole	Phalguni
	Shreyash Rajendra Mohite		Shreyash
	Saurabh Suhas Fursule		Saurabh
11	Yash Lalgude	Home automation	Yash
	Mayur Jagadale		Mayur
12	Rushabh chandrakant dhumi	Automatic hand sanitizing machine using Arduino uno board	Rushabh
	Poonam Vitthal Sutar		Poonam
	Namrata ekbote		Namrata



[illegible]



C. A. Y. M. E. Trust's

*Siddhant College of Engineering.*

*Department of Electronics and Telecommunication Engineering.*

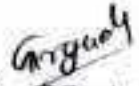
*(Approved by AKTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)*


*At: Post - Sudumbare, Tal. - Maval, Dist - Pune, PIN - 412 109. ☎ 02114-661904*

**Date: 24<sup>th</sup> Feb 2023**

## **Project Based Learning Title Finalization Notice**

All the Students of SE E & TC engineering are hereby informed that Project title finalization is scheduled on **08/03/2023 (Wednesday)**. In Project Title Finalization, Project Group should explain all the three Project ideas in front of all faculty members. One of the Project Title will be finalized if found proper or changes will be suggested if required. Details of the entire Project based learning ideas should be brought on plain paper. (No PPT presentation is required).

  
**Prof. Geetanjali Argade**  
Dept. PBL coordinator  
(8605431518)

  
**Dr. Prabhat K. Pallav**  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109





C. A. V. M. E. Trust's

Siddhant College of Engineering

Department of Electronics and Telecommunication Engineering

(Approved by AICTE, Recognised by Govt. of Maharashtra and Affiliated to S.P. Pune University & MESBTE)

At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904

SEM- II (2022-23)

Class:- SE (E & TC)

Date : 13<sup>th</sup> Mar 2023

## NOTICE

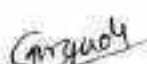
All students of SE are hereby informed that Project Based Learning (PBL) Review I (presentation) for Semester II is scheduled on 15/03/2023 (Wednesday).


PBL presentation should include following points.

1. Introduction
2. Literature Survey
3. Problem Statement

Attendance is mandatory for all group members.  
Also maintain logbook week wise.

Note: Submit the abstract of project on or before 10/03/2023.

  
Prof. Geetanjali Argade  
Dept. PBL coordinator  
(8605431518)

  
Dr. Pradip K. Pallav  
Head of Department,  
E & TC Engineering  
of The E&TC Dept.,  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering

**Department of Electronics and Telecommunication Engineering.**

(Approved by AKTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.

SEM- II (2022-23)

Class:- SE (E & TC)

Date : 6<sup>th</sup> April 2023

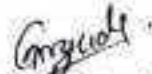
## NOTICE


All students of SE are hereby informed that Project Based Learning (PBL) Review II (presentation) for Semester II is scheduled on 11/04/2023 (Tuesday).

PBL presentation should include following points.

1. Introduction
2. Literature Survey
3. Problem Statement
4. Aim and Objectives
5. System Block Diagram

Attendance is mandatory for all group members.  
Also maintain logbook week wise.

  
Prof. Geetanjali Argade  
Dept. PBL coordinator  
(8605431518)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109





C. A. Y. M. E. Trust's

Siddhant College of Engineering.

Department of Electronics and Telecommunication Engineering.

(Approved by AKTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)

At. Post - Sudumbare, Tal - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.

SEM- II (2022-23)

Class:- SE (E & TC)

Date : 3<sup>rd</sup> May 2023

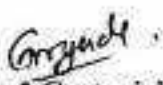
## NOTICE


All students of SE are hereby informed that Project Based Learning (PBL) Review III (presentation) for Semester II is scheduled on 12/05/2023 (Friday).

PBL presentation should include following points.

1. Introduction
2. Literature Survey
3. Problem Statement
4. Aim and Objectives
5. System Block Diagram
6. System Implementation Details
7. Discussion and Analysis of Results
8. Conclusion
9. System Limitations

Attendance is mandatory for all group members.  
Also maintain logbook week wise.

  
Prof. Geetanjali Argade  
Dept. PBL coordinator  
(8605431518)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Head of the E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S. P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Marol, Dist. - Pune, PIN - 412 109. ☎ 02114-661904

SEM- II (2022-23)

Class:- SE (E & TC)

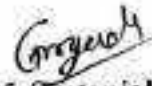
Date : 19<sup>th</sup> May 2023

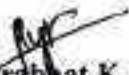
## Project Based Learning contents

**Project Groups should prepare the project based learning report and has to submit soft copy as well as hard copy (Spiral Binding)**

All the project groups are instructed to complete PBL report in the given tasks :

1. Introduction
2. Literature Survey
3. Problem Statement
4. Aim and Objectives
5. System Block Diagram
6. System Implementation Details
7. Discussion and Analysis of Results
8. Conclusion
9. System Limitations
10. Future Scope
11. References

  
Prof. Geetanjali Argade  
Dept. PBL coordinator  
(8605431518)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Marol, Pune- 412109





C. A. Y. M. E. Trust's  
Siddhant College of Engineering.  
Department of Electronics and Telecommunication Engineering.  
(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☐ 02114-661904.

SEM- II (2022-23)

Class:- SE (E & TC)

Date : 22<sup>nd</sup> May 2023

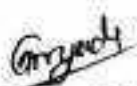
## NOTICE


All the Students members of SE E&TC Engineering are hereby informed that, Project Based Learning SPPU Term work exam Submission is scheduled on 25<sup>th</sup> May 2023, Thursday. Project based learning evaluation will be for 50 marks. All the Project (PBL) Groups are supposed to contact the Dept. PBL Coordinator and discuss the status of the project before 24<sup>th</sup> May 2023. Project Groups Should Prepare the (PBL) report considering following points. (PPT also)

- |                                  |                                       |
|----------------------------------|---------------------------------------|
| 1. Introduction                  | 7. Discussion and Analysis of Results |
| 2. Literature Survey             | 8. Conclusion                         |
| 3. Problem Statement             | 9. System Limitations                 |
| 4. Aim and Objectives            | 10. Future Scope                      |
| 5. System Block Diagram          | 11. References                        |
| 6. System Implementation Details |                                       |

### Note:-

1. Prepare PPT presentation of at least 15-20 slides
2. While presentation each group member has to give the presentation (So divide the presentation among your respective group members)
3. Prepare project report of 25-30 Pages
4. Submit 2 Copies of report with Spiral Binding duly signed by Dept. PBL Coordinator and HOD (Refer SPPU syllabus)

  
Prof. Geetanjali Argade  
Dept. PBL coordinator  
(8605431518)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



## CERTIFICATE

*This is to certify the project based learning report entitled*

**“Wireless Power Transmission”**


**Is a benefited work carried out by**

<b>Dnyaneshwar Thombre</b>	<b>(S190443018)</b>
<b>Ritesh Agre</b>	<b>(S190443001 )</b>
<b>Pradip Dangale</b>	<b>(S190443046 )</b>

This work is being submitted for the award of Engineering of  
**ELECTRONIC & TELECOMMUNICATION** is submitted in partial  
fulfillment of the Prescribed syllabus of SPPU, Pune  
During the academic Year 2022-23

  
**Prof. Geetanjali Argade**  
( Subject Teacher )

  
**Dr. Prabhat Pallav.**  
( HOD E&TC )

  
**Dr. Kamble L. V.**  
( Principal )



Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Malwal, Pune - 412109





## CERTIFICATE

*This is to certify the project based learning report entitled*

**"Smart Onion Storage"**


Is a benefited work carried out by

Bhushan Ratnkant Rokade	(S190443049)
Karan Kishor Jadhav	(S190443027 )
Karande Supriya Sanjay	(S190443033 )

This work is being submitted for the award of Engineering of  
ELECTRONIC & TELECOMMUNICATION is submitted in partial  
fulfillment of the Prescribed syllabus of SPPU, Pune  
During the academic Year 2022-23

  
Prof. Geetanjali Argade  
( Subject Teacher )

  
Dr. Prabhat Pallav.  
( HOD E&TC )

  
Dr. Kamble L. V.  
( Principal )



Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

**A PROJECT BASED LEARNING REPORT  
ON**

**“Home automation”**

**Submitted to**

**Siddhant College of Engineering, Sudumbare.**

**Department: - Electronics & Telecommunication**

**In Partial fulfillment of the Requirement for the Engineering in  
Electronics & Telecommunications**

**Submitted by**

**Mayur Jagadale**

**(S190443028)**

**Rushabh Dhumal**

**(S190443014)**

**Under the guidance of project guide**

**Prof. Geetanjali Argade**



**CAYMET's  
SIDDHANT COLLEGE OF ENGINEERING**  
Sudumbare, Pune – 412109



# SIDDHANT COLLEGE OF ENGINEERING

Department: - Electronics and  
Telecommunication



## CERTIFICATE

*This is to certify the project-based learning report entitled.*

**"Home automation"**

**Is a benefited work carried out by**

**Mayur Jagadale**

**(S190443028)**

**Rushabh Dhumal**

**(S190443014)**

**This work is being submitted for the award of Engineering of  
ELECTRONIC & TELECOMMUNICATION is submitted in partial  
fulfillment of the Prescribed syllabus of SPPU, Pune  
During the academic Year 2022-23**

*Geetanjali Argade*  
**Geetanjali Argade**  
**(Subject Teacher)**

*Dr. Prabhat Pallav*  
**Dr. Prabhat Pallav**  
**(HOD E&TC)**

**Head Of The E&TC Dept.**  
**Siddhant College of Engineering**  
**Sudumbare, Maval, Pune- 412109**

**Dr. Kamble L. V.**  
**(Principal)**



# PROJECT BASED LEARNING REPORT

ON

"MULTIPURPOSE GLASS CLEANING ROBOT

USING MACHINE LEARNING"

**Submitted to**

**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBRE.**

**Dist. Pune-412109**



Department: Electronics & Telecommunication

Academic year: 2022-2023

**Under the guidance of subject Teacher**

Prof. Geetanjali Argade

**Submitted by,**

**Shinde Anjali Arun**

**-S190443003**

**Goukonde Pratiksha Bandu**

**-S190443024**

**Pawar Shrutika Ramesh**

**-S190443045**



## CERTIFICATE

Project Based Learning Report Entitled On  
"MULTIPURPOSE GLASS CLEANING ROBOT  
USING MACHINE LEARNING"

Submitted by,

Shinde Anjali Arun

Goukonde Pratiksha Bandu

Pawar Shrutika Ramesh.

**This work is being submitted for the award of Engineering of ELECTRONIC & TELECOMMUNICATION is submitted in partial fulfillment of the During the academic Year 2022-23 Prescribed syllabus of SPPU, Pune-412109.**



Subject Teacher

(Prof. Geetanjali Angade)

  
H.O.D

(Dr. Prabhat Pallav)

Principal

(Dr. L. V. Kamble)

Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



**Savitribai Phule Pune University, Pune**  
**T.E. (Electronics & Telecommunication Engineering) 2019 Course**  
**(With effect from Academic Year 2021-22)**

**Semester-VI**

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit			
		Theory	Practical	Tutorial	In-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total
304192	Cellular Networks	03	-	-	30	70	-	-	-	100	03	-	-	03
304193	Project Management	03	-	-	30	70	-	-	-	100	03	-	-	03
304194	Power Devices & Circuits	03	-	-	30	70	-	-	-	100	03	-	-	03
304195	Elective-II	03	-	-	30	70	-	-	-	100	03	-	-	03
304196	Cellular Networks Lab	-	02	-	-	-	-	-	50	50	-	01	-	01
304197	Power Devices & Circuits Lab	-	02	-	-	-	-	50	-	50	-	01	-	01
304198	Elective-II Lab	-	02	-	-	-	-	25	-	25	-	01	-	01
304199	Internship**	-	-	-	-	-	100	-	-	100	-	-	04	04
304200	Mini Project	-	04	-	-	-	25	-	50	75	-	02	-	02
304191 B	Mandatory Audit Course 6 &	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>		<b>12</b>	<b>10</b>	<b>00</b>	<b>120</b>	<b>280</b>	<b>125</b>	<b>75</b>	<b>100</b>	<b>700</b>				
<b>Total Credit</b>											<b>12</b>	<b>05</b>	<b>04</b>	<b>21</b>

**Abbreviations:**

In-Sem: In semester

End-Sem: End semester

TH: Theory

TW : Term Work

PR: Practical

OR: Oral

TUT: Tutorial

**Note: Students of T.E. (Electronics & Telecommunications) have to opt any one of the audit course from the list of audit courses prescribed by BoS (Electronics & Telecommunications Engineering)**

**Elective -II**

- 1) Digital Image Processing
- 2) Sensors in Automation
- 3) Advanced JAVA Programming
- 4) Embedded Processors
- 5) Network Security





C. A. V. M. E. Trust's

Siddhant College of Engineering.

Department of Electronics and Telecommunication Engineering.

(Approved by AICTE, Recognised by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.

SEM- II (2022-23)

Class: - TE (E & TC)


Date: 17<sup>th</sup> Feb 2023


### Notice (Mini Project Group Formation)

All the Students of TE E & TC (2022-23) are hereby informed to form their Mini Project groups for third year projects. The last date of Project group submission is **21<sup>st</sup> Feb 2023**.

Follow the guidelines given below while forming the project groups:

1. Project groups should be of **3 to 4 members only** (less members are not allowed).
2. Once Project group is submitted no changes will be entertained.
3. To avoid further consequences try to form the project groups with the students with proper understanding and discussion. No disputes or other queries except project work will be entertained by Project Guide, Project Coordinator or HOD.
4. After project group formation search for project topics which will be selected by panel members after presentation of selected topics
5. Project Guides will be allotted by Project Coordinator and HOD on 22<sup>nd</sup> Feb 2023.

  
17/2/23  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.


Department of Electronics and Telecommunication Engineering.


(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.

Date: 17<sup>th</sup> Feb 2023

### List of Project Guides with Choices

Sr. No	Name of Project Guide	Specialization
1.	Dr. Prabhat Pallav	Embedded system
2.	Dr. A. V. Bade	Embedded system
3.	Prof. M. U. Inamdar	IOT, WSN, PLC, I/MC, ES.
4.	Prof. G. A. Argade	Image processing, ES, (communication), AI
5.	Prof. S. B. Deshmukh	IOT, AI, WSN, (communication)
6.	Prof. S. V. Shelke	Electrical power system
7.	Prof. K. A. Kadam	WSN, communication

  
17/2/23  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.


