

## SAPTHAGIRI COLLEGE OF ENGINEERING

A UNIT OF SRI SRINIVASA EDUCATIONAL & CHARITABLE TRUST  
(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.)  
(Accredited by NAAC with "A" Grade) (Accredited by NBA for ECE, CSE, ISE, ME & EEE)  
(An ISO 9001 – 2015 & ISO 14001 – 2015 Certified Institution)  
#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru- 560 057. Phone: 080 – 28372800  
**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

### III YEAR MINI-PROJECT BATCHES

SL.NO	USN	STUDENTS NAME	TITLE OF PROJECT
1.	1SG21EE051	PRATHAMA R	Smart Parking System
	1SG21EE075	TEJASHREE K	
	1SG22EE418	SURESH B M	
	1SG22EE419	VANITHA D S	
2.	1SG21EE061	SAHANA S JOSHI	Solar powered electric fence
	1SG21EE072	SUMAN KUMAR CHOUDHARY	
	1SG22EE414	PRASAD GANESH UPPAR	
3.	1SG21EE005	APOORVA B	Solar Wireless Electric Vehicle Charging Scheme
	1SG21EE012	CHINMAY E GOWDA	
	1SG21EE005	YOGITHA	
	1SG22EE400	ANIL KUMAR T P	
4.	1SG21EE004	ANARGHYA J	SONAR: Marine Radar
	1SG21EE020	HARISH V	
	1SG21EE078	VARSHA C	
	1SG22EE401	ARAVIND V S	
5	1SG21EE056	RAKESH B S	Wireless EV Charging Using Solar Energy
	1SG21EE058	RAKESH P	
	1SG21EE059	ROSHAN JOGI A S	
	1SG21EE064	SHWETHA S	
6.	1SG21EE062	SANIYA SHEIKH	Hydro electricity generation
	1SG21EE065	SHRAVANI S	
	1SG21EE071	SUHAS H O	
	1SG21EE074	SUNITHA M	
7.	1SG21EE038	MANOJ M	Solar Based Automatic Staircase Lighting System
	1SG21EE043	N SUKRUTHA	
	1SG21EE068	SOWMYA S R	
	1SG22EE420	VINODH KUMAR	
8.	1SG21EE035	MADHUSHREE M N	Solar Based Inverter
	1SG21EE079	VARALAKSHMI B R	
	1SG22EE417	SHYAM SATHEESH	
9.	1SG21EE003	ANANYA C	Mini Solar Power System
	1SG21EE021	HARSHA K	
	1SG21EE033	LOHITH M B	
	1SG22EE411	NIKHIL ANANT ACHARI	
10.	1SG21EE008	BHEEMA REDDY B	Solar Charged Power Bank
	1SG21EE028	KUSHAL R GOWDA	
	1SG22EE403	BISHWARUP CHAKRABORTY	
	1SG22EE405	HITESH KUMAR S	
11	1SG21EE051	PRATHAMA R	Solar Tracking System

Principal  
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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

