



# Guru Nanak Dev Engineering College

**Mailoor Road, Bidar, KA – 585403**

**Approved by AICTE New Delhi and Affiliated to VTU Belagavi**

## **Criterion 1 – Curricular Aspects**

### **Department of E&EE**

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69	3GN18EE025	MOHD AZHAR	INTERNSHIP	EEE
70	3GN18EE026	NIKITA	INTERNSHIP	EEE
71	3GN18EE028	P SHARADHA	INTERNSHIP	EEE
72	3GN18EE029	PRAVEENKUMAR	INTERNSHIP	EEE
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74	3GN18EE031	PURUSHOTTAM	INTERNSHIP	EEE
75	3GN18EE032	RANJITA B R	INTERNSHIP	EEE
76	3GN18EE033	SHAIK ADNAN	INTERNSHIP	EEE
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79	3GN18EE037	SHARAN RAJASHEKAR	INTERNSHIP	EEE
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81	3GN18EE041	SHWETA HANGARGE	INTERNSHIP	EEE

82	3GN18EE042	SIDDHARTH	INTERNSHIP	EEE
83	3GN18EE043	SUMAN HOSMANI	INTERNSHIP	EEE
84	3GN18EE044	SWATI	INTERNSHIP	EEE
85	3GN18EE045	SYED AHMED ULLA	INTERNSHIP	EEE
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101	3GN19EE410	VIJAYKUMAR	INTERNSHIP	EEE
102	3GN16EE020	MOHAMMED IMRAN	INTERNSHIP	EEE
103	3GN16EE035	SHAIK PARWAZ AHMED	INTERNSHIP	EEE
104	3GN17EE008	AVINASH BADIGER	INTERNSHIP	EEE
105	3GN17EE015	KRISHNA SAIGAL	INTERNSHIP	EEE
106	3GN17EE038	SANTOSH REDDY	INTERNSHIP	EEE
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108	3GN18EE400	ABDULHAMEED NADAF	INTERNSHIP	EEE
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VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

GURU NANAK DEV ENGINEERING COLLEGE

BIDAR-585403, KARNATAKA

ACADEMIC YEAR 2021-2022



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

**CERTIFICATE**


This is to certify that the Mini project report entitled "DIGITAL TACHOMETER" is a bonafide work carried out by MD SOHAIL KHAN (3GN19EE010), SHAIK MUZAFFER (3GN19EE024), SARDAR NAVJEET SINGH (3GN20EE404), R NAGA SUJEET JOSHI (3GN20EE403). In partial fulfillment for the award of Bachelor of Engineering in ELECTRICAL&ELECTRONICS ENGINEERING from the Visvesvaraya Technological University, Belagavi During the year 2021-2022. It is certified that the mini project Report satisfies the academic requirement in respect of mini project work prescribed for the Bachelor of Engineering degree.

  
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Prof. PRAKASH UDGIRE

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## ABSTRACT

A "DIGITAL TACHOMETER" made purely from electronic components and is used to measure the speed of an engine or any other moving object in revolutions per minute and is also known as an electronic tachometer. Electronic tachometers are used in the dashboard of a car for measuring the driving speed. These tachometers are light weight, easy to view and accurate under all conditions. They are usually not portable. A Digital RPM Meter is a measuring instrument which can measure the rotational speed of a rotary machine digitally. In industries we can use this type of digital tachometers which will reduce human effect. The industrial name of this instrument is "Tachometer". It is an important measuring device in the field of electrical engineering & widely used in industries and laboratorial work. Here we are going to design an Aurdino based digital tachometer using IR sensor module to detect object for count rotation of any rotating body and the programming is given by the FTDI programmer. As IR transmits IR rays which reflect back to IR receiver and then IR Module generates an output or pulse which is detected by the aurdino controller when we press start button. It counts continuously for 5 seconds.



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**DEPARTMENT OF  
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This is to certify that the Mini project report entitled "SMART BUILDING USING IR SENSOR" is a bona fide work carried out by VIJAYLAXMI(3GN19EE037), SOUMYA(3GN19EE028), SWATI(3GN19EE031), TABASSUM(3GN19EE033). In practical fulfillment for the award of Bachelor of Engineering in ELECTRICAL & ELECTRONICS ENGINEERING from the Visvesvaraya Technological University, Belagavi During the year 2021-2022. It is certified that the mini project Report satisfies the academic requirement in respect of seminar work prescribed for the Bachelor of Engineering degree.