Date: 22<sup>nd</sup> Feb 2023


## Project Title Finalization Notice

All the Students of TE E & TC engineering are hereby informed that Mini Project title finalization is scheduled on 16<sup>th</sup> Mar 2023 from 09.30am to 04.00 pm at A20 classroom.

In Mini Project Title Finalization, Project Group should explain all the three Project ideas in front of the Panel members. One of the Project Title will be finalized if found proper or changes will be suggested if required.

Details of all the Project ideas should be brought on plain paper. (No PPT presentation is required).

  
22/02/23  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109





C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.

SEM- II (2022-23)

Class:- TE ( E & TC)

Date : 17<sup>th</sup> Mar 2023

### Notice

All the students of TE E & TC Engineering are hereby informed that, Mini Project Review-I is scheduled on 19<sup>th</sup> Mar 2023, at 10.00 am. All the Mini Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review

This review has weightage of 50% of Term work marks.

Project Groups should prepare the Presentation accordingly.

All the Group members should be present at the time of Project Review.

Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

Dr. Prashant K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E & TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune - 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S. P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☐ 02114-661904

SEM- II (2022-23)

Class:- TE ( E & TC)

Date : 13<sup>th</sup> Apr 2023

## Notice


All the students of TE E & TC Engineering are hereby informed that, Mini Project Review-II is scheduled on **16<sup>th</sup> Apr 2023, at 10.00 am**. All the Mini Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:


1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review
7. Design Calculations
8. Experimental Layout

This review has weightage of 50% of Term work marks.

Project Groups should prepare the Presentation accordingly.

All the Group members should be present at the time of Project Review.

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The **ES&TC Dept.**  
Siddhant College of Engineering  
Sudumbare, Maval, Pune-412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sadumbare, Tal. - Marol, Dist. - Pune, PIN - 412 109. ☐ 02114-661904

**SEM- II (2022-23)**

**Class:- TE ( E & TC)**

**Date : 8<sup>th</sup> May 2023**


### **Notice**


All the students of **TE E&TC Engineering** are hereby informed that, **Mini Project Review-III** is scheduled on **12<sup>th</sup> May 2023 at 10.00 am**. All the Mini Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

- |   |  |
|---|--|
| 1. Introduction                               | 10. Fabrication Status (Add actual photos) |
| 2. Problem statement                          | 11. Assembly (Add actual photos)           |
| 3. Objectives                                 | 12. Experimentation                        |
| 4. Concept                                    | 13. Analysis (add analysis part if any)    |
| 5. Plan (Complete Plan to Finish the Project) | 14. Results                                |
| 6. Literature Review                          | 15. Conclusions and References             |
| 7. Design Calculations                        |  |
| 8. Experimental Layout                        |  |
| 9. Purchase of Material (Add actual photos)   |  |

**Presentation will be in front of Project Evaluation Panel.** All the Group members should be present at the time of Project Review.

**Note:-** Project Should be completed at the end of this month. Prepare project report in consultation with your project Guides.

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
**E&TE Engineering Dept.**  
Siddhant College of Engineering  
Sadumbare, Marol, Pune- 412109





C. A. V. M. E. Trust's  
Siddhant College of Engineering,

Department of Electronics and Telecommunication Engineering.

(Approved by AKTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.

SEM- II (2022-23)

Class:- TE ( E & TC)


Date : 19<sup>th</sup> May 2023


## Mini Project Contents

1. Group formation
2. Topic finalization
3. Literature Review
4. Methodology
5. Components selection
6. Design Calculations
7. Experimental Layout
8. Purchase of Components
9. Fabrication (PCB Design)
10. Assembly
11. Experimentation and
12. Analysis
13. Conclusion and References

**Note:-** Project Groups should Prepare the project report and has to submit soft copy as well as hard copy ( Spiral Binding )

All the project groups are instructed to complete the given tasks in Mini Project.

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. T. M. E. Trust's  
Siddhant College of Engineering.

Department of Electronics and Telecommunication Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☐ 02114-661904.

SEM- II (2022-23)

Class:- TE ( E & TC)

Date : 21<sup>st</sup> May 2023

### Notice


All the Students members of TE E&TC Engineering are hereby informed that, Mini Project SPPU Oral exam is scheduled on 23<sup>rd</sup> May 2023. Mini Project evaluation will be for 50 marks (25 marks term work & 25 marks Oral). All the Mini Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Mini Project Groups Should Prepare the report considering following points. (PPT also)

1. Introduction
2. Problem statement
3. Objectives
4. Methodology
5. Plan (Complete Plan to Finish the Project)
6. Literature Review
7. Design Calculations
8. Experimental Layout

#### Note:-

1. Prepare PPT presentation of at least 15-20 slides
2. While presentation each group member has to give the presentation (So divide the presentation among your respective group members )
3. Prepare project report of 25-30 Pages
4. Submit 2 Copies of report with Spiral Binding duly signed by Project Guide, Project Coordinator, HOD and Principal. (Refer SPPU syllabus)
5. Carry Logbook and Literature referred during oral exam.

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head of the E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

**MINI PROJECT REPORT**  
**ON**  
**OBSTACLE AVOIDING ROBOT USING AURDINO**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY,  
IN THE FULFILLMENT OF MINI PROJECT  
FOR THE AWARD OF THE DEGREE  
OF  
**THIRD YEAR E&TC ENGINEERING**  
BY

**Name of the students**

Shraddha Kisan Palkar

Bhavika Santosh Zagade

**Seat no./Roll no.**

72297746J

72297770M

Under the Guidance of  
**Prof. M.U.Inamdar**

**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**



Sudumbare, Talegaon-Chakan Road  
Tal - Muval, Dist - Pune - 412109.

**ACADEMIC YEAR : 2022-23**



## CERTIFICATE

This is to certify that the project report entitled **Obstacle Avoiding Robot** having 72297746J & 72297770M is a Bonafide work carried out by him under the supervision of Prof. "M.U.Inamdar" and it is approved for the partial fulfilment of the project part I of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.



**Prof.M.U. Inamdar**

**Project Guide**



**Prof. Prabhat Palley**  
**Head of the E&T Dept.**  
**Siddhant College of Engineering**  
**Head of Department**  
Sudumbare, Maharashtra - 412109



**Dr.L.V.Kambale**

**Principal**

Place: Sudumbare, Pune

Date: 23/05/2023

A  
MINI PROJECT REPORT  
ON  
**TITLE OF THE PROJECT**  
**“AUTO WATER PUMP SWITCHER”**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY,  
IN THE FULFILLMENT OF **MINI PROJECT**  
FOR THE AWARD OF THE DEGREE  
OF  
**THIRD YEAR E&TC ENGINEERING**

BY  
**Name of the students:-**  
**Thorat Pratiksha Rajaram**  
**Mohite Pratiksha Lalaso**

**Roll no:**  
**72297763J**  
**72297737K**

**Under the Guidance of**  
**Prof. M. U. Inamdar**

**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**



**Sudumbare, Talegaon-Chakan Road**  
**Tal - Maval, Dist - Pune - 412109.**  
**ACADEMIC YEAR : 2022-23**

## CERTIFICATE

This is to certify that the project report entitled "AUTO WATER PUMP SWITCHER", having roll no: 72297763J & 72297737K, is a Bonafide work carried out by him under the supervision of Prof. Prof. M. U. Inamdar and it is approved for the partial fulfilment of the project part 1 of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering(Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.

  
Prof. M. U. Inamdar

Project Guide

  
Dr. Prabhat Pallav

Head Of The E&TC Dept.  
Head of Department of Engineering  
Sudumbare, Naval, Pune- 412109



Dr. L. V. Kamble

Principal

Place :Sudumbare,Pune

Date : 22/5/2023



**DEVELOPMENT OF AUTOMATED RAIN OPERATED WIPER**  
**MINI PROJECT REPORT**  
**ON**  
**DEVELOPMENT OF AUTOMATED RAIN OPERATED WIPER**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY,  
IN THE FULFILLMENT OF **MINI PROJECT**  
FOR THE AWARD OF THE DEGREE  
OF  
**THIRD YEAR E&TC ENGINEERING**  
BY

**Name of the students**

**Seat no./Roll no.**

1) Pratiksha Akarte

T190443002

2) Aparna Jagtap

T190443006

3) Kedar Kadam

T190443035

Under the Guidance of

**Prof. M. U. Inamdar**

**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**



Sudumbare, Talegaon- Chakan Road  
Tal - Maval, Dist - Pune - 412109.

**ACADEMIC YEAR : 2022-23**

## CERTIFICATE

This is to certify that the project report entitled "DEVELOPMENT OF AUTOMATED RAIN OPERATED WIPER", having "T190443002, T190443006, T190443035" is a bonafide work carried out by him under the supervision of "Prof. M. U. Inamdar" and it is approved for the partial fulfilment of the project part I of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.



**Prof. M. U. Inamdar**

**Project Guide**



**Dr. Prabhat pallav**

Head Of The E&TC Dept.

Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

**Head of Department**



**Dr. L. V. Kamble**

**Principal**

Place: Sudumbare, Pune

Date 22/5/23

A  
MINI PROJECT REPORT  
ON  
**TITLE OF THE PROJECT**  
**"Voice Controlled Home automation"**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY,  
IN THE FULFILLMENT OF MINI PROJECT  
FOR THE AWARD OF THE DEGREE  
OF

**THIRD YEAR E&TC ENGINEERING**

BY

**Name of the students:-**

**Salunke Shubhangi Vilas**

**Kholamkar Archana Mukund**

**Gurav Nitin Satish**

**PRN no:**

**72297762L**

**72297711F**

**72297744B**

**Under the Guidance of Prof. M. U. Inamdar**  
**CAYMET's**

**SIDDHANT COLLEGE OF ENGINEERING**



**Sudumbare, Talegaon-Chakan Road Tal**  
**- Maval, Dist - Pune - 412109.**  
**ACADEMIC YEAR : 2022-23**



## CERTIFICATE

This is to certify that the project report entitled "Voice Controlled Home automation", having PRN no: 72297762L, 72297711F & 72297744B, is a Bonafede work carried out by him under the supervision of Prof. Prof. M. U. Inamdar and it is approved for the partial fulfilment of the project part I of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering(Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.



  
Prof. M. U. Inamdar

Project Guide

  
Dr. Prashant Pallav  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Head of Department  
Sudumbare, Maval, Pune- 412109

Dr. L. V. Kamble

Principal

Place :Sudumbare,Pune

Date :23/05/2023

**MINI PROJECT REPORT**  
**ON**  
**SOUND LEVEL DETECTOR**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY,  
IN THE FULFILLMENT OF MINI PROJECT  
FOR THE AWARD OF THE DEGREE  
OF  
**THIRD YEAR E&TC ENGINEERING**  
BY

**Name of the students**

**Seat no./Roll no.**

1.Rajani Ramarao Mali

T190443063

2.Rutuja Suresh Peje

T190443060

3.Vaishnavi Handore

T190443029

Under the Guidance of

**Prof. M.U.Inamdar**

**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**



Sudumbare, Talegaon-Chakan Road  
Tal - Maval, Dist - Pune - 412109.

**ACADEMIC YEAR : 2022-23**

## CERTIFICATE

This is to certify that the project report entitled **Sound level detector** having **T190443063, T190443060 & T190443029** is a Bonafede work carried out by him under the supervision of Prof. **"M.U. Inamdar"** and it is approved for the partial fulfilment of the project part I of therequirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.

  
**Prof. M.U. Inamdar**

**Project Guide**

  
**Prof. Prabhut Pallav**

**Head of Department  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Mavai, Pune- 412109**

  
**Dr. L. V. Kambale**

**Principal**  


Place: Sudumbare, Pune

Date: 23/05/2023



**Savitribai Phule Pune University**

**Third Year of E & Tc Engineering (2019 Course)**

**304199: Internship**

<b>Teaching Scheme:</b>	<b>Credit</b>	<b>Examination Scheme:</b>
<b>**</b>	<b>04</b>	<b>Term Work: 100 Marks</b>

**Course Objective:**

- Will expose technical students to the industrial environment, which cannot be simulated in the classroom and hence creating competent professionals for the industry.
- Provide possible opportunities to learn, understand and sharpen the real time technical / managerial skills required at the job.
- Exposure to the current technological developments relevant to the subject area of training.
- Experience gained from the '**Internship**' will be used in classroom discussions.
- Create conditions conducive to quest for knowledge and its applicability on the job.
- Learn to apply the Technical knowledge in real industrial situations.
- Gain experience in writing Technical reports/projects.
- Expose students to the engineer's responsibilities and ethics.
- Familiarize with various materials, processes, products and their applications along with relevant aspects of quality control.
- Promote academic, professional and/or personal development.
- Expose the students to future employers.
- Understand the social, economic and administrative considerations that influence the working environment of industrial organizations.
- Understand the psychology of the workers and their habits, attitudes and approach to problem solving.

**Course Outcomes:** On completion of the internship, learner will be able to –

**CO1:** To develop professional competence through internship.

**CO2:** To apply academic knowledge in a personal and professional environment.

**CO3:** To build the professional network and expose students to future employees.

**CO4:** Apply professional and societal ethics in their day to day life.

**CO5:** To become a responsible professional having social, economic and administrative considerations.

**CO6:** To make own career goals and personal aspirations.

Internships are educational and career development opportunities, providing practical experience in a field or discipline. Internships are far more important as the employers are looking for employees who are properly skilled and having awareness about industry environment,



C. A. E. M. E. Trust's

Siddhant College of Engineering

Department of Electronics and Telecommunication Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)

At, Post - Sudumbare, Tal - Maval, Dist - Pune, PIN - 412 109. ☎ 02114 661904

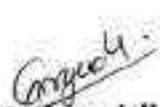
SEM- II (2022-23)


Class: - TE (E & TC)

Date: 18<sup>th</sup> Jan 2023

## INTERNSHIP NOTICE

All the Students of TE E & TC (2022-23) are hereby informed that after the completion 5<sup>th</sup> semester have to undergo a mandatory 4-6 week internship during the period from 21<sup>st</sup> Jan 2023 to 15<sup>th</sup> Feb 2023.