	1SG21EE064	SANJAY H S	
	1SG21EE073	SUMANTH N M	
	1SG22EE419	VANITHA D S	
12.	1SG21EE034	M AISHWARYA	Solar Based Automatic Agriculture Pump Controller
	1SG21EE080	VEDITHA D P	
	1SG22EE407	KRISHNA RAJ SHEKAR	
	1SG22EE410	NAGESH M S	
13.	1SG21EE040	MARUTHI S	Solar Powered Insect Detection System
	1SG21EE044	NARAPRAGNA H	
	1SG21EE054	PUNITH N	
14.	1SG21EE037	MANOJ GOWDA GV	Hybrid Power Generation Using Solar and Wind Energy
	1SG21EE046	NAVEEN KUMAR B C	
	1SG21EE048	NIKITHA P	
	1SG21EE076	THARUN R	
15.	1SG21EE047	NAYANA L	Solar Powered Automatic Irrigation System
	1SG21EE075	TEJASHREE K	
	1SG22EE415	RAKSHITH T C	
	1SG22EE418	SURESH B M	
16.	1SG21EE010	CHANDAN V	Electricity Generation by Biogas
	1SG21EE026	KAVYA R	
	1SG22EE402	BHOOMIKA H R	
	1SG22EE409	MOHAMMED SAMEER	
17.	1SG21EE007	BHARATH B	Automatic Smart Street Light Using IR Sensor
	1SG21EE009	BRUNDA K	
	1SG21EE031	LIKITHA H	
	1SG21EE084	VISHWANATH S	
18	1SG21EE036	MANOJ C N	Geothermal Energy Generator
	1SG21EE045	NANDINI N	
	1SG21EE049	NITHYA SHREE N	
	1SG21EE070	SUDEEP	
19	1SG21EE060	ROSHNI KUMAR	Solar Powered Monitoring System
	1SG21EE067	SNEHA B	
	1SG22EE413	NIRANJAN M PHALKE	
	1SG22EE422	YOGESH GANAPATI GOUDA	
20	1SG21EE042	MONIKA K V	Solar Grass Cutter
	1SG21EE050	NUTHAN M	
	1SG22EE412	NINGAPPA S	
	1SG22EE416	RANJITH KUMAR	
21	1SG21EE004	ANARGHYA J	Solar Pesticide Sprayer
	1SG21EE020	HARISH V	
	1SG21EE078	VARSHA C	
	1SG22EE401	ARAVIND V S	
22	1SG21EE022	HEMASHREE G	Home Automation Using Solar

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### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

	1SG21EE024	K C KUSHAL PRASAD	Energy
	1SG21EE029	KUSHAL S	
	1SG22EE404	DIVYA B C	
23	1SG21EE006	BHARAT RAJ CHANDRAKANTH KALAMADI	Fire Fighting Robot Using Solar
	1SG21EE027	KISHORE KUMAR S	
	1SG22EE406	JYOTHI G R	
	1SG22EE408	MEGHANA K	
24	1SG21EE001	ABHISHEK V	Solar Powered Automatic Trash Sorter Using Arduino UNO
	1SG21EE016	DHANUSH R	
	1SG21EE030	LALITH N	
	1SG21EE079	VATHSALA B K	
25	1SG21EE013	DEEKSHITH KUMAR S	Solar Powered Weather Station
	1SG21EE015	DHANALAKSHMI N C	
	1SG21EE025	KARTHIK H	
	1SG21EE087	YUKTHA D	
26	1SG21EE002	AISHWARYA S T	Wind Mill
	1SG21EE017	GAGAN B	
	1SG21EE081	VENKATESH GOWDA S	
	1SG21EE085	VIVEK P	

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Department of Electrical & Electronics Engineering  
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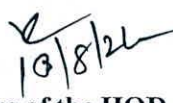


**CERTIFICATE**

Certified that the project work entitled “SMART PARKING SYSTEM” is carried out by PRATHAMA R bearing USN [1SG21EE051], TEJASHREE K bearing USN [1SG21EE075], SURESH B M bearing USN [1SG22EE418], VANITHA D S bearing USN [1SG22EE419], Bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

*for*   
Sign. of the Internal Guide

Dr. Rekha S N  
Professor & H O D

*for*   
Signature of the HOD

Dr. Rekha S N  
Professor & H O D

  
Signature of the Principal

Dr. H. Ramakrishna  
Principal



Principal  
Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the project work entitled **SOLAR POWERED ELECTRIC FENCE** is carried out by **SAHANA S. JOSHI** bearing USN [1SG21EE061], **SUMAN KUMAR CHOUDHARY** bearing USN [1SG21EE072], **PRASAD GANESH UPPAR** bearing USN [1SG22EE414], **VINUTHA C** bearing USN [1SG22EE421], bonafide students of **Sapthagiri College of Engineering** in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign of the guide