  
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Signature of HOD  
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1. SHUBHA S
2. G. Prakash

  
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25/07/22

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## ABSTRACT

The "Smart building" concept is based on embedded system and IoT (Internet of Things) Technology. The presented model includes different features using which we can automate various tasks in our workplaces. The smart lighting system activate according to the natural light intensity available and human presence in the building. Smart Dustbins, which require less maintenance by opening when it detects human. Smart Watering systems help in the maintenance of lawns by measuring the soil moisture content. Earthquake detection module is use to warn about an earthquake and other seismic activities. The smart building concept is successfully designed using Arduino and Thing speak server is used for analyze the data.



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This is to certify that the Mini project report entitled "ANTI-SLEEP ALARM USING ARDUINO" is a bonafide work carried out by TEJASWINI PATIL (3GN18EE047) VAISHNAVI KORE (3GN18EE049), ROHAN. C (3GN19EE018), SHUBHANSHU (3GN19EE025), in partial fulfillment for the award of Degree of Bachelor of Engineering in ELECTRICAL & ELECTRONICS ENGINEERING from the Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the mini project report satisfies the academic requirement in respect of the mini project work prescribed for the Bachelor of Engineering degree.

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## ABSTRACT

Driving to save live time, and money in spite of the conditions around you and the actions of others."-This is the slogan for Defensive Driving. The Objective of this project is to develop a system to keep the vehicle secure and protect it by the occupation of the intruders. Vehicle accidents are most common if the driving is inadequate. These happen on most factors if the driver is drowsy or if he is alcoholic. Driver drowsiness is recognized as an important factor in the vehicle accidents. It was demonstrated that driving performance deteriorates with increased drowsiness with resulting crashes constituting more than 20% of all vehicle accidents. But the life lost once cannot be rewinded. Advanced technology offers some hope avoid these up to some extent. This project involves measure and controls the eye blink using IR sensor. The IR transmitter is used to transmit the infrared rays in our eye. The IR receiver is used to receive the reflected infrared rays of eye. If the eye is closed means the output, of IR receiver is high otherwise the IR receiver output is low.

Accidents due to drowsiness can be controlled and prevented with the help of eye blink sensor using IR rays. It consists of IR transmitter and an IR receiver. The transmitter transmits IR rays into the eye.



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This is to certify that the Mini project report entitled "ARDUINO MOTION DETECTOR USING PIR SENSOR" is a bonafide work carried out by GIRISH(3GN19EE005), MANJUNATH(3GN19EE008), SIDRAMESH (3GN19EE026), SURYAPRAKASH (3GN19EE030) in partial fulfillment for the award of Degree of Bachelor of Engineering in ELECTRICAL & ELECTRONICS ENGINEERING, from the Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the mini project report satisfies the academic requirement in respect of the mini project work prescribed for the Bachelor of Engineering degree.

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23/7/2022

## ABSTRACT

PIR Sensor Switch which can detect the Infrared Rays released by human body. The light or any other electrical appliance can be activated automatically by the active presence of a human body within the detection range / coverage area & when there is no presence the light will be deactivated automatically. PIR sensors allow you to sense motion. almost always used to detect whether a human has moved in or out of the sensors range. They are small, inexpensive, low-power, easy to use and don't wear out. For that reason they are commonly found in appliances and gadgets used in homes or businesses. They are often referred to as PIR, "Passive Infrared", "Pyro-electric" or "IR motion" sensors.



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BIDAR-585403, KARNATAKA

ACADEMIC YEAR 2021-2022



## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### CERTIFICATE

This is to certify that the mini-project entitled " TOUCH ON AND OFF SWITCH " is a bonafide work carried out by DEEPAK PAWAR (3GN19EE003), NAGRAJ NEKAR (3GN19EE011), VENCHERSAM (3GN19EE035) & ZHAHEER (3GN19EE039) in partial fulfillment for the award of Degree of Bachelor of Engineering in Electrical & Electronics Engineering affiliated Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that mini project report satisfies the academic requirement in report of the mini project work described for the Bachelor of Engineering Degree.

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## ABSTRACT

Touch On and Touch Off sensor switch using 555 timer IC on a breadboard. This circuit uses two pairs of touch conductors to sense and register the touch. One pair of touch conductors (sensors) for turning ON the output and the other pair for turning OFF the output.

You can use any output device like DC motors or AC appliances (like lights or fans) by using a relay at the output of 555 timer IC and by wiring the output device to the relay.