  
Prof. Gectanjali Argade  
Internship coordinator (Dept. TPC)  
(8605431518)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

Department of Electronics and Telecommunication Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904

SEM- II (2022-23)

Class:- TE (E & TC)

Date : 22<sup>th</sup> Feb 2023


## NOTICE


All students of TE are hereby informed that Internship Report and week wise Review for Semester II is scheduled on following dates

Date	Review No.	Time	Location
13/03/2023	I	10 AM- 4 PM	A20 Classroom
11/04/2023	II	10 AM- 4 PM	A20 Classroom
12/05/2023	III	10 AM- 4 PM	A20 Classroom

The report shall be presented covering following recommended fields but limited to:

- Title/Cover Page
- Internship completion certificate
- Internship Place Details-Company background-organization and activities/Scope and object of the study / personal observation.
- Index/Table of Contents
- Introduction
- Title/Problem statement/objectives
- Motivation/Scope and rationale of the study
- Methodological details
- Results / Analysis /inferences and conclusion
- Suggestions / Recommendations for improvement to industry, if any
- Attendance Record
- List of reference (Library books, magazines and other sources)

  
Prof. Geetanjali Argade  
Internship coordinator (Dept. TPC)  
(8605431518)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



**CAYMET'S**  
**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE**  
 Sudumbare, Maval, Pune: 412109

**Class: TE( E & TC) Internship**

**Subject Teacher: Prof: Argade Geetanjali Arjun**

**Internship Data 2022-2023**

**Date: 25/5/2023**

Sl. No.	Name of the Candidates	Company Name	Starting Date	End date	No. of weeks
1	AKARTI PRATIKSHA SANJAY	GKN fokker Elmo Pvt Ltd	1/21/2023	2/24/2023	4
2	AMBEKAR MANDIRA VITTHAL	GE Aviation	1/21/2023	3/4/2023	6
3	APARNA ADHIK JAGTAP	K.K. power solutions pvt ltd	1/23/2023	2/25/2023	5
4	ARCHANA MUKUND KHOLAMKAR	Cognifront	1/21/2023	2/21/2023	4
5	AWAGHADE GAURI RAJESH	K.K. power solutions pvt ltd	1/23/2023	2/25/2023	5
6	BARHATE PRATIKSHA ARVIND	Systech Automation systems	1/21/2023	2/18/2023	4
7	BATWAL PRASAD LAXMAN	Kalp tech solutions pvt ltd	1/21/2023	2/18/2023	4
8	BHAGWAT SAKSHI GANESH	Shiv electronics Pvt Ltd	1/20/2023	2/16/2023	6
9	BHASE AKANKSHA DHYANESHWAR	Infivoices pvt Ltd	1/21/2023	2/20/2023	4
10	BHOSALE AKANKSHA BHASKAR				
11	BHOSALE DIPESHWARI DADARAJE	R.S Process Systems Pvt Ltd	2/2/2023	2/26/2023	4
12	DANGE ABHISHEK DILIP	Infivoices pvt Ltd	1/21/2023	2/20/2023	4
13	GAIWAD RAJESHWARI VIJAY	Shiv electronics Pvt Ltd	1/20/2023	2/16/2023	6
14	GHOGE KANCHAN ARUN	K.K. power solution Pvt LTD	1/23/2023	2/25/2023	5
15	GOMANE ASHISH ATMARAM	GE Aviation	1/21/2023	3/4/2023	6
16	HANDORE VAISHNAVI VILAS	Philips Global Business Servi	1/21/2023	2/20/2023	4
17	JADHAV ASHWINI RAMCHANDRA				
18	JADHAV YESHWANT KRISHNA	Infivoices pvt Ltd	1/21/2023	2/20/2023	4
19	JAMBLE AMOL NANDKUMAR	Volgend Technologies Pvt. Lt	1/21/2023	2/18/2023	4
20	KACHARE YASH KUMAR	K.K. power solution Pvt LTD	1/23/2023	2/25/2023	5
21	KADAM KEDAR SAHEBRAO	Infivoices pvt Ltd	1/21/2023	2/20/2023	4
22	KARLE ARCHANA SHESHRAO	K.K. power solution Pvt LTD	1/23/2023	2/25/2023	5
23	KHADAGE ADITYA MANOHAR	GE Aviation	1/21/2023	3/4/2023	6
24	LOKIHANDE SAMARTH SANJAY	Volgend Technologies Pvt. Lt	1/21/2023	2/18/2023	4
25	MAHESH SUDHAKAR EKHANDE	Volgend Technologies Pvt. Lt	1/21/2023	2/18/2023	4
26	MANE PRITEE HIMMATRAO	GE Aviation	1/21/2023	3/4/2023	6
27	MESHAM HRITIK				
28	MOHITE PRATIKSHA LALASO	Volgend technologies Pvt.ltd	1/21/2023	2/18/2023	4
29	MONIKA SUNIL DHAWALE	HP Tronic Pvt.Ltd.	2/1/2023	3/15/2023	6
30	MULUK SARVESH MARUTI				
31	NAIK ABHJEET ARVIND	Kalp tech solution pvt ltd	1/21/2023	2/18/2023	4
32	NHARI VISHRAM SHASHIKANT	K.K. power solution Pvt LTD	1/23/2023	2/25/2023	5
33	NIKAM PRASHANT BHIMRAO	K.K. power solution Pvt LTD	1/23/2023	2/25/2023	5
34	NITIN SATISH GURAV	Kalp tech solution pvt ltd	1/21/2023	2/18/2023	4
35	ONKAR RAJKUMAR TAKALE	Kalp tech solution pvt ltd	1/21/2023	2/18/2023	4
36	PALKAR SHRADDHA KISAN	Jayashree Electron Pvt. Ltd.	1/21/2023	2/20/2023	5
37	PANDE ROHINI ASHOK	GE Aviation	1/21/2023	3/4/2023	6
38	PATIL ANSALI ANANT	GE Aviation	1/21/2023	3/4/2023	6
39	PATIL PRATIKSHA SANJAY	Volgend technologies Pvt.ltd	1/21/2023	2/18/2023	4
40	PAWAR SAYALI SATISH	Kalp tech solution pvt ltd	1/21/2023	2/18/2023	4
41	PENDEKAR VIKAS MARUTI	K.K. power solution Pvt LTD	1/23/2023	2/25/2023	5

42	PEJE RUTUJA SURESH	Kalp tech solution pvt ltd	1/21/2023	2/18/2023	4
43	PRAVIN HARIDASRAO GULHANE	Volgend technologies Pvt.ltd	1/21/2023	2/18/2023	4
44	RAJANI RAMRAO MALI	Kalp tech solution pvt ltd	1/21/2023	2/18/2023	4
45	SAWANT SALONI GANESH	K.K. power solution Pvt LTD	1/23/2023	2/25/2023	5
46	SHAIKH ZIBA AFSAR	GE Aviation	3/14/2023	4/19/2023	5
47	SHINDE ROHIT ANIL	Infovoices. pvt.ltd	1/21/2023	2/20/2023	4
48	SHUBHANGI VILAS SALUNKE	NS*2 INFOTECH PVT. LTD	1/21/2023	2/18/2023	4
49	THORAT PRATIKSHA RAJARAM	GE Aviation	1/21/2023	3/4/2023	6
50	TORASKAR MARUTI SHANKAR	Volgend technologies Pvt.ltd	1/21/2023	2/18/2023	4
51	UMAP RUTUJA RAMESHRAO	Infovoices. pvt.ltd	1/21/2023	2/20/2023	4
52	UMESH SUDAM NAGARE	Kalp tech solution pvt ltd	1/21/2023	2/18/2023	4
53	WAGHMARE AMAN ARUN				
54	WANI YASHASWI SANJAY	Infovoices. pvt.ltd	1/21/2023	2/20/2023	4
55	ZAGADE BHAVIKA SANTOSH	Jayashree Electron Pvt. Ltd.	1/21/2023	2/20/2023	5
56	BHOSALE KARAN MANAJI	Volgend technologies Pvt.ltd	1/21/2023	2/18/2023	4
57	ROHIT JADHWAR				

*Geetanjali*  
Prof. Geetanjali Argade  
T&P Coordinator

*M.U. Inamdar*  
Prof. M.U. Inamdar  
Academic Coordinator

*Pg*  
Dr. Prabhat Pallav  
Head of The E&T Dept.  
Siddhant College of Engineering  
Sudumbare, Marol, Pune - 412109

*LV Kamble*  
Dr. L.V. Kamble  
Principal  
Siddhant College of Engineering  
Sudumbare, Pune - 412109



C. A. V. M. E. Trust's

Siddhant College of Engineering.

Department of Electronics and Telecommunication Engineering.

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S. P. Pune University & MSBTE)

At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02114-661904.

SEM- II (2022-23)

Class: - TE (E & TC)

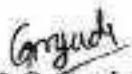
Date: 19<sup>th</sup> May 2023


## NOTICE

All the Students members of TE E&TC Engineering are hereby informed that, Internship SPPU Term work exam Submission is scheduled on 22<sup>nd</sup> May 2023, Thursday. Internship evaluation will be for 100 marks. All the students' members are supposed to contact the Internship Coordinator (Dept. TPC) and discuss the status of the internship report before 21<sup>st</sup> May 2023. All students should prepare the Internship report considering following points:

**Note:-** All students should prepare the Internship report considering following points:

1. Prepare internship report of 25-30 Pages
2. Submit 1 Copy of report with Spiral Binding duly signed by Internship coordinator (Dept. TPC) and HOD (Refer SPPU syllabus)
3. Carry logbook (week wise report) and Original internship certificate with you at the time of submission.

  
Prof. Geetanjali Argade  
Internship coordinator (Dept. TPC)  
(8605431518)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



# **INTERNSHIP REPORT**

*A report submitted in partial fulfillment of the requirements for internship program of*

*Third year of engineering*

**By**

**Vikas Maruti Pednekar**

**Under supervision of**

**K. K. Power Solutions Ltd.**

**Pune**

**(Duration 23<sup>rd</sup> January, 2023 to 25<sup>th</sup> February, 2023)**



**Department of electronics and telecommunication**

**Siddhant Collage of Engineering,**

**APPROVED BY AICTE, RECOGNIZED BY DTE (GOVT.) & AFFILIATED TO SAVITRIBAI PHULE PUNE  
UNIVERSITY**

*(Formerly Known as University of Pune)*

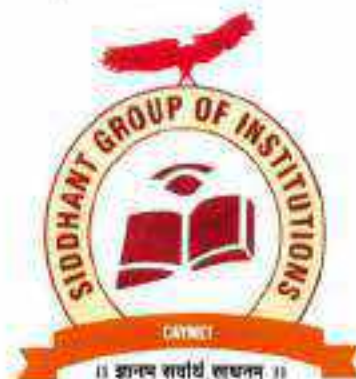
**Sudumbare, Taluka: Maval District: Pune**

**Department of electronics and telecommunication**

**Siddhant Collage of Engineering,**

APPROVED BY AICTE, RECOGNIZED BY DTE (GOVT.) & AFFILIATED TO SAVITRIBAI PHULE  
PUNE UNIVERSITY

**Sudumbare, Taluka: Maval District: Pune**



***CERTIFICATE***

This is to certify that the "Internship report" submitted by **Vikas Maruti Pednekar** (Reg. No.: 72297751E) is work done by her and submitted during 2022-2023 academic year, in partial fulfillment of requirements for internship program of third year of electronics and telecommunication engineering at **K. K. Power Solutions Ltd. Pune.**

*Geetanjali*

**Department Internship coordinator**

**Prof. Geetanjali Argade**

*Pallav*

**Head Of the department**

**Dr. Pallav Prabhat**

**Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109**

# INTERNSHIP REPORT

*A report submitted in partial fulfillment of the requirements for internship program of*

*Third year of engineering*

**By**

**Yash Kumar Kachare**

*Under supervision of*

**K. K. Power Solutions Ltd.**

**Pune**

**(Duration 23<sup>rd</sup> January, 2023 to 25<sup>th</sup> February, 2023)**



**Department of electronics and telecommunication**

**Siddhant College of Engineering,**

**APPROVED BY AICTE, RECOGNIZED BY DTE (GVT.) & AFFILIATED TO SANTTIBAI PHULE PUNE UNIVERSITY**

*(Formerly known as University of Pune)*

**Sudumbare, Taluka: Maval District: Pune**



**Department of electronics and telecommunication**

**Siddhant Collage of Engineering,**

APPROVED BY AICTE, RECOGNIZED BY DTE (GOVT.) & AFFILIATED TO SAVITRIBAI PHULE  
PUNE UNIVERSITY

**Sudumbare, Taluka: Maval District: Pune**



***CERTIFICATE***

This is to certify that the "Internship report" submitted by Yash Kumar Kachare (Reg. No.: 72297727B) is work done by her and submitted during 2022-2023 academic year, in partial fulfillment of requirements for internship program of third year of electronics and telecommunication engineering at K. K. Power Solutions Ltd. Pune.

  
Department Internship coordinator

**Prof. Geetanjali Argade**

  
Head Of the department

**Dr. Pallav Prabhat**

Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune-412101

# **INTERNSHIP REPORT**

A report submitted in partial fulfillment of the requirements for the Award of Degree of

**THIRD YEAR OF ENGINEERING**  
**in**  
**ELECTRONICS AND TELECOMMUNICATION ENGINEERING**  
**by**

**RUTUJA RAMESH UMAP**  
**PRN NO. – 72297765E**

**Under Supervision of**  
**MS. SHRIYA PAGUI**  
**HR, Infovoices Pvt. Ltd.**  
**Hinjewadi.**

**(Duration: 21 January 2023 to 20 February 2023 )**



**DEPARTMENT OF ELECTRONICS AND  
TELECOMMUNICATION ENGINEERING**

**SIDDHANT COLLEGE OF ENGINEERING**

**(Hindi Linguistic Minority Institute)**

**Approved by AICTE, Recognized by D.T.E., Govt. of Mah. And Affiliated to the  
SPPU & MSBTE**

**A/P – Sudumbare, Tal. – Maval, Dist. – Pune, PIN – 412109.**

## CERTIFICATE

This is to certify that the “**Internship report**” submitted by **Rutuja R. Umap**, PRN NO. – 72297765E is work done by him and submitted during 2022–2023 academic year, in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF ENGINEERING in ELECTRONICS AND TELECOMMUNICATION ENGINEERING**, at **Infovoices Pvt. Ltd. Hinjawadi**.



Prof. Greetanjali A. Argade  
Department Internship Coordinator



Prof. Prabhat Kumar Pallav  
Head of the Department  
Department of E&TC

Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Mavel, Pune- 412109



# INTERNSHIP REPORT

A report submitted in partial fulfillment of the requirements for the Internship Program of

**THIRD YEAR OF ENGINEERING**  
in  
**ELECTRONICS AND TELECOMMUNICATION ENGINEERING**  
by  
**KEDAR S. KADAM**  
PRN NO. – 72297728L

Under Supervision of  
**MS. SHRIYA PAGUI**  
HR, Infovoices Pvt. Ltd.  
Hinjewadi.