Dr. Vijaykumar Annaji Kulkarni

Associate Professor

Dept of EEE

Sign of the HOD

Dr. Rekha S N

Professor and HOD

Dept of EEE

Sign of the Principal

Dr. H Ramakrishana

Principal

External viva

1. Supriya Satyan
2. Dr. Rekha S N

Principal  
Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

Sanjay Satyan 22/3/24

Dr. 22/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



**CERTIFICATE**

Certified that the project work entitled “Solar Wireless Electric Vehicle Charging System” is carried out by Apoorva B USN [1SG21EE005], Chinmay E Gowda USN [1SG21EE0012], Yogitha K C USN [1SG21EE086], Anil Kumar T P USN [1SG21EE400], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

Dr. Vijay Kumar Annaji Kulkarni

Professor

Signature of the HOD

Dr. Rekha S N

Professor & HOD

Signature of the Principal

Dr. H. Ramakrishna

Principal

External Viva

Principal

Sapthagiri College of Engineering

Chikkasandra, Hesarghatta Road,

Bangalore-560 057

Signature with date

Name of the examiners

1.

2. Dr. Rekha S.N

21/3/24.



**Department of Electrical & Electronics Engineering**  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled "SONAR: MARINE RADAR" is carried out by HARISH V bearing USN [1SG21EE020], ANARGHYA bearing USN [1SG21EE004], VARSHA C bearing USN [1SG21EE078], ARAVIND V S bearing USN [1SG22EE401], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2022-23**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

*for* 

Sign. of the Internal Guide

Dr. Rekha S N

Professor & H.O.D

*for* 

Signature of the HOD

Dr. Rekha S N

Professor & H.O.D



Signature of the Principal

Dr. H. Ramakrishna

Principal



Principal  
Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road.  
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Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING

CERTIFICATE



Certified that the project work is **WIRELESS EV CHARGING USING SOLAR ENERGY** carried out **RAKESH B S USN [1SG21EE056]**, **RAKESH P USN [1SG21EE058]**, **ROSHAN JOGI A S USN [1SG21EE059]**, **SHWETHA S USN [1SG21EE064]**, bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of Bachelor of Engineering in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year 2023-24. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide  
**Dr. VIJYA KUMAR ANNAJI KULKARNI**  
Professor

Signature of the HOD  
**Dr. Rekha S N**  
Professor & H.O.D

Signature of the Principal  
**Dr. H. Ramakrishna**  
Principal

External Viva

Name of the examiners

- 1.
2. **Dr. Rekha S. N**

Principal  
**Sapthagiri College of Engineering**  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

Signature with date

**25/3/24**



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the mini project entitled “HYDRO ELECTRICITY GENERATION” is carried out by SANIYA SHEIKH (1SG21EE062), SHRAVANI S (1SG21EE065), SUHAS H O (1SG21EE071), SUNITHA M (1SG22EE074), bonafide student of Sapthagiri College of Engineering in partial fulfilment for the award of Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The mini project report has been approved as it satisfies the academic requirements in respect of mini project prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide  
Dr. Vijay Kumar Annaji Kulkarni  
professor

Signature of the HOD  
Dr. Rekha S N  
Professor & HOD

Signature of the Principal  
Dr. H. Ramakrishna  
Principal

External Viva

Principal  
Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

NAME OF THE EXAMINERS

1. supriya Satyan
2. Dr. Rekha S N

SIGNATURE WITH DATE

Satyan 22/3/24

Dr. 22/3/24



Department of Electrical & Electronics Engineering  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled **Solar Based Automatic Staircase Lighting System** is carried out by MANOJ M bearing USN [ISG21EE038], N SUKRUTHA bearing USN [ISG21EE043], SOWMYA S R bearing USN [ISG21EE068], VINODH KUMAR bearing USN [ISG22EE420], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2022-23. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide  
Dr. Vijaykumar Annaji Kulkarni  
B.E, M.E, Phd

Signature of the HOD  
Dr. Rekha S N  
Professor & H.O.D

Signature of the Principal  
Dr. H. Ramakrishna  
Principal

Principal

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Bangalore-560 057

External Viva

Name of the examiners

1. Supriya Sattan
2. Dr. Rekha S N

Signature with date

22/3/24.