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**ACADEMIC YEAR 2021-2022**



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**CERTIFICATE**

This is to certify that the mini project entitled "**GENERATION OF ELECTRICITY BY WASTE MATERIAL**" is a bonafide work carried out by **ANANAD SWAMY (3GN19EE002)**, **SACHIN KALE (3GN19EE0020)**, **SAIPRASAD (3GN19EE022)** & **SANGMESH (3GN19EE023)** in partial fulfillment for the award of Degree of Bachelor of Engineering in Electrical & Electronics Engineering affiliated Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the mini project report satisfies the academic requirement in report of the mini project work described for the Bachelor of Engineering Degree.

**Mr. DURGA PRASAD**

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## ABSTRACT

The waste materials that are produced daily from different sources can be used to produce energy from which we can get electricity. The conventional fuels required for production of electricity is decreasing day by day and it is very important to find out alternative sources which can be used as the fuel for the production of electricity especially for developing countries like India. This paper discusses waste materials as a renewable energy source. The paper explores the resources we have ready in our hand as well as the advantages and disadvantages of the using of waste materials as a source of electrical energy. The paper also reviews a few waste to energy projects in some other parts of the world and discusses the future of extracting energy from waste materials.



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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING CERTIFICATE

This is to certify that the mini project entitled "VOLTAGE DETECTOR" is a bonafide work carried out by VIKAS (3GN20EE406), VENKATESH (3GN19EE036), SRIDUTT (3GN19EE029) & ABINEZER (3GN18EE003). In partial fulfillment for the award of Bachelor of Engineering in Electrical & Electronics Engineering affiliated from Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the mini project report satisfies the academic requirement in respect of mini project work prescribed for the Bachelor of Engineering degree.

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## ABSTRACT

Electricity can cause serious injury or even death which is why safety must come first when with electricity or electrical devices. In order to avoid injury, prior to starting work on an electrical box such as an AC mains switch-board or a power supply, for example, you must first verify there is no AC voltage. If you can't completely isolate you device from the supply wires, how can you be sure that there is no voltage remaining? Enter a non-contact AC voltage detector.

There are several options available on the market and they range in price, but in true fashion, with this kit you are able to quickly and create your own non-contact AC voltage detector in less than an hour.

  
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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING CERTIFICATE

This is to certify that the mini project entitled "FLAME SENSOR USING ARDUINO, LED AND BUZZER" is a bonafide work carried out by POOJA (3GN19EE012), SAINEGHA (3GN19EE021), PRIYADARSHINI (3GN19EE016) in partial fulfillment for the award of Degree of Bachelor of Engineering in Electrical & Electronics Engineering affiliated Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the mini project report satisfies the academic requirement in report of the mini project work described for the Bachelor of Engineering Degree.

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## Abstract

Fire detection is the main objective of this project besides surveillance. The aim of the project is to early detection of fire apart from preventive measures to reduce the losses due to hazardous fire. The project mainly is based on image processing and arduino serial communication. In this project, at the user end, the fire images will be feeded in the form of video frames. These images will be further processed by using the software, MATLAB. The proposed system uses RGB and YCbCr color space. The advantage of using YCbCr color space is that it can separate the luminance from the chrominance more effectively than RGB color space. along with this smoke, motion, area detection is also performed using its color characteristics. The proposed system consist of hardware such as arduino, DHT 11 to monitor the Humidity and Temperature. There is a camera for the surveillance. This camera will give a real-time video output to the user on the laptop or computer via a small GUI-graphic user interface which is to be built in MATLAB. Thus the fire will be detected using this model. This project can also be served for security and surveillance applications.



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This is to certify that the Mini project report entitled "WIRELESS ID CARD ENTRY SYSTEM" is a bonafide work carried out by SACHIN (3GN19EE019) SINDHU (3GN19EE027), SWATI (3GN19EE032), VAIJAYANTI (3GN19EE034), in partial fulfillment for the award of Degree of Bachelor of Engineering in ELECTRICAL & ELECTRONICS ENGINEERING from the Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the mini project report satisfies the academic requirement in respect of the mini project work prescribed for the Bachelor of Engineering degree.

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## ABSTRACT

Initially RFID tags were developed to eventually replace barcodes in supply chains. Their advantages are that they can be read wirelessly and without line of sight, contain more information than barcodes, and are more robust. The paper describes the current technology, including the frequency ranges used and standards. With the increasing ubiquity of RFID tags, however, privacy became a concern. The paper outlines possible attacks that can violate one's privacy and it also describes counter measures. The RFID technology did not stop at item-level tagging. The paper also presents current research that focuses on locating and tracking labeled object that move. Since the uses for RFID tags are so widespread, there is a large interest in lowering the costs for producing them. It turns out that printing tags might become a viable alternative to traditional production.