(Duration: 21 January 2023 to 20 February 2023 )



**DEPARTMENT OF ELECTRONICS AND  
TELECOMMUNICATION ENGINEERING**

**SIDDHANT COLLEGE OF ENGINEERING**


(Hindi Linguistic Minority Institute)

Approved by AICTE, Recognized by D.T.E., Govt. of Mah. And Affiliated to the  
SPPU & MSBTE

**A/P – Sudumbare, Tal. – Maval, Dist. – Pune, PIN – 412109.**

## CERTIFICATE

This is to certify that the "Internship report" submitted by **KEDAR S. KADAM**, PRN NO. – 72297728L is work done by him and submitted during 2022–2023 academic year, in partial fulfillment of the requirements for the internship program of **THIRD YEAR OF ENGINEERING in ELECTRONICS AND TELECOMMUNICATION ENGINEERING**, at **Infovoices Pvt. Ltd. Hinjawadi**.

  
Prof. Geetanjali A. Argade

Department Internship Coordinator

  
Prof. Prabhat Kumar Pallav

Head of the Department

Department of E&TC

Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

# **INTERNSHIP REPORT**

*A report submitted in partial fulfillment of the requirements for internship program of*

*Third year of engineering*

**By  
Amol Jamble**

**Under supervision of  
Mr.Rohit Patil, HR  
Volgend Technologies Pvt. Ltd  
Pune**

**(Duration 21<sup>st</sup> January, 2023 to 18<sup>th</sup> February, 2023)**



**Department of electronics and telecommunication**

**Siddhant Collage of Engineering,**

*APPROVED BY AICTE, RECOGNIZED BY DTE (GOVT.) & AFFILIATED TO SAVITRIBAI PHULE PUNE  
UNIVERSITY*

*(Formerly Known as University of Pune)*

**Sudumbare, Taluka: Maval District: Pune**



**Department of electronics and telecommunication**

**Siddhant Collage of Engineering,**

APPROVED BY AICTE, RECOGNIZED BY DTE (GOVT.) & AFFILIATED TO SAVITRIBAI PHULE PUNE  
UNIVERSITY

**Sudumbare, Taluka: Maval District: Pune**



***CERTIFICATE***

This is to certify that the "Internship report " submitted by Amol Jamble (Reg. No.: 72297726D) is work done by him and submitted during 2022-2023 academic year , in partial fulfillment of requirements for internship program of third year of electronics and telecommunication engineering at Volgend Technologies Pvt. Ltd. Pune.

  
Department Internship coordinator

**Prof. Geetanjali Argade**

  
Head Of the department

**Dr. Pallav Prabhat**



MICROINCH HUB

### Internship Letter

This letter is to certify that Mr. JAYESH DIPAK KULKARNI has worked in our organization as a Digital Marketing Intern. He had started working here on 10th February 2022 and worked till 10th May 2022. He had served 3 months in our organization.

He had been very responsible till the date he had joined. He had enriched himself with lots of skills and work experiences to date. Some of his mind-blowing skills include SEO, Social Media Management, Blogging, and content creation.

Apart from his love and devotion he had also been a very good and kind man and always maintained a good relationship with everyone. We are really glad to have such a generous personality among us.

Wishing him the best of his luck in his career.

Sincerely,



Managing Director  
(Chetashri Amale)

[www.microinhub.com](http://www.microinhub.com)

M: 9527232389

E: [contact@microinhub.com](mailto:contact@microinhub.com)

Address: A-209, KPCT Mall, Fatima Nagar, Hadapsar, Pune

+919960417935

mwellsoftwaresolutions@gmail.com



MWell Software Solutions

## INTERNSHIP COMPLETION LETTER

We are glad to inform you that Miss. Akshata Parchande from Mwell Software Solutions has successfully completed her internship for Joining date 01-03-2022 to 30-04-2022 for During her Internship, She was exposed to the various activities in Java Internship

We Found her extremely inquisitives and hardworking. She was very much interested to learn the functions of our core division and also willing to put her efforts and get into the depth of subject to understand it better.

Her association with us is very fruitful and we wish her all the best in her future endeavours.

Signatory Authority.

Mwell Software Solutions

Mr. M.S Patil

(Director)

Mwell Software Solutions, Pune





**TO WHOME IT MAY CONERN**

This is to certify that **Mr. Dhawal Bhupendra Tank** has done his internship in **Python Development**, Pune from **14<sup>th</sup> February, 2022** to **14<sup>th</sup> May, 2022**.

During his internship, he was exposed to the various activities in the Python Development domain, implementing Python Framework, Python Library and MongoDB skills.

We found extremely Inquisitive and dedicated. He was very much interested in getting into the depth of the subject to understand it better.

His association with us was fruitful and we wish him all the best in this future endeavors.

For CRB Tech Solutions Pvt. Ltd.



HR Department



**CRB Tech Solutions Pvt. Ltd.**

9<sup>th</sup> Floor, Pride Parmar Galaxy, Sadhu Vaswani Circle, Pune 411001

## INTERNSHIP COMPLETION LETTER

We are glad to inform you that **Mr. Ganesh Sudam Jadhav** from **Mwell Software Solutions** has successfully completed his internship for **1<sup>st</sup> Feb 2022 to 30<sup>th</sup> March 2022**. During his Internship, he was exposed to the various activities in Java Internship.

We found him extremely inquisitive and hardworking. He was very much interested to learn the functions of our core division and also willing to put his efforts and get into the depth of subject to understand it better.

His association with us is very fruitful and we wish him all the best in his future endeavours.

Signatory Authority,

For Mwell Software Solutions

  
Mr. M.S. Patil

(Director)

Mwell Software Solutions, Pune





red hat  
CERTIFIED  
PARTNER

## INTERNSHIP LETTER

Date : 24 Apr 2022

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ujwala Bansode did internship in our organization as Software Developer from 20 Oct 2021 to 20 Apr 2022. During this tenure She has undertaken various tasks in our Technical Department and has successfully completed them to the best of her abilities.

During his tenure with us we found her to be good, hardworking and honest in performing her duties.

We wish her all the best for future endeavours.





## GKN Fokker Elmo India Pvt. Ltd.



Date: 07<sup>th</sup> April 2023

Name: Pratiksha Akarte

Empl. No: 500257

To whom so ever it may concern,

It is to certify that Pratiksha Akarte has completed Internship with GKN Fokker Elmo India Pvt. Ltd from 23<sup>rd</sup> January 2023 to 24<sup>th</sup> February 2023.

She worked under the direct supervision of the Team leader and got the opportunity to work in Cutting & Marking department. Along with her other duties, she was responsible for managing the timelines of the projects she was working on. Her manager is pleased with her timely highlighting and managing of any delays, which could have affected the project completions.

She is a quick learner, and she learned our operations system and organizational culture quickly. With her eagerness to learn, she developed various skills while working with us. Her team collaboration skills and friendly nature made her part of our organization even during the first week. She outdid the expected performance, and we are happy to have the opportunity for training such an enthusiastic candidate.

We wish her the best of luck for all her endeavors.

Regards,

Ashwini Kulkarni

Human Resources Manager



**GE Aviation**

GE India Industrial Pvt Ltd Chakan  
MIDC Phase II, A-78/1,

Vasuli Village, Khed Taluk Pune  
MH 410501

Date: 03/04/2023(MM/DD/YYYY)

**To Whomsoever it may concern**

This letter is to certify that Mandira Vitthal Ambekar has worked as an Internship from 01/20/2023(MM/DD/YYYY) to 03/04/2023(MM/DD/YYYY).

Mandira Ambekar has successfully completed the Training.  
For GE India Industrial Pvt Ltd,

Ashutosh Debey  
Project Manager  
GE South Asia

GE India Industrial Pvt Ltd, Registered Office: A-18, First Floor Okhla Industrial Area Phase II New Delhi South Delhi 110020 CIN : U31580DL1992PTC194724



**Savitribai Phule Pune University**

**Fourth Year of E & Tc Engineering (2019 Course)**

**404188: Project Phase – I**

Teaching Scheme:	Credit	Examination Scheme:
Practical: 02 Hrs. / Week	01	Term Work: 50 Marks

**Course Objectives:**

- To understand the basic concepts & broad principles of projects.
- To understand the value of achieving perfection in project implementation & completion.
- To apply the theoretical concepts to solve real life problems with teamwork and Multidisciplinary approach.
- To demonstrate professionalism with ethics; present effective communication skills and relate engineering issues to broader societal context.

**Course Outcomes:**

**CO1: Demonstrate** a sound technical knowledge in field of E&TC in the form of project.

**CO2: Undertake** real life problem identification, formulation and solution.

**CO3: Design** engineering solutions to complex problems utilizing a systematic approach.

**CO4: Demonstrate** the knowledge, effective communication skills and attitudes as professional engineer.

Project phase 1 is an integral part of the project work. The project work shall be based on the knowledge acquired by the student during the graduation and preferably it should meet and contribute towards the needs of the society. The project aims to provide an opportunity of designing and building complete system or subsystems in the field of Electronics and communication where the student likes to acquire specialized skills. The student shall prepare the duly certified Fourth report of project work in standard format for satisfactory completion of the work by the concerned guide and head of the Department/Institute.



**Guidelines:**

1. Group Size: The student shall carry the project work individually or by a group of students. Optimum group size shall be 3 students. However, if project complexity demands a maximum group size of 4 students, the project committee should be convinced about such complexity and scope of the work. Projects selected should meet and contribute towards the needs of the society.
2. Selection and approval of topic: Topic should be related to real life application in the field of Electronics and Telecommunication engineering.
3. The topic may be based on : Investigation of the latest development in a specific field of Electronics or Communication / The investigation of practical problem in manufacture and / or testing of electronics or communication equipment/ Software based projects related to VHDL, Communication, Instrumentation, Signal Processing agriculture Engineering etc. with the justification for techniques used / any topic in the field of E&TC may be allowed.
4. Interdisciplinary projects should be encouraged. The examination of Interdisciplinary projects shall be conducted independently in respective departments.
5. The term work assessment of project phase 1 shall be based on Innovative Idea of selected project, literature survey, Depth of understanding, Applications, Individual contributions, presentation, project report, timely completion of work.
6. The department should prepare project planner and should follow accordingly
7. A log book of work carried out during the semester should be maintained with weekly review remarks by the guide and committee.
8. A certified copy of report preferably using LATEX is required to be presented to external examiner at the time of Fourth examination.
9. The project report must undergo by plagiarism check and the similarity index must be less than 15%. The plagiarism report should be included in the project report.

**Savitribai Phule Pune University**  
**Fourth Year of E & Tc Engineering (2019 Course)**

**404197: Project Phase – II**

<b>Teaching Scheme:</b>	<b>Credit</b>	<b>Examination Scheme:</b>
<b>Practical: 10 Hrs. / Week</b>	<b>05</b>	<b>Term Work: 100 Marks</b>
		<b>Oral: 50 Marks</b>

Project phase 2 is extension of Project phase 1 carried out in seventh semester. The student shall prepare the duly certified Fourth report of project work in standard format preferably in LATEX for satisfactory completion of the work by the concerned guide and head of the Department/Institute.

**GUIDELINES**

1.	The project TW/OR assessment shall be based on Live Project Demonstration and presentation by the students. The assessment parameters shall be Innovative Idea of selected project, literature survey, Depth of understanding, Applications, Individual contributions, presentations, project report, timely completion of work (Project review presentations), participation in project competition, publication of research work in journal/conference, publication in the form of patent and copyright etc. The college can prepare the rubrics based on these parameters
2.	Certified hard bound project report to be submitted by the students in prescribed format.
3.	Students must preferably publish at least one technical paper on project work in the conference or peer reviewed Journals or publish patent or copyright or should participate into one of the project competition at university/State/National/International level.
4.	A log book of work carried out during the semester should be maintained with weekly review remarks by the guide and committee.
5.	A certified copy of report preferably using LATEX is required to be presented to external examiner at the time of Fourth examination.
6.	The project report must undergo by plagiarism check and the similarity index must be less than 10%. The plagiarism report should be included in the project report.

**Savitribai Phule Pune University**  
**Fourth Year of E & Tc Engineering (2019 Course)**

**404197: Project Phase – II**

<b>Teaching Scheme:</b>	<b>Credit</b>	<b>Examination Scheme:</b>
<b>Practical: 10 Hrs. / Week</b>	<b>05</b>	<b>Term Work: 100 Marks</b>
		<b>Oral: 50 Marks</b>

Project phase 2 is extension of Project phase 1 carried out in seventh semester. The student shall prepare the duly certified Fourth report of project work in standard format preferably in LATEX for satisfactory completion of the work by the concerned guide and head of the Department/Institute.

**GUIDELINES**

1.	The project TW/OR assessment shall be based on Live Project Demonstration and presentation by the students. The assessment parameters shall be Innovative Idea of selected project, literature survey, Depth of understanding, Applications, Individual contributions, presentations, project report, timely completion of work (Project review presentations), participation in project competition, publication of research work in journal/conference, publication in the form of patent and copyright etc. The college can prepare the rubrics based on these parameters
2.	Certified hard bound project report to be submitted by the students in prescribed format.
3.	Students must preferably publish at least one technical paper on project work in the conference or peer reviewed Journals or publish patent or copyright or should participate into one of the project competition at university/State/National/International level.
4.	A log book of work carried out during the semester should be maintained with weekly review remarks by the guide and committee.
5.	A certified copy of report preferably using LATEX is required to be presented to external examiner at the time of Fourth examination.
6.	The project report must undergo by plagiarism check and the similarity index must be less than 10%. The plagiarism report should be included in the project report.