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



**CERTIFICATE**

Certified that the project work entitled **SOLAR BASED INVERTER** is carried out by MADHUSHREE MN bearing USN [1SG21EE035] VARALAKSHMI B R bearing USN [1SG21EE079], SHYAM SATHEESH bearing USN [1SG22EE417], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2022-23. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

Dr. Vijaykumar Annaji Kulkarni

B.E, M.E, Phd

Signature of the HOD

Dr. Rekha S N

Professor & H.O.D

Signature of the Principal

Dr. H. Ramakrishna

Principal

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Name of the examiners

1. Supriya Satyan
2. Dr. Rekha S.N

Signature with date

Supriya Satyan 22/3/24  
Dr. Rekha S.N 22/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the project work entitled **MINI SOLAR POWER SYSTEM** is carried out by **ANANYA C** bearing USN [1SG21EE003], **HARSHA K** bearing USN [1SG21EE021], **LOHITH M B** bearing USN [1SG21EE033], **NIKHIL ANANT ACHARI** bearing USN [1SG22EE411], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Guide

Dr. Vijaykumar Annaji kulkarni

Asso. Professor  
Dept of EEE

Signature of the HOD

Dr. Rekha S N

Professor & H.O.D  
Dept of EEE

Signature of the Principal

Dr. H. Ramakrishna

Principal

Principal  
Sapthagiri College of Engineering  
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External Viva

Name of the examiners

1. Supriya Sattan
2. Dr. Rekha S.N

Signature with date



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



**CERTIFICATE**

Certified that the project work entitled SOLAR CHARGED POWER BANK carried out by **BHEEMA REDDY .B** bearing USN [1SG21EE008], **KUSHAL R GOWDA** bearing USN [1SG21EE028], **BISHWARUP CHAKRABORTY** bearing USN [1SG22EE403], **HITHESH KUMAR S** bearing USN [1SG22EE405], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2022-23**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

**Dr. Vijay Annaji Kulkarani**  
Professor

Signature of the HOD

**Dr. Rekha S N**

Professor & H.O.D

Signature of the Principal

**Dr. H. Ramakrishna**

Principal

Principal

Sapthagiri College of Engineering  
External Viva **hikkasandra, Hesaraghatta Road,**  
Bangalore-560 057

Name of the examiners

1. **Supriya Satyan**
2. **Dr. Rekha S. N**

Signature with date  
  
**22/3/24.**



Department of Electrical & Electronics Engineering  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled **SOLAR TRACKING SYSTEM** is carried out by **PRATHAMA R [1SG21EE051], SANJAY HS[1SG21EE064], SUMANTH NM [1SG21EE072], VANITHA DS [1SG22EE419]**, bonafide students of **Sapthagiri College of Engineering** in partial fulfillment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2022-23**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Signature of the Internal Guide

**Dr. Vijay Kumar Annaji Kulkarni**

Associate Professor

Signature of the HOD

**Dr. Rekha S N**

Professor & H.O.D

Signature of the Principal

**Dr. H. Ramakrishna**

Principal

Principal

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Name of the examiners

1. **Sapriya Sattan**
2. **Dr. Rekha S N**

Signature with date

**Anirudh** 22/3/24

**R** 22/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the mini project work entitled "SOLAR BASED AUTOMATIC AGRICULTURE PUMP CONTROLLER" carried out by M AISHWARYA bearing USN [1SG21EE034], VEDITHA D P bearing USN [1SG21EE080], KRISHNA RAJ SHEKAR bearing USN [1SG22EE407], NAGESH M S bearing USN [1SG22EE410], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