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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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This is to certify that the mini-project entitled "AUTOMATIC PLANT WATERING SYSTEM" is a bonafide work carried out by HARIVISHNU(3GN20EE401), AMOL(3GN20EE400), GOWRE SUDARSHAN(3GN19EE006) AND DEEPAK(3GN19EE004) in partial fulfillment for the award of Degree of Bachelor of Engineering in Electrical & Electronics Engineering affiliated Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the mini project report satisfies the academic requirement in report of the mini project work described for the Bachelor of Engineering Degree.

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25/07/22

## ABSTRACT

In the present era, food scarcity and water scarcity occur due to the increase in population. To avoid this problem we have to promote the agriculture sector. But water wastage is more in this sector in the form of water logging while watering the agricultural fields through irrigation. Therefore an automatic plant irrigation system has to be designed for the proper water supply in the fields. This paper deals with an automatic plant irrigation system which automatically senses the moisture content of the soil and decide whether irrigation is needed or not and how much water is needed for soil. This system uses AtMega328 microcontroller. It is programmed to sense the moisture content if the soil over a period of time. When the moisture content is less than the limit which is predefined, it will start supplying the desired amount of water till it reaches the limit. So when the soil is dry the pump will automatically water the fields and when the soil is wet the pump will automatically switch off, there by eradicate the need of manpower and conserve the time.

  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar



GURU NANAK DEV ENGINEERING COLLEGE BIDAR-585403.  
KARNATAKA.



DEPARTMENT OF ELECTRICAL &  
ELECTRONICS ENGINEERING

CERTIFICATE

This is to certify that the Mini project report entitled "ARDUINO TRAFFIC LIGHT SIMULATOR" is a bonafide work carried out by PALLAVI(3GN20EE402), SILVIA(3GN20EE405), PREETI PAWAR(3GN19EE014), SHARAN KUMAR (3GN18EE036). In partial fulfillment for the award of Bachelor of Engineering in ELECTRICAL & ELECTRONICS ENGINEERING from the Visvesvaraya Technological University, Belagavi During the year 2021-2022. It is certified that the mini project Report satisfies the academic requirement in respect of mini project work prescribed for the Bachelor of Engineering degree.

Signature of Guide

MRS .BASAMMA.R

Signature of HOD

Dr.NEELSHETTY.K

Signature of Principal

Dr.DHANANJAYA.D MUKTEDAR

PRINCIPAL

Guru Nanak Dev Engg. College

BIDAR

Signature with Date

SK 16.10.7/2022

Name of the Examiner

1)...SHUBHA.S.....

2)...G.Prashant.....


PRINCIPAL

Guru Nanak Dev Engg. College Bidar

26/09/22

## ABSTRACT

Rapid advances in scientific understanding and global economic activity have resulted in a significant increase in the volume of automotive activity for human and product mobility, necessitating greater road construction. Controls for vehicular movement, as well as controllers, are thus a crucial requirement of modern society. This research aims to construct a microcontroller-based traffic control device to achieve this goal. For this project, the Arduino platform is the microcontroller of choice. A Light Emitting Diode (LED) advertising display has also been added into its implementation to take use of the red light wait period to distribute relevant information or facts, making this idea more effective and productive



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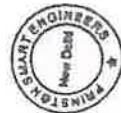


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## To Whom It May Concern

This is to Certify that Miss/Mr. AKHILESH Bearing USN 3GN17EE004 is a Bonafide Student of GURU NANAK DEV ENGINEERING COLLEGE, BIDAR. STUDYIN ELECTRICAL AND ELECTRONICS ENGINEERING has Undertaken Internship in "EMBEDDED AND IOT" with us from 30<sup>th</sup> AUGUST 2021 to 30<sup>th</sup> SEPTEMBER 2021.

During the period of her/ his Internship program with us, she/ he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We take this opportunity to thank him/her and wish him/her all the best for his/her future.

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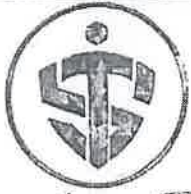
Mr. MALLIKARJUN KUMBAR  
DIRECTOR

# 1274 2nd Floor, Sanitary Core,  
3rd phase, Yelahanka New Town,  
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## To Whom It May Concern

This is to Certify that Miss/Mr. NITESH KIRAN Bearing USN 3GN17EE022 is a Bonafide Student of GURU NANAK DEV ENGINEERING COLLEGE, BIDAR. STUDYIN ELECTRICAL AND ELECTRONICS ENGINEERING has Undertaken Internship in "EMBEDDED AND IOT" with us from 30<sup>th</sup> AUGUST 2021 to 30<sup>th</sup> SEPTEMBER 2021.