C. A. V. M. E. Trust's  
Siddhant College of Engineering,  
Department of Electronics and Telecommunication Engineering.  
(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal - Mulund, Dist. - Pune, PIN - 412 109. 02114-051904

SEM-I (2022-23)

Class: - BE (E & TC)


Date: 27<sup>th</sup> July 2022


### Notice (Project Group Formation)

All the Students of BE E & TC (2022-23) are hereby informed to form their project groups for final year projects. The last date of Project group submission is **30 July 2022, Saturday**. Follow the guidelines given below while forming the project groups:

1. Project groups should be of 3 to 4 members only (less members are not allowed).
2. In case any student is year down in the group, vacancy will be filled by project coordinator.
3. Once Project group is submitted no changes will be entertained.
4. While filling Google form write your full name in given sequence only, with correct mail ids and mobile numbers which will be used for further communication throughout the year.
5. To avoid further consequences try to form the project groups with the students with proper understanding and discussion. No disputes or other queries except project work will be entertained by Project Guide, Project Coordinator or HOD.
6. After project group formation search for project topics which will be selected by panel members after presentation of selected topics.
7. Project Guides will be allotted by Project Coordinator and HOD on 2<sup>nd</sup> August 2022.

**Note:** - Project group submission link <https://forms.gle/SwTH9htTviGZP75B7>

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of the Dept.  
Siddhant College of Engineering  
Sudumbare, Mulund, Pune- 412109





C. A. V. M. E. Trust's  
Siddhant College of Engineering  
Department of Electronics and Telecommunication Engineering.  
(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At Post - Sudumbare, Tal - Maval, Dist - Pune, PIN - 412 109. - 02114-661904

Date: 27<sup>th</sup> July 2022

### List of Project Guides with Choices

Sr. No	Name of Project Guide	Specialization
1.	Dr. Prabhat Pallav	Embedded System
2.	Prof M U Inamdar	Embedded System
3.	Prof A V Bade	IOT, WSN, PLC, MC, ES
4.	Prof G A Argade	Image processing, ES, Communication, AI
5.	Prof S B Deshmukh	IOT, AI, WSN, Communication
6.	Prof S V Shelke	Electrical power system
7.	Prof K A Kadam	WSN, Communication

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

Siddhant College of Engineering, Sudumbare, Pune		
ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT		
Class: BE (E&TC)	Project Group list 2022-23	
Group No	Students Name	Signature
1	AMIT RAMCHANDRA KOKARE	
	CHOWDHARY KAMLESH SHIVKARAN	
	DHENGALE PRANJAL KASHINATH	
2	KHALADKAR KULDIP SADASHIV	
	KUMAWAT HARSHAL VASANTRAO	
	KALE AMOL KASHINATH	
3	DANGE AMRUTA DILIP	
	SHEWALE ASHWINI ASHOK	
	KAMBLE VAIBHAVSHALI RAJENDRA	
4	MANDAVKAR MANGESH RAMESH	
	GADE DHANSING HARIDAS	
	DIMBLE SWAPNIL PRABHAKAR	
	DADASO BHAGAVANRAO JADHAV	
5	KHATRI KEDAR RAMESHKUMAR	
	PRAMOD GANPATRAO DHONUKSHE	
	GADE ATUL RAGHUNATH	
6	KACHARE KUNAL RAJARAM	
	PUNAM PANDURANG SIRASE	
	GHOTALE UJWALA REVANSIDDH	
7	ADEKAR SHREYA ANAND	
	KHARE NISHA PRABHAKAR	
	BHUBAL KALYANI ANIL	
8	SALUNKHE AKSHAY MARUTI	
	KADAM PRASHANT BALASAHEB	
	KHANVILKAR DHANANJAY INDRAJIT	
9	MOHITE ADITYA ANGAD	
	SHINDE SAMEER DNYANESHWAR	
	MUNGASE SURAJ SANJAY	
10	BIRADAR KRANTI NETAJI	
	BIRAJDAR SAURABH RAJARAM	
	BIRAJDAR SNEHA RAJARAM	
11	VISHAL BABAN MISAL	
	DATTRAM KALYAN KALE	
	DAWANE ABHJEET VIJAY	
12	DUBEY VIJAY SATYANARAYAN	






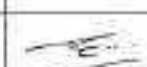
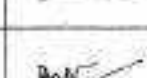
Project Coordinator  
Prof. M.U Inamdar

HOD  
Dr. Prabhat Pallav  
Head of The E&TS Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109




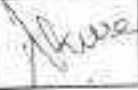

**Siddhant College of Engineering**  
**Department of Electronics and Telecommunication**  
**BE (E&TC) A. Y. 2022-23**

**Project stage 1**

Roll No	Group No	Student Name	Guide Name	Remark (Sign)
1	G2201	SALUNKHE AKSHAY MARUTI	Prof.Kure Namita	
2		KHANVILKAR DHANANJAY INDRAJIT		
3		KADAM PRASHANT BALASAHEB		
4	G2202	DANGE AMRUTA DILIP	Prof.Inamdar M.U	
5		KAMBLE VAIBHAVSHALI RAJENDRA		
6		SHEWALE ASHWINI ASHOK		
7	G2203	PUNAM PANDURANG SIRASE	Prof.Kure Namita	
8		GHOTALE UJWALA REVANSIDDH		
9		KUNAL KACHARE		
10	G2204	ADEKAR SHREYA ANAND	Prof.Inamdar M.U	
11		BHUJBAL KALYANI ANIL		
12		KHARE NISHA PRABHAKAR		
13	G2205	KALE AMOL KASHINATH	Prof.Prabhat Pallav	
14		KHALADKAR KULDIP SADASHIV		
15		KUMAWAT HARSHAL VASANTRAO		
16	G2206	KHATRI KEDAR RAMESHKUMAR	Prof.Inamdar M.U	
17		GADE ATUL RAGHUNATH		
18		PRAMOD GANPATRAO DHONUKSHE		
19	G2207	MUNGASE SURAJ SANJAY	Prof.Prabhat Pallav	
20		MOHITE ADITYA ANGAD		
21		SHINDE SAMEER DNYANESHWAR		


SBD

GAA

22	G2206	AMIT RAMCHANDRA KOKARE	Prof.Prabhat Pallav	
23		CHOWDHARY KAMLESH		
		DUBEY VIJAY SATYANARAYAN		
24		DHENGALE PRANJAL KASHINATH		
25	G2209	BIRADAR KRANTI NETAJI	Prof.Kum Namita	
26		BIRAJDAR SAURABH RAJARAM		
27		BIRAJDAR SNEHA RAJARAM		
28	G2210	DIMBLE SWAPNIL PRABHAKAR	Prof.Inamdar M.U	
29		DADASO BHAGAVANRAO JADHAV		
30		MANDAVKAR MANGESH RAMESH		
31		GADE DHANSING HARIDAS		
32	G2211	DATTARAM KALYAN KALE	Prof.Prabhat Pallav	
33		DAWANE ABHIJIT VIJAY		
34		VISHAL BABAN MISAL		

  
Prof. Inamdar M.U

Project co-ordinator

  
Prof.Pallav Prabhat

**H.O.D.**  
Head Of The ESTC Dept.  
Siddhant College of Engineering  
Sasunbar, Navai, Pune- 412109



C. A. V. M. E. Trust's  
Siddhant College of Engineering,  
Department of Electronics and Telecommunication Engineering.  
(Approved by AKTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & AISBT)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109, ☎ 02114-661904

Date: 2<sup>nd</sup> August 2022


## Project Title Finalization Notice

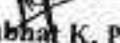
All the Students of BE E & TC engineering are hereby informed that Project title finalization is scheduled as per schedule given below

Date	Group No.	Time	Location
03/08/2022	All	09.30 am to 04.00 pm	AVE Lab

In Project Title Finalization, Project Group should explain all the three Project ideas in front of the Panel members. One of the Project Titles will be finalized if found proper or changes will be suggested if required.

Details of all the Project ideas should be brought on plain paper. (No PPT presentation is required).

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune-412109





C. A. Y. M. E. Trust's  
Siddhant College of Engineering  
Department of Electronics and Telecommunication Engineering.  
Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & AICTE  
H. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109 - 02114-661904

Date: 03/08/2022

### Attendance of Project Guides

Sr. No	Name of Project Guide	Sign
1.	Dr. Prabhat Pallav	
2.	Prof M U Inamdar	
3.	Prof A V Bade	
4.	Prof G A Argade	
5.	Prof S B Deshmukh	
6.	Prof S V Shelke	
7.	Prof K A Kadam	

Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

Siddhant College of Engineering, Sudumbare, Pune		
ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT		
Class: BE (E&TC)	Project Group list 2022-23	
Group No	Students Name	Signature
1	AMIT RAMCHANDRA KOKARE	
	CHOWDHARY KAMLESH SHIVKARAN	
	DHENGAL PRANJAL KASHINATH	
2	KHALADKAR KULDIP SADASHIV	
	KUMAWAT HARSHAL VASANTRAO	
	KALE AMOL KASHINATH	
3	DANGE AMRUTA DILIP	
	SHEWALE ASHWINI ASHOK	
	KAMBLE VAIBHAVSHALI RAJENDRA	
4	MANDAVKAR MANGESH RAMESH	
	GADE DHANSING HARIDAS	
	DIMBLE SWAPNIL PRABHAKAR	
	DADASO BHAGAVANRAO JADHAV	
5	KHATRI KEDAR RAMESHKUMAR	
	PRAMOD GANPATRAO DHONUKSHE	
	GADE ATUL RAGHUNATH	
6	KACHARE KUNAL RAJARAM	
	PUNAM PANDURANG SIRASE	
	GHOTALE UJWALA REVANSIDDH	
7	ADEKAR SHREYA ANAND	
	KHARE NISHA PRABHAKAR	
	BHUIBAL KALYANI ANIL	
8	SALUNKHE AKSHAY MARUTI	
	KADAM PRASHANT BALASAHEB	
	KHANVILKAR DHANANJAY INDRAJIT	
9	MOHITE ADITYA ANGAD	
	SHINDE SAMEER DNYANESHWAR	
	MUNGASE SURAJ SANJAY	
10	BIRADAR KRANTI NETAJI	
	BIRAJDAR SAURABH RAJARAM	
	BIRAJDAR SNEHA RAJARAM	
11	VISHAL BABAN MISAL	
	DATTAM KALYAN KALE	
	DAWANE ABHJEET VIJAY	
12	DUBEY VIJAY SATYANARAYAN	

Project Coordinator  
Prof. M.U Inamdar

HOD  
Dr. Prabhat Pallav  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Waver, Pune- 412108



C. A. V. M. E. Trust's  
Siddhant College of Engineering.  
Department of Electronics and Telecommunication Engineering.  
(Approved by: AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSDTE)  
At. Post - Sudumbare, Tal. - Mayal, Dist. - Pune, PIN - 412 109. 02114-661964

SEM - I (2022-23)

Class:- BE (E & TC)


Date : 18<sup>th</sup> August 2022


### Notice

All the students of BE E & TC Engineering are hereby informed that Project Review-I is scheduled on 22<sup>nd</sup> August 2022, Monday at 10.00 am. All the Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review

This review has a weightage of 50% of Term work marks. Project Groups should prepare the Presentation accordingly. All the Group members should be present at the time of Project Review.

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Pradip K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Mayal, Pune- 412109





C. A. V. M. E. Trust's  
Siddhant College of Engineering,  
Department of Electronics and Telecommunication Engineering  
(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At: Post - Sudumbare, Tal - Marol, Dist - Pune, PIN - 412 109. 02114-661994

Date: 22<sup>nd</sup> August 2022

**Attendance of Project Guides**

Sr. No	Name of Project Guide	Sign
1.	Dr. Prabhat Pallav	
2.	Prof M U Inamdar	
3.	Prof A V Bade	
4.	Prof G A Argade	
5.	Prof S B Deshmukh	
6.	Prof S V Shelke	
7.	Prof K A Kadam	

Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept  
Siddhant College of Engineering  
Sudumbare, Marol, Pune- 412109

**Siddhant College of Engineering, Sudumbare, Pune**  
**ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT**

Class: BE (EATU)	Project Title List		Sem-I	A.Y.-2022-23	
Group No	Students Name	Sign	Title	Guide Name	Signature
1	AMIT RAMCHANDRA KADKAR	Amit	Automatic Accident detection With Notification System and Electric Bumper	Dr. Prabhakar K. Palle	P.K.P.
	CHOWCHURY KAMLESH SHIVKARAN	Chowchury			
	DHENGAL PRANAL KASHINATH	Dhengkale			
2	KHALADKAR KULDIP SADASHIV	Khaladkar	IoT Base EV Battery Monitoring and Alert system	Dr. Prabhakar K. Palle	P.K.P.
	KUMARAT HARSHAL VASANTKAD	Kumarat			
	KALE ANIL KASHINATH	Kale			
3	DANGE ANRUTA DILIP	Dange	Safety Jacket for Women	Prof. M.U Inamdar	M.U.
	SHIWALE ASHWINI ASHOK	Shiwale			
	KAMBLE VAIBHAVNOLI RAUTDRA	Kamble			
4	MANDAVKAR NANGESH RAMESH	Mandavkar	Design an Algorithm for Efficient Communication Between Nodes in IoT	Prof. M.U Inamdar	M.U.
	GADE DHANESING HARIDAS	Gade			
	DIMBLE SWAPNIL PRABHAKAR	Dimble			
	DADASA BHAGAVANRAO JADHAV	Dadasa			
5	KHATRI KEDAR RAMESHCHUMAR	Khatrkar	Hand Gesture Recognition using IoT	Prof. M.U Inamdar	M.U.
	PRANOD GANPATRAO DHONI/KSHI	Pranod			
	GADE ATUL RACHUNATH	Gade			
6	KACHARE KUNAL RAJARAM	Kachare	IoT based Smart Energy Meter	Prof. Geetajali Agade	G. Agade
	PUNAM PANDURANG SIRASE	Punam			
	GHOTALE URMILA REVANSIDDH	Ghotale			
7	ADKAR SHREYA ANAND	Adkar	Battery Management System using Cooling Thermoelectric	Prof. M.U Inamdar	M.U.
	KHARE NISHA PRABHAKAR	Khare			
	BHUBAL KALYANI ANIL	Bhubal			
8	SALUNKE AKSHAY HARUTI	Salunke	Voice Controlled Wheel Chair with Obstacle Detection and Control via Touch Panel	Prof. Suresh Deshmukhi	S. Deshmukhi
	KADAM PRASHANT BALASAMER	Kadam			
	KHANVILKAR DHANANJAY INDIRAJIT	Khanvilkar			
9	MORHE ADITYA ANAND	Morhe	Wildlife Observation Robot	Dr. Prabhakar K. Palle	P.K.P.
	SHINDE SAMEER DNYANESHWAR	Shinde			
	MUNGASE SURAJ SANJAY	Mungase			
10	BIRADAR KRANTI NETAJI	Biradar	Door Access Control System Face Mask Detection Using Artificial Intelligence	Prof. Kajani Kadam	K. Kadam
	BIRAJDAR SALIRASHI RAJARAM	Birajdar			
	BIRAJDAR SNEHA RAJARAM	Birajdar			
11	VISHAL BABAN NISAL	Vishal	Alcohol Sensing Alert with Motor Locking System	Dr. Prabhakar K. Palle	P.K.P.
	DATTARAM KALYAN KALE	Dattaram			
	DAWANE ABHIJEET VIJAY	Dawane			
12	DUBEY VIJAY SATYANARAYAN	Dubey	IoT Based GPS Location Tracker using Node micro and GPS Module	Prof. Shubhanga Shirke	S. Shirke

Project Coordinator  
Prof. M.U Inamdar

Dr. Prabhakar Palle  
 HOD  
 Head Of The E&TE Dept.  
 Siddhant College of Engineering  
 Sudumbare, Wajal, Pune- 412 109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering  
Department of Electronics and Telecommunication Engineering.  
(Approved by AKTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. 02114-661904

SEM-I (2022-23)

Class:- BE (E & TC)


Date : 27<sup>th</sup> Sept 2022

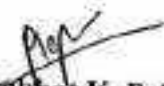
### Notice

All the students of BE E & TC Engineering are hereby informed that, **Project Review-II** is scheduled on **10<sup>th</sup> October 2022, Monday at 10.00 am**. All the Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review
7. Design Calculations
8. Experimental Layout

This review has weightage of 50% of Term work marks. Project Groups should prepare the Presentation accordingly. All the Group members should be present at the time of Project Review.