Dr. Vijay Kumar Annaji Kulkarni

Professor

Signature of the HOD

Dr. Rekha S N

Professor & HOD

Signature of the Principal

Dr. H. Ramakrishna

Principal

Principal

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External Viva

Name of the examiners

1. Supriya Sathian

2. Dr. Rekha S. N

Signature with date

22/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



**CERTIFICATE**

Certified that the project work entitled **SOLAR POWERED INSECT DETECTION SYSTEM** is carried out by **MARUTHI S** bearing **USN [1SG21EE040]**, **NAGAPRAGNA H** bearing **USN [1SG21EE044]**, **PUNITH N** bearing **USN [1SG22EE054]**, bonafide students of **Sapthagiri College of Engineering** in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign of the guide

Dr. Vijaykumar Annaji Kulkarni  
Associate Professor  
Dept of EEE

Sign of the HOD

Dr. Rekha S N  
Professor and HOD  
Dept of EEE

External viva

Sign of the Principal

Dr. H Ramakrishana  
Principal

Principal

Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

1.

2. Dr. Rekha S.N

25/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



**CERTIFICATE**

Certified that the project work entitled **HYBRID POWER GENERATION USING SOLAR AN WIND ENERGY** is carried out by **MANOJ GOWDA G V** bearing USN [1SG21EE037], **NAVEEN KUMAR B C** bearing USN [1SG21EE046], **NIKITHA P** bearing USN [1SG21EE048], **THARUN R** bearing USN [1SG21EE076], Bonafede students of Sapthagiri College of Engineering in partial fulfilment for the award of Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-24. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign Of the Guide

Dr. Vijaykumar Annaji Kulkarni  
Associate Professor  
Dept of EEE

Sign of The H O D

Dr. Rekha S N  
Professor & HOD  
Dept of EEE

Sign of The Principal

Dr. H. Ramakrishna  
Principal.

External viya

Principal  
Sapthagiri College of Engineering  
Chikkasandra, Hesarghatta Road,  
Bangalore-560057

Name of the examiners

- 1.
2. Dr. Rekha S.N

Signature with date  
25/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



**CERTIFICATE**

Certified that the project work entitled **SOLAR POWERED AUTOMATIC IRRIGATION SYSTEM** is carried out by **NAYANA. L** bearing USN [1SG21EE047], **TEJASHREE. K** bearing USN [1SG21EE075], **RAKSHITH.T C** bearing USN [1SG22EE415], **SURESH .B M** bearing USN [1SG22EE418], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2022-23**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

**Dr. Vijaykumar annaji Kulkarni**

Professor

Signature of the  
HOD

**Dr. Rekha S N**

Professor &  
H.O.D

Signature of the  
Principal

**Dr. H. Ramakrishna**

Principal

Principal

Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

**External Viva**

Name of the examiners

1.

2. **Dr. Rekha S.N**

Signature with date

25/3/24.



**Department of Electrical & Electronics Engineering**  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled **ELECTRICITY GENERATION BY BIOGAS** is carried out by **CHANDAN V** bearing USN [1SG21EE010], **KAVYA R** bearing USN [1SG21EE026], **BHOOMIKA H R** bearing USN [1SG22EE402], **MOHAMMED SAMEER** bearing USN [1SG22EE426], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign of the guide

**Dr. Vijaykumar Annaji Kulkarni**  
Associate Professor  
Dept of EEE

Sign of the HOD

**Dr. Rekha S N**  
Professor and HOD  
Dept of EEE

External viva

Sign of the Principal

**Dr. H Ramakrishana**  
Principal

Principal

**Sapthagiri College of Engineering**  
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Bangalore-560 057

1.

2. **Dr. Rekha S N**

21/3/24.