During the period of her/ his Internship program with us, she/ he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We take this opportunity to thank him/her and wish him/her all the best for his/her future.

For, Take it smart (OPC) Pvt.Ltd



Mr. MALLIKARJUN KUMBAR  
DIRECTOR

*Shaw*  
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Date: 1/10/2021

### To Whom It May Concern

This is to Certify that Miss/Mr PAWAN PATIL Bearing USN 3GN17EE024 is a Bonafide Student of GURUNANK DEV ENGINEERING COLLEGE BIDAR STUDYING ELECTRICAL AND ELECTRONICS ENGINEERING has Undertaken Internship in "EMBEDDED SYSTEM AND IOT" with us from 30<sup>th</sup> AUGUST 2021 to 30<sup>th</sup> SEPTEMBER 2021.

During the period of her/ his Internship program with us, she/ he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We take this opportunity to thank him/her and wish him/her all the best for his/her future.

For, Take it smart (OPC) Pvt.Ltd



Mr. MALLIKARJUN KUMBAR  
DIRECTOR

*Shan...*  
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3rd phase, Yelahanka New Town,  
Bengaluru, Karnataka - 560 064.



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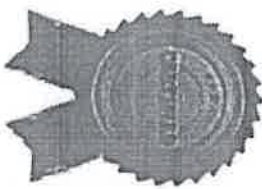
# Certificate of Internship Electrical Design

RANJITA CHOUKANPALLI

GURUNANAK DEV ENGINEERING COLLEGE, BIDAR

3GN17EE033

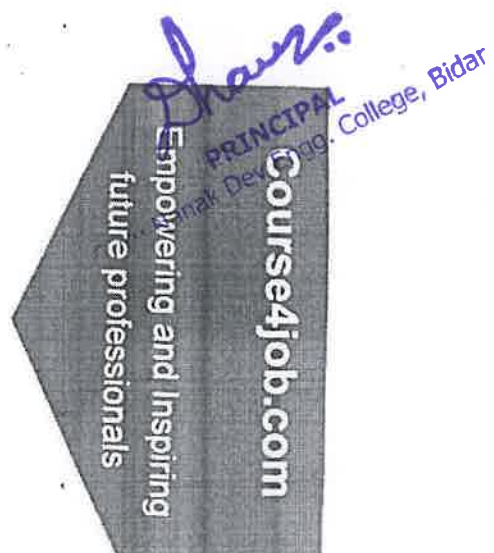
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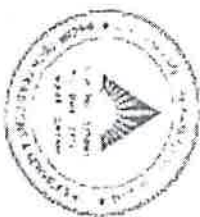
Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
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Date: 30/09/2021

### To Whom It May Concern

This is to Certify that Miss/Mr. **HARISH REDDY** Bearing USN **3GN17EE048** is a Bonafide Student of **GURU NANAK DEV ENGINEERING COLLEGE** MALOOR ROAD BIDAR STUDYING **ELECTRICAL AND ELECTRONICS ENGINEERING** has Undertaken Internship in "PCB DESIGNING" with us from **30<sup>th</sup> AUGUST 2021 to 30<sup>th</sup> SEPTEMBER 2021**.

During the period of her/ his Internship program with us, she/ he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We take this opportunity to thank him/her and wish him/her all the best for his/her future.

For, Take it smart (OPC) Pvt.Ltd



Mr. **MALLIKARJUN KUMBAR**  
DIRECTOR

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Tele Fax : (0) 8482-244136  
E-mail: naranjassk@gmail.com  
naranjasugar@gmail.com

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Ref: NSSKB/ADM/2021-22

Date: 07.12.2021

**CERTIFICATE**

This is to certify that Mr. Abhishek.Y B.E. VII SEM (USN:3GN18EE001), student of Gurú Nanak Dev Engineering College Bidar, has successfully completed his Internship under guidance of Chief Engineer in our organization with in the permitted period of 04 weeks i.e. from 25.09.2021 to 24.10.2021 as a part of curriculum.

He was regular, punctual and attentive during the Training period at our organization.

For Naranja SSK Ltd,



B.S. Aparanji  
MA, MBA, LLB

Managing Director

Managing Director  
Naranja S.S.K. Ltd.  
Imampur-Bidar

*Shan*  
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## CERTIFICATE

This is to certify that Mr. ABHISHEK (Reg No. USN 3GN18EE002) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like,

" etc.,

His/Her conduct and behavior during the above said period was good.

*Shan.*  
PRINCIPAL  
Guru Nanak Dev Engg. College, Bidar

*Shan