  
Prof. M. H. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109





C. A. V. M. E. Trust's  
Siddhant College of Engineering  
Department of Electronics and Telecommunication Engineering  
Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE  
At Post - Sudumbare, Tal - Maval, Dist - Pune, PIN - 412 109. 02114-561964

Date: 10<sup>th</sup> October 2022

### Attendance of Project Guides

Sr. No.	Name of Project Guide	Sign
1.	Dr. Prabhat Pallav	
2.	Prof M U Inamdar	
3.	Prof A V Bade	
4.	Prof G A Argade	
5.	Prof S B Deshmukh	
6.	Prof S V Shelke	
7.	Prof K A Kadam	

Prof. M. U. Inamdar  
Project coordinator  
(9130504310)

Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

Siddhant College of Engineering, Sudumbare, Pune					
ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT					
Class: BE (E&TC)	Project Title List		Sem-II	A.Y.-2022-23	
Group No	Students Name	Sign	Title	Guide Name	Signature
1	AMIT RAMCHANDRA KOKARE		Automatic Accident Detection With Notification System and Electric Bumper	Dr. Prabhakar K. Palkar	
	CHOWDHARY KAMLESH SHIVKARAN				
	DHINGALE PRANJAL KASHINATH				
2	KHALAOKAR KULDIP SADASHIV		IOT Base EV Battery Monitoring and Alert system	Dr. Prabhakar K. Palkar	
	KUMAWAT HARSHAL VASAHTRAO				
	KALE AMOL KASHINATH				
3	DANGE ANRUTA DRUP		Safety Jacket for Women	Prof. M.U Inamdar	
	SHIRWALE ASHWIN ASHOK				
	KAMBLE VAIBHAVSHALI RAJENDRA				
4	MANDAVKAR MANGESH RAMESH		Design an Algorithm for Efficient Communication Between Nodes in IOT	Prof. M.U Inamdar	
	GADE DHANSHING HARIDAS				
	DIMBLE SWAPNIL PRABHAKAR				
5	DADASA BHAGAVANRAO JADHAV		Hand Gesture Recognition using IOT	Prof. M.U Inamdar	
	KHATRI KEDAR RAMESHKUMAR				
	PRAMOD GANPATRAO DHONUKSHE				
6	GADE ATUL KASHINATH		IOT based Smart Energy Meter	Prof. Goutam Angde	
	KACHARE KUNAL RAJARAM				
	PUNAM PANDURANG SHIRASE				
7	GHOTALE UJWALA REVANSIDDH		Battery Management System using Cooling Thermo Electric	Prof. M.U Inamdar	
	ADIKAR SHREYA ANAND				
	KHARE NISHA PRABHAKAR				
8	BHUBAL KALYANI ANIL		Voice Controlled Wheel Chair with Obstacle Detection and Control via Touch Panel	Prof. Swati Dedarath	
	SALUNKHE AKSHAY MARUTI				
	KADAM PRASHANT BALASAHEB				
9	KHANVILKAR DHANANJAY INDRAJIT		Wildlife Observation Robot	Dr. Prabhakar K. Palkar	
	MOHITE ADITYA ANAND				
	SHINDE SAMEER DNYANESHWAR				
10	MUNGASE SURAJ SANDAY		Door Access Control System Face Mask Detection Using Artificial Intelligence	Prof. Kalyani Kadam	
	BIRAJDAR KRANTINETAJI				
	BIRAJDAR SAURASH RAJARAM				
11	BIRAJDAR SNEHA RAJARAM		Alcohol Sensing Alert with Motor Locking System	Dr. Prabhakar K. Palkar	
	VISHAL BABAN MISAL				
	DATTARAM KALYAN KALE				
12	DAWANE ABHISHEK VIKAS		IOT Based GPS Location Tracker using Node-mcu and GPS Module	Prof. Shubhangi Shelke	
	DURBY VIJAY SATYANARAYAN				

Project Coordinator  
Prof. M.U Inamdar

Dr. Prabhakar Palkar  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maharashtra, Pune - 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎ 02124-661904.

SEM- I (2022-23)

Class:- BE (E & TC)


Date : 1<sup>st</sup> Nov 2022


## Notice

All the students of BE E & TC Engineering are hereby informed that, Project Review-III is scheduled on 10<sup>th</sup> Nov 2022, Thursday at 11.00 am. All the Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review
7. Design Calculations
8. Experimental Layout
9. Purchase of Material
10. Fabrication
11. Assembly
12. Experimentation
13. Analysis,

This review has weightage of 50% of Term work marks. Project Groups should prepare the Presentation accordingly. All the Group members should be present at the time of Project Review.

  
**Prof. M.U. Inamdar**  
Project coordinator  
(9130504310)

  
**Dr. Prabhat K. Pallav**  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



# Siddhant College of Engineering, Sudumbare, Pune

## ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT

### Project Title List

Sem-I

A.Y.-2022-23

Class: BE (E&TC)	Students Name	Sign	Title	Guide Name	Signature
1	AMIT RAMCHANDRA KOKARE		Automatic Accident detection With Notification System and Electric Bumper	Dr. Prabhat K. Palle	
	CHONDHARY KAMLESH SHEKHAR				
	CHENGALE PRANJAL KASHINATH				
2	KHALADKAR KULDIP SADASHIV		IOT base EV Battery Monitoring and Alert system	Dr. Prabhat K. Palle	
	KUMAWAT HARSHAL VASANTRAO				
	KALE AMOL KASHINATH				
3	DANGE ANRUTA DILIP		Safety Jacket for Women	Prof. M.U. Inamdar	
	SHEWALE ASHWINI ASHOK				
	KAMBLE VAIBHAVSHALI RAJENDRA				
4	MANDAYKAR MANGESH RAMESH		Design an Algorithm for Efficient Communication Between Nodes in IOT	Prof. M.U. Inamdar	
	GADE DHANSHING HARIDAS				
	DIMBLE SWAPNE PRABHAKAR				
5	DADASO BHAGAVANRAO JADHAV		Hand Gesture Recognition using IOT	Prof. M.U. Inamdar	
	KHATRI KEDAR RAMESHCHANDR				
	PRANOD GANPATRAO DHONKURSHIE				
6	GADE ATUL RAGHUNATH		IOT based Smart Energy Meter	Prof. Ganesha Argade	
	KACHARE KUNAL RAJARAM				
	PUNAM PANDURANG SIRASE				
7	GODALE URMILA REVANSIDDH		Battery Management System using Cooling Thermal Electric	Prof. M.U. Inamdar	
	ADEKAR SHREYA ANAND				
	KHARE NISHA PRABHAKAR				
8	BRUTBAL KALYANI ANIL		Voice Controlled Wheel Chair with Obstacle Detection and Control via Touch Panel	Prof. Swati Deshmukh	
	SALUNKHE AKSHAY MANUTI				
	KADAM PRASHANT BALASAMH				
9	KHANVILKAR DHANANJAY INDRAJIT		Wildlife Observation Robot	Dr. Prabhat K. Palle	
	MOHITE ADITYA ANAND				
	SHENDE SAMEER DNYANESHWAR				
10	MUNGASE SUKAL SANJAY		Door Access Control System Face Mask Detection Using Artificial Intelligence	Prof. Kalyani Kadam	
	BIRAJDAR KRANTI NETAJI				
	BIRAJDAR SAURABH RAJARAM				
11	BIRAJDAR SNEHA RAJARAM		Alcohol Sensing Alert with Motor Locking System	Dr. Prabhat K. Palle	
	VISHAI BABAN MISAL				
	DATTARAM KALYAN KALE				
12	DAWANE ABHISHEK VIJAY		IOT Based GPS Location Tracker using Node-mcu and GPS Module	Prof. Shalbhing Shetke	
	DUBEY VIJAY SATYANARAYAN				

Project Coordinator  
Prof. M.U. Inamdar

HOD  
Dr. Prabhat Palle  
Head Of The E&TE Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering  
Department of Electronics and Telecommunication Engineering.  
(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S. P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal - Maval, Dist - Pune, PIN - 412 109. ☎ 02114-661904.

SEM-I (2022-23)

Class:- BE (E & TC)

Date : 16<sup>th</sup> Nov 2022


## Notice


All the students of BE E&TC Engineering are hereby informed that, **Project Review-IV** is scheduled on **21<sup>st</sup> Nov 2022, Wednesday at 10.00 am**. All the Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

- |   |   |
|---|---|
| 1. Introduction                               | 9. Purchase of Material (Add actual photos) |
| 2. Problem statement                          | 10. Fabrication Status (Add actual photos)  |
| 3. Objectives                                 | 11. Assembly (Add actual photos)            |
| 4. Concept                                    | 12. Experimentation                         |
| 5. Plan (Complete Plan to Finish the Project) | 13. Analysis (add analysis part if any)     |
| 6. Literature Review                          | 14. Results                                 |
| 7. Design Calculations                        | 15. Conclusions and References              |
| 8. Experimental Layout                        |   |

Presentation will be in front of Project Evaluation Panel. All the Group members should be present at the time of Project Review.

**Note:-** Project Should be completed at the end of this month. Prepare project report in consultation with your project Guides.

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhakar K. Pallav  
Head of Department  
Department of Electronics and Telecommunication Engineering  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



**Siddhant College of Engineering, Sudumbare, Pune**  
**ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT**

Class: BE (E&TE)	Project Title List				
Group No	Students Name	Sign	Sem-I	A.V.-2022-23	
			Title	Guide Name	Signature
1	AMIT RASHMIKHA KOLARE CHETANWARI KAMLESH SHIVKARAN CHENGALE PRANJAL KASHINATH		Automatic Accident detection With Notification System and Electric Bumper	Dr. Prabhat K. Pathav	
2	KHALADKAR KULDIP SADASHIV KUMARAT HARSHAL VASANTRAO KALE ANOL KASHINATH		IOT Base EV Battery Monitoring and Alert system	Dr. Prabhat K. Pathav	
3	DANGE AMRUTA DILIP SHEWALE ASHWINI ASHOK KAMBLE VAIBHAVSHALI RAJENDRA		Safety Jacket for Women	Prof. M.U Inamdar	
4	MANDAYKAR MANGESH RAMESH GADE DHANSHING HARIDAS DUMBLE SWAPNIL PRABHAKAR DADASO BHAGAVANRAO JADHAV		Design an Algorithm for Efficient Communication Between Nodes in IOT	Prof. M.U Inamdar	
5	KHATRI KEDAR RAMESHKUMAR PRANOD GANPATRAO DHONUKSHE GADE ATUL RAGHUNATH		Hand Gesture Recognition using IOT	Prof. M.U Inamdar	
6	KACHARE ELINAL RAJARAM PENAM PANDURANG SIRASE CHOTALE UJWALA REVANSIDDH		IOT based Smart Energy Meter	Prof. Geetanjali Agade	
7	ADEKAR SHREYA ANAND KHARE NISHA PRABHAKAR BHEUBAL KALYANI ANIL		Battery Management System using Cooling Thermo Electric	Prof. M.U Inamdar	
8	SALUNKHE AKSHAY MANJUNATH KADAM PRASHANT BALASAMUDH KJANVILKAR DHAMANIKY INDRANATH		Voice Controlled Wheel Chair with Obstacle Detection and Control via Touch Panel	Prof. Suresh Deshpande	
9	MOHITE ADITYA ANAND SHINDE SAMEER DNYANESHWAR MUNGASE SURAJ SANJAY		Wildlife Observation Robot	Dr. Prabhat K. Pathav	
10	SIRADAR KRANTI NEPAJI BIRAUDAR SALIKABH RAJARAM BIRAUDAR SHEHA RAJARAM		Door Access Control System Face Mask Detection Using Artificial Intelligence	Prof. Kalyani Kadam	
11	VISHAL BABAN MISAL DATTARAM KALYAN KALE DAWANE ABHISEET VIJAY		Alcohol Sensing Alert with Motor Locking System	Dr. Prabhat K. Pathav	
12	DUBEY VIJAY SATYANARAYAN		IOT Based GPS Location Tracker using Node mcu and GPS Module	Prof. Shubhangi Sheth	

Project Coordinator  
 Prof. M.U Inamdar

Dr. Prabhat Pathav  
 Head Of The E&TE Dept.  
 Siddhant College of Engineering  
 Sudumbare, Maval, Pune- 412109





C. A. Y. M. E. Trust's  
Siddhant College of Engineering,  
Department of Electronics and Telecommunication Engineering.  
(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & AISBT)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. B-02114-661904.

SEM- I (2022-23)

Class:- BE (E & TC)

Date : 22<sup>nd</sup> Nov, 2022

## Project Stage-I & II contents

### **Project Stage-I (SEM-I)**

1. Group formation,
2. Topic finalization,
3. Literature Review,
4. Methodology,
5. Components selection
6. Design Calculations
7. Experimental Layout

**Note:-** Project Groups should Prepare the project report and has to submit soft copy as well as hard copy ( Spiral Binding )


### **Project Stage-II (SEM-II)**

1. Purchase of Components,
2. Fabrication (PCB Design) ,
3. Assembly ,
4. Experimentation and
5. Analysis

**Project Groups should prepare the project report and has to submit soft copy as well as hard copy (Black Book copy)**

All the project groups are instructed to complete the given tasks in stage-I & II

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabal K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. ☎02114-661904.