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the mini project entitled "AUTOMATIC SMART STREET LIGHT USING IR SENSOR" is carried out by BHARATH B [1SG21EE036], BRUNDA K [1SG21EE009], LIKHITHA H [1SG21EE031], VISHWANATH S [1SG21EE082], bonafide student of Sapthagiri College of Engineering in partial fulfilment for the award of Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The mini project report has been approved as it satisfies the academic requirements in respect of mini project prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide  
Dr. VIJAY KUMAR ANNAJI KULKARNI  
Professor

Signature of the HOD  
Dr. Rekha S N  
Professor & HOD

Signature of the Principal  
Dr. H. Ramakrishna  
Principal

External Viva

Principal  
Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore - 560075  
Signature with date

Name of the examiners

- 1.
2. Dr. Rekha S N

21/3/24



Department of Electrical & Electronics Engineering  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled "Geothermal Energy Generator" is carried out by **MANOJ C N USN [1SG21EE036], NANDINI N USN [1SG21EE045], NITHYA SHREE NUSN [1SG21EE049], SUDEEPUSN [1SG21EE070]**, bonafide students of **Sapthagiri College of Engineering** in partial fulfillment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

**Dr. Vijay Kumar Annaji Kulkarni**

Professor

Signature of the HOD

**Dr. Rekha S N**

Professor & HOD

Signature of the Principal

**Dr. H. Ramakrishna**

Principal

Principal

**Sapthagiri College of Engineering**  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

External Viva

Name of the examiners

1.

2. **Dr. Rekha S.N**

Signature with date

*Put*  
**25/3/24**





# SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi and Recognized by AICTE, New Delhi)

(An ISO 9001:2015 and 14001:2015 certified Institution)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057.

Accredited by NAAC with “A” GRADE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

(Accredited by NBA)

## CERTIFICATE

Certified that the project work entitled **SOLAR POWER MONITORING SYSTEM** is carried out by **ROSHNI N KUMAR** bearing USN [1SG21EE060], **SNEHA B** bearing USN [1SG21EE067], **NIRANJAN M PHALKE** bearing USN [1SG22EE413], and **YOGESH G GOUDA** bearing USN [1SG22EE422], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi** during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

Dr. Vijaykumar Annaji Kulkarni

Associate Professor, Dept of EEE

Signature of the HOD

Dr. Rekha S N

Professor & H.O.D, Dept. of EEE

Signature of the Principal

Dr. H. Ramakrishna

Principal

### External Viva-Voce Examination:

Name of the examiners

1.

2. Dr. Rekha S N

Principal  
Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

Per  
25/10/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



**CERTIFICATE**

Certified that the project work entitled **SOLAR GRASS CUTTER** or is carried out by **MONIKA K V** bearing USN [1SG21EE042], **NUTHAN M** bearing USN [1SG21EE050], **NINGAPPA S** bearing USN [1SG22EE412], **RANJITH KUMAR K** bearing USN [1SG22EE416], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide

**Dr. Rekha S N**

Professor & H O D

Signature of the HOD

**Dr. Rekha S N**

Professor & H.O. D

Signature of the Principal

**Dr. H. Ramakrishna**

Principal

Principal

Sapthagiri College of Engineering  
Chikkasandra, Hesaraghatta Road,  
Bangalore-560 057

**External Viva**

Name of the examiners

1.

2. **Dr. Rekha S N**

Signature with date

25/3/24.



**Department of Electrical & Electronics Engineering**  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled “**SOLAR PESTCIDE SPARYER**” is carried out by **HARISH V** bearing USN [1SG21EE020], **ANARGHYA J** bearing USN [1SG21EE004], **VARSHA C** bearing USN [1SG21EE078], **ARAVIND V S** bearing USN [1SG22EE401], bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide  
Dr. Vijaykumar Annaji Kulkarni  
Professor

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Dr. Rekha S N  
Professor & H.O.D

Signature of the Principal  
Dr. H. Ramakrishna  
Principal

Principal  
Sapthagiri College of Engineering  
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Bangalore-560 057

**External Viva**

Name of the examiners

1.

2. Dr. Rekha S.N

Signature with date

21/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the mini project entitled "HOME AUTOMATION USING SOLAR ENERGY" is carried out by HEMASHREE G (1SG21EE022), K C KUSHAL PRASAD (1SG21EE024), KUSHAL S (1SG21EE029), DIVYA B C (1SG22EE404), bonafide student of Sapthagiri College of Engineering in partial fulfilment for the award of Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The mini project report has been approved as it satisfies the academic requirements in respect of mini project prescribed for the Bachelor of Engineering Degree.

Sign. of the Internal Guide  
Dr. Vijay Kumar Annaji Kulkarni  
Professor

Signature of the HOD  
Dr. Rekha S N  
Professor & HOD

Signature of the Principal  
Dr. H. Ramakrishna  
Principal

NAME OF THE EXAMINERS

External Viva

Principal

Sapthagiri College of Engineering  
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Bangalore-560 057

SIGNATURE WITH DATE

1.

2. Dr. Rekha S.N

Dr.  
21/3/24



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the mini project entitled “FIRE FIGHTING ROBOT USING SOLAR” is carried out by BHARAT RAJ CHANDRAKANT KALAMADI(1SG21EE006), KISHORE KUMAR S(1SG21EE027), JYOTHI G R (1SG22EE406), MEGHANA K (1SG22EE408), bonafide student of Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in department of Electrical and Electronics Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The mini project report has been approved as it satisfies the academic requirements in respect of mini project prescribed for the Bachelor of Engineering Degree.

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Dr. Vijay Kumar Annaji Kulkarni  
Professor

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Professor & HOD

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Dr. H. Ramakrishna  
Principal

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External Viva

Name of the examiners

1.

2. Dr. Rakhe S.N

Signature with date

21/3/24.



**Department of Electrical & Electronics Engineering**  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled “**SOLAR POWERED AUTOMATIC TRASH SORTER USING ARDUINO UNO**” is carried out by **ABHISHEK V** bearing USN [1SG21EE001], **DHANUSH R** bearing USN [1SG21EE016], **LALITH N** bearing USN [1SG21EE030], **VATHSALA B K** bearing USN [1SG21EE078], bonafide students of **Sapthagiri College of Engineering** in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

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**Dr. Vijaykumar Annaji Kulkarni**  
Professor

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**Dr. Rekha S N**  
Professor & H.O.D

**Signature of the Principal**

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Name of the examiners

1.

2. *Dr. Rekha S.N*

Signature with date

*Dr*  
*21/3/24*



Department of Electrical & Electronics Engineering  
**SAPTHAGIRI COLLEGE OF ENGINEERING**



**CERTIFICATE**

Certified that the project work entitled **“SOLAR POWERED WEATHER STATION”** is carried out by **DEEKSHITH KUMAR S USN [1SG21EE013]**, **DHANALAKSHMI N C USN [1SG21EE0015]**, **KARTHIK H USN [1SG21EE025]**, **YUKTHA D USN [1SG21EE087]**, bonafide students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

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Professor

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**Dr. Rekha S N**

Professor & HOD

**Signature of the Principal**

**Dr. H. Ramakrishna**

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**Principal**  
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1.

2. **Dr. Rekha S.N**

Signature with date

**21/3/24**



Department of Electrical & Electronics Engineering  
SAPTHAGIRI COLLEGE OF ENGINEERING



CERTIFICATE

Certified that the project work entitled WIND MLL is carried out by AISHWARYA S T bearing USN [1SG21EE002], GAGANA B bearing USN [1SG21EE017], VENKATESH GOWDA S bearing USN [1SG21EE081], VIVEK P bearing USN [1SG21EE085], Bonafede students of Sapthagiri College of Engineering in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year **2023-24**. It is certified that all corrections/suggestions indicated in the Internal Assessment have been incorporated in the report deposited. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Sign of the Guide

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Associate Professor

Dept of EEE

  
Sign of the H O D

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Sign of the Principal

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Principal

  
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