**SEM- I (2022-23)**

**Class:- BE (E & TC)**

**Date : 27<sup>th</sup> Dec, 2022**


### **Notice**


All the Students BE (E & TC) are hereby informed that, **Project Stage-I SPPU Oral exam** is scheduled on **28<sup>th</sup> Dec, 2022**. Project stage-I evaluation will be for 50 marks (Termwork-25 marks & Oral -25 marks). All the Project Groups are instructed to contact the respective Guides. Project Groups Should Prepare the Project Stage-II report considering following points. (PPT also)

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review
7. Design Calculations
8. Experimental Layout

#### **Note:-**

1. Prepare PPT presentation of at least 15-20 slides
2. While presentation each group member has to give the presentation (So divide the presentation among your respective group members )
3. Prepare project report of 60-70 Pages
4. Submit Final report (**Number of group members +1**) Binding duly signed by Project Guide, Project Coordinator, HOD and Principal. (Refer SPPU syllabus)
5. Carry all the Research Papers, Logbook, CD and Literature referred during oral exam

  
**Prof. M.U. Inamdar**  
Project coordinator  
(9130504310)

  
**Dr. Prabhakar K. Pallav**  
Head of Department,  
E & TC Engineering  
**Head Of The E&TC Dept.**  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to J.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal. - Maval, Dist. - Pune, PIN - 412 109. B.02114-661904.

**SEM- I (2022-23)**

**Class:- BE (E & TC)**

**Date : 27<sup>th</sup> Dec, 2022**


### **Notice**


All the Students BE (E & TC) are hereby informed that, **Project Stage-I SPPU Oral exam** is scheduled on **28<sup>th</sup> Dec, 2022**. Project stage-I evaluation will be for 50 marks (Termwork-25 marks & Oral -25 marks). All the Project Groups are instructed to contact the respective Guides. Project Groups Should Prepare the Project Stage-II report considering following points. (PPT also)

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review
7. Design Calculations
8. Experimental Layout

#### **Note:-**

1. Prepare PPT presentation of at least 15-20 slides
2. While presentation each group member has to give the presentation (So divide the presentation among your respective group members )
3. Prepare project report of 60-70 Pages
4. Submit Final report (**Number of group members +1**) Binding duly signed by Project Guide, Project Coordinator, HOD and Principal. (Refer SPPU syllabus)
5. Carry all the Research Papers, Logbook, CD and Literature referred during oral exam

  
**Prof. M.U. Inamdar**  
Project coordinator  
(9130504310)

  
**Dr. Prabhat K. Pallav**  
Head of Department,  
E & TC Engineering  
**Head Of The E&TC Dept.**  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109





C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

**Department of Electronics and Telecommunication Engineering.**

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At, Post - Sudumbare, Tal - Mayal, Dist - Pune, PIN - 412 109. 022114-661904.

SEM- II (2022-23)

Class:- BE (E & TC)


Date : 9<sup>th</sup> Feb, 2023


### Notice

All the students of BE E & TC Engineering are hereby informed that, **Project Review-I** is scheduled on 13<sup>th</sup> Feb 2023, at 10.00 am. All the Project Groups are supposed to contact the respective Guides and discuss the status of the project before. Project Groups Should Prepare the Presentation (PPT) for review. Following Points to should be included in Presentation:

1. Introduction
2. Problem statement
3. Objectives
4. Concept
5. Plan (Complete Plan to Finish the Project)
6. Literature Review

This review has weightage of 50% of Term work marks. Project Groups should prepare the Presentation accordingly. All the Group members should be present at the time of Project Review.

  
Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

  
Dr. Prabhakar K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Mayal, Pune - 412109



C. A. Y. M. E. Trust's  
Siddhant College of Engineering.

Department of Electronics and Telecommunication Engineering

(Approved by AICTE, Recognized by Govt. of Maharashtra and Affiliated to S.P. Pune University & MSBTE)  
At. Post - Sudumbare, Tal - Maval, Dist - Pune, PIN - 412 109. B02114-661904.

Date: 13<sup>th</sup> Feb, 2023

### Attendance of Project Guides

Sr. No	Name of Project Guide	Sign
1.	Dr. Prabhat Pallav	
2.	Dr. A. V. Bade	
3.	Prof. M U Inamdar	
4.	Prof. G.A. Argade	
5.	Prof. S. B. Deshmukh	
6.	Prof. S. V. Shelke	
7.	Prof. K. A. Kadam	

Prof. M.U. Inamdar  
Project coordinator  
(9130504310)

Dr. Prabhat K. Pallav  
Head of Department,  
E & TC Engineering  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

# Siddhant College of Engineering, Sudumbare, Pune

## ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT

Class: BE (E&TC)	Project Title List	Sem-II	A.Y.-2022-23		
Group No	Students Name	Sign	Title	Guide Name	Signature
1	AMIT KAMCHANDRA KOKARE CHOWDHARY KAMLESH SHEVKARAN DHENGALE PRANAL KASHINATH		Automatic Accident detection With Notification System and Electric Bumper	Dr. Prabhat K. Pallav	
2	KHALADKAR KULDIP SADASHIV KUMAWAT HARSHAL VASANTRAO KALE AMOL KASHINATH		IoT Base EV Battery Monitoring and Alert system	Dr. Prabhat K. Pallav	
3	DANGE AMRUTA DILIP BHEWALE ASHWINI ASHOK KAMBLE VAIBHAVSHALI RAJENDRA		Safety Jacket for Women	Prof. M.U Inamdar	
4	MANDAVKAR MANGESH RAMESH GADE DHANSHING HARIDAS DIMBLE SWAPNIL PRABHAKAR DADASO BHAGAVANTRAO JADHAV		Design an Algorithm for Efficient Communication Between Nodes in IoT	Prof. M.U Inamdar	
5	KHATRI KEDAR RAMESH KUMAR PRAMOD GANPATRAO DHONLIKHE GADE ATUL RAGHUNATH		Hand Gesture Recognition using IOT	Prof. M.U Inamdar	
6	KACHARE KUNAL RAJARAM PUNAM PANDURANG SIRASE GROTALE UPWALA REYANSIDDH		IoT based Smart Energy Meter	Prof. Geetanjali Arpade	
7	ADEKAR SHREYA ANAND KHARKE NISHA PRABHAKAR BHUIBAL KALYANI ANIL		Battery Management System using Cooling Thermo Electric	Prof. M.U Inamdar	
8	SALLUNKHE AKSHAY MARUTI KADAM PRASHANT BALASAHEB KHANVILKAR DEHANGADY INDRAJIT		Voice Controlled Wheel Chair with Obstacle Detection and Control via Touch Panel	Prof. Swati Deshmukh	
9	MOHITE ADITYA ANAND SHINDE SAMDER DNYANESHWAR MUNGASE SIBRAJ SANJAY		Wildlife Observation Robot	Dr. Prabhat K. Pallav	
10	BIKADAR KIRANTI NETAJI BIRAJDAR SAURABH RAJARAM BIRAJDAR SNEHA RAJARAM		Door Access Control System Face Mask Detection Using Artificial Intelligence	Prof. Kalyani Kadam	
11	VISHAL BABAN MISAL DATIRAM KALYAN KALE DAWANE ABHJEET VIJAY		Alcohol Sensing Alert with Motor Locking System	Dr. Prabhat K. Pallav	
12	DUBEY VIJAY SATYANARAYAN		IoT Based GPS Location Tracker using Node mcu and GPS Module	Prof. Shubhangi Shelke	

Project Coordinator  
Prof. M.U Inamdar

Dr. Prabhat Pallav  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109



A PROJECT REPORT ON

**Design an Algorithm for Efficient Communication between  
nodes in IOT**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY, IN THE FULL  
FULFILLMENT OF PROJECT PART II OF THE REQUIREMENTS

FOR THE AWARD OF THE DEGREE

OF

**BACHELOR OF E&TC ENGINEERING**

BY

**Name of the students**

**Seat no./Roll no.**

**Mangesh Ramesh Mandavkar**

**(PRN No. 72165841F)**

**Dhansing Haridas Gade**

**(PRN No. 72165830L)**

**Dadaso Bhagavanrao Jadhav**

**(PRN No. 72165823H)**

**Swapnil Prabhakar Dimbale**

**(PRN No. 72165828J)**

Under the Guidance of

**Prof. Inamdar M.U**

**CAYMET's**

**SIDDHANT COLLEGE OF ENGINEERING**



**Sudumbare, Talegaon-Chakan Road**

**Tal - Maval, Dist - Pune - 412109.**

**ACADEMIC YEAR : 2022-23**



CAYMET's

## SIDDHANT COLLEGE OF ENGINEERING

### CERTIFICATE

This is to certify that the project report entitled "Design an Algorithm for Efficient Communication between nodes in IOT" **Mangesh Ramesh Mandavkar, Dhansing Haridas Gade, Dadaso Bhagvanrao Jadhav, Swapnil Prabhakar Dimble** is a bonafide work carried out by him under the supervision of "Prof. Inamdar M.U" and it is approved for the fulfilment of the project part II of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.

  
Prof. Inamdar M.U

Project Guide

  
Prof. Inamdar M.U

Project Co-ordinator

  
External Examiner

  
Dr. Pallav Prabhat

Head of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

  
Dr. B.V. Kambale

Siddhant College of Engineering  
Sudumbare, Pune - 412109  
Principal

Place : Sudumbare, Pune

Date : 30/05/2023



A

**PROJECT PART II**

**REPORT ON**

**VOICE CONTROLLED WHEELCHAIR WITH OBSTACLE  
DETECTION & CONTROL VIA TOUCH PANEL**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY,

IN THE FULFILLMENT OF PROJECT PART II OF THE REQUIREMENTS FOR THE

AWARD OF THE DEGREE

OF

**BACHELOR OF E&TC ENGINEERING**

BY

**Name of the students**

**Seat no./Roll no.**

Salunkhe Akshay Maruti

72165845J

Kadam Prashant Balasaheb

72165833E

Khanvilkar Dhananjay Indrajit

72165836K

Under the Guidance of

**Prof. Swati Deshmukh**

**CAYMET's**

**SIDDHANT COLLEGE OF ENGINEERING**



**Sudumbare, Talegaon-Chakan Road  
Tal - Maval, Dist - Pune - 412109.  
ACADEMIC YEAR 2022-2023**



**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**

**CERTIFICATE**

This is to certify that the project stage II report entitled “ **VOICE CONTROLLED WHEELCHAIR WITH OBSTACLE DETECTION & CONTROL VIA TOUCH PANEL**”, having “**Salunkhe Akshay Maruti (72165845J, Kadam Prashant Balasaheb (72165833E), Khanvilkar Dhananjay Indrajit (72165836K).**” are a bonafide work carried out by him under the supervision of Prof. “Prof. Swati Deshmukh” and it is approved for the fulfilment of the project part II of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.

  
**Prof. Swati Deshmukh**

**Project Guide**

  
**External Examiner**

  
**Dr. Prabhat K. Pallav**

**Head Of The E&TC Dept.**  
**Head of Department**  
Siddhant College of Engineering  
Sudumbare, Naval, Pune- 412109

  
**Prof. Inamdar M. U.**

**Project Co-Ordinator**

  
**Dr. L. V. Kamble**

**Principal**  
**Principal**  
Siddhant College of Engineering  
Sudumbare, Pune - 412 109

Place: Sudumbare, Pune

Date: 30/05/2023





**A PROJECT REPORT ON  
IOT BASED EV BATTERY MONITORING & ALERT SYSTEM.**

**SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY,  
IN THE FULFILLMENT OF PROJECT PART II OF THE REQUIREMENTS FOR THE  
AWARD OF THE DEGREE**

**OF**

**BACHELOR OF E & TC ENGINEERING**

**BY**

**Name of the students**

**Seat no. / Roll no.**

**Kuldeep Khaladkar**

**72165835M**

**Harshal Kumawat**

**72165839D**

**Amol Kale**

**72165834C**

**Under the Guidance of**

**Dr. Prabhat Pallav**

**CAYMET's  
SIDDHANT COLLEGE OF ENGINEERING**



**Sudumbare, Talegaon-Chakan road  
Tal - Maval, Dist - Pune- 412109.**

**ACADEMIC YEAR: 2022-23**



**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**


**CERTIFICATE**

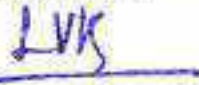
This is to certify that the project report entitled **"IoT Based EV battery monitoring & alert system"** by **Pravall Kumawat, Kuldeep Khaladkar, Amol Kale** are bonafide work carried out by him under the supervision of **"Dr. Prabhat Pallav"** and it is approved for the fulfillment of the project requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.

  
**Dr. Pallav Prabhat**  
**Project Guide**

  
**Prof. Inamdar M.U.**  
**Project Co-ordinator**

  
**Dr. Pallav Prabhat**  
**Head of Department**  
Head Of The E&TC Dept.  
Siddhant College of Engineering  
Sudumbare, Maval, Pune- 412109

  
**Dr. L.V. Kamble**  
**Principal**  
Siddhant College of Engineering  
Sudumbare, Pune - 412 109

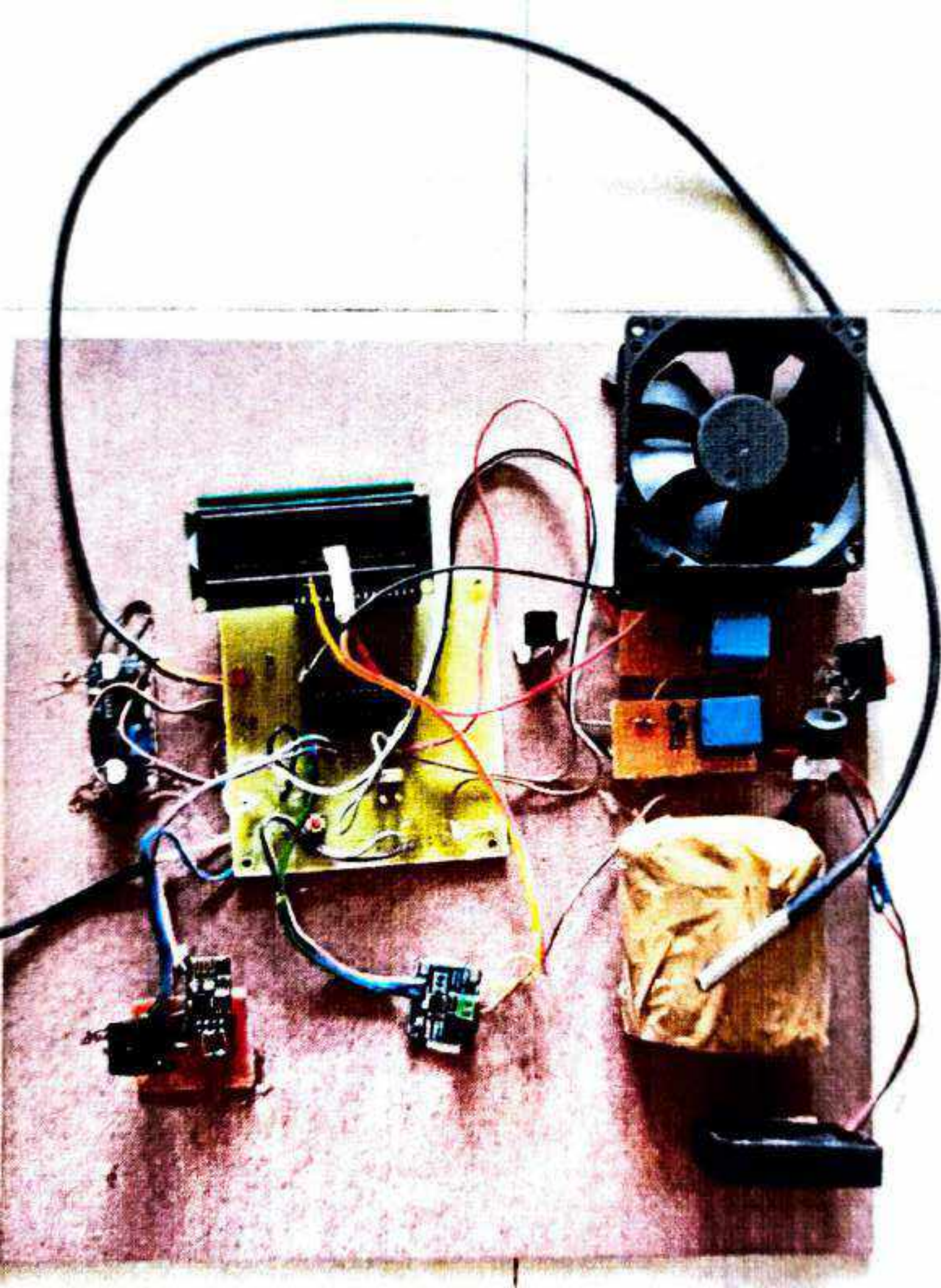
  
**External Examiner**



Place: Sudumbare, Pune

Date: 30/5/2023





A  
PROJECT REPORT  
ON

**“BATTERY MANAGEMENT SYSTEM (BMS) USING  
COOLING THERMOELECTRIC”**

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE  
IN THE PARTIAL FULFILMENT OF THE REQUIREMENTS

OF  
**BACHELOR OF ENGINEERING**  
**(ENTC ENGINEERING)**

**SUBMITTED BY**

SHREYA ADEKAR	72165816E
NISHA KHARE	72165837H
KALYANI BHUJBAL	72165818M

**Under the Guidance of**

**Prof. M. U. IMANDAR**



**DEPARTMENT OF ENTC ENGINEERING**

**CAYMET's**

**SIDDHANT COLLEGE OF ENGINEERING, SUDUMBARE,  
TALEGAON - CHAKAN ROAD, TAL - MAVAL, DIST -  
PUNE 412109**

**2022- 23**



**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**

# CERTIFICATE

This is to certify that the project report entitled "BATTERY MANAGEMENT SYSTEM (BMS) USING THERMOELECTRIC COOLING", having "B190443001, B190443024, B190443003." is a bonafide work carried out by him under the supervision of Prof. "M. U. Inamdar" and it is approved for the partial fulfilment of the project part I of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Electronics & Telecommunication).

The Project work has not been earlier submitted to any other institute or university for the award of degree.

  
**Prof. M. U. Inamdar**

**Project Guide**

  
**Prof. Pallav Prabhat**

**Head of Department**  
**Head Of The E&TC Dept.**  
**Siddhant College of Engineering**  
**Sudumbare, Maval, Pune- 412109**

  
**Dr. R. L. Khandagale**  
**Principal**  
**Siddhant College of Engineering**  
**Sudumbare, Pune- 412109**

  
**Prof. M. U. Inamdar**

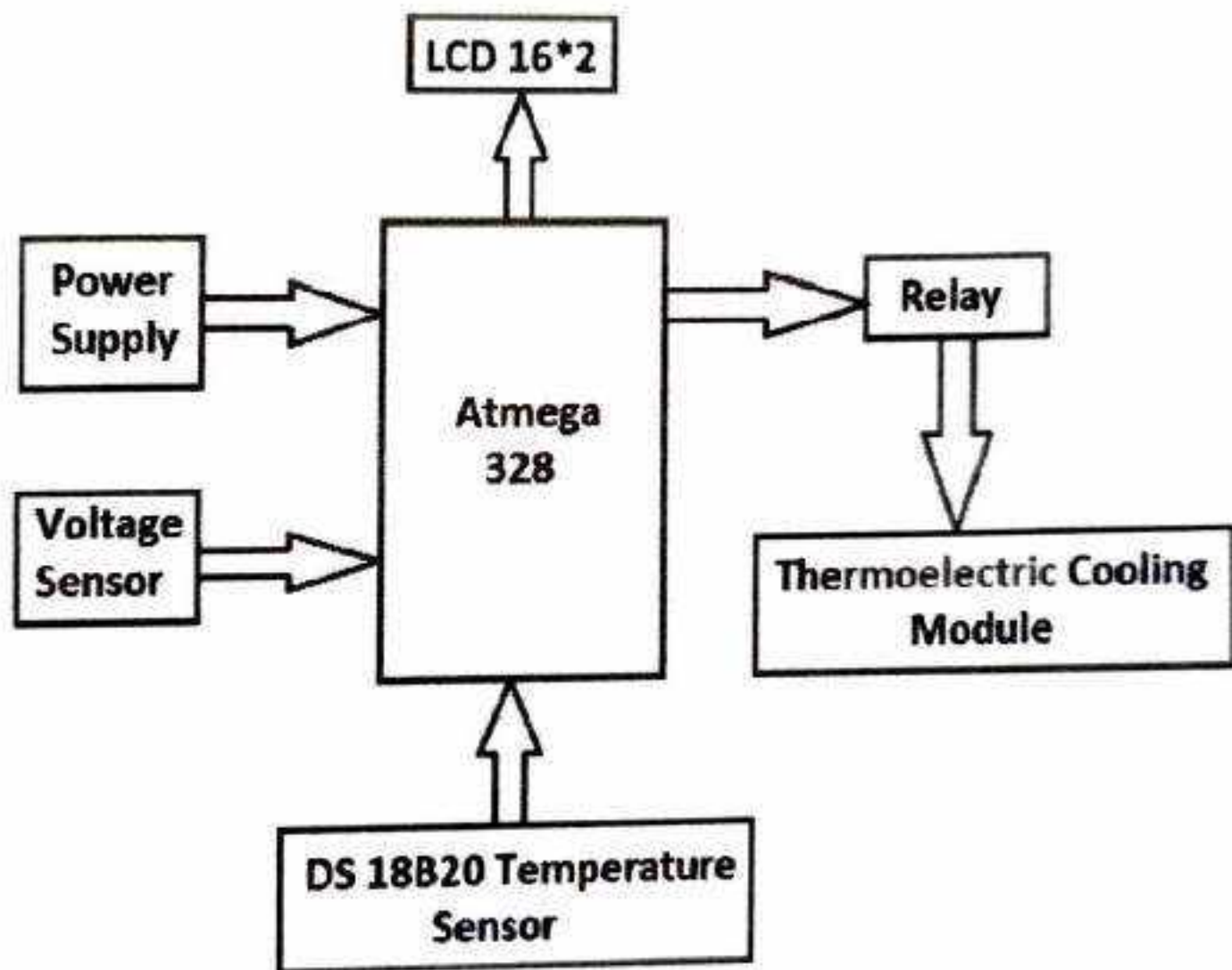
**Project Co-ordinator**



  
**External Examiner**

Place: Sudumbare, Pune

Date: 30/5/2023



**Fig :- 6 The Block Diagram of the developed prototype**

**A**  
**PROJECT PART II REPORT**  
**ON**  
**AUTOMATIC ACCIDENT DETECTION WITH**  
**NOTIFICATION SYSTEM AND ELECTRIC BUMPER**  
**SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY**  
**IN THE FULFILLMENT OF PROJECT PART II OF THE REQUIREMENTS**  
**FOR THE AWARD OF THE DEGREE**  
**OF**  
**BACHELOR OF E&TC ENGINEERING**  
**BY**

**Amit R. Kokare (72165817C)**  
**Kamlesh S. Chowdhary (72165822K)**  
**Pranjal K. Dhengale (72165827L)**

**Under the Guidance of**

**Dr. Prabhat K. Pallav**

**CAYMET's**  
**SIDDHANT COLLEGE OF ENGINEERING**



**Sudumbare, Talegaon-Chakan Road**  
**Tal - Maval, Dist - Pune - 412109.**

**ACADEMIC YEAR : 2022-23**



**CAYMET's  
SIDDHANT COLLEGE OF ENGINEERING**

**CERTIFICATE**


Verify that the Project part 2 report entitled "AUTOMATIC ACCIDENT DETECTION WITH NOTIFICATION SYSTEM AND ELECTRIC BUMPER", having "Amit R. Kokare (72165817C), Kamlesh S. Chowdhary (72165822K), Pranjal K. Dhengale (72165827L)" is a bonafide work carried out by them under the supervision of "Dr. Prabhat K. Pallav" to the Savitribai Phule Pune University, for the award of the degree of Final Year of Engineering (Electronics & Telecommunication).

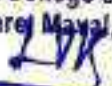
The Project work has not been earlier submitted to any other institute or university for the award of degree.

  
**Dr. Prabhat K. Pallav**  
Project Guide

  
**Prof. Inamdar M.U**  
Project Co-ordinator



  
**Dr. Prabhat K. Pallav**  
Head of Department  
Siddhant College of Engineering  
Sudumbare, Pune - 412109

  
**Dr. L. V. Kamble**  
Principal  
Siddhant College of Engineering  
Sudumbare, Pune - 412109

Place: Sudumbare, Pune  
Date: 30/05/2023

  
External Examiner

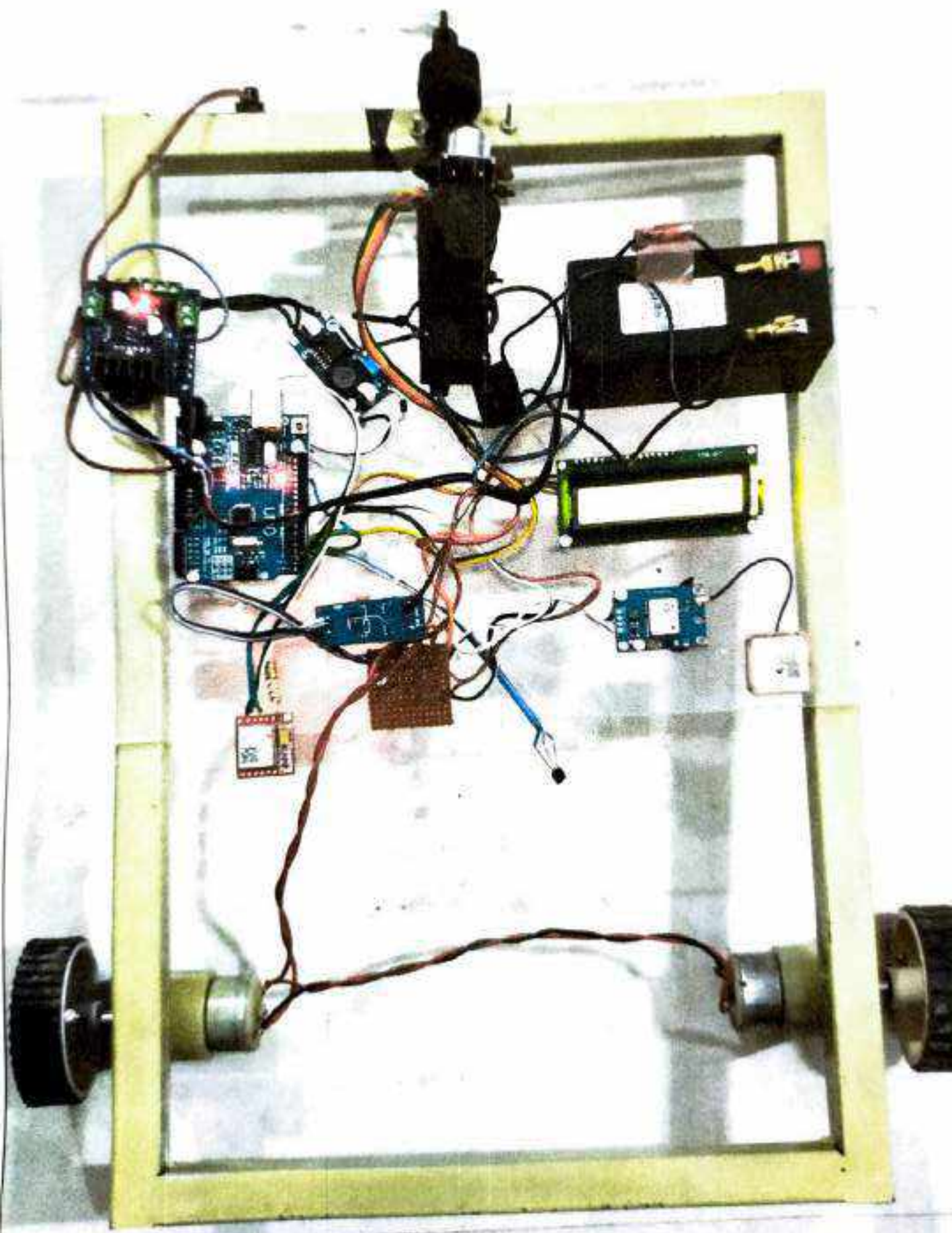


Fig. 24 - Image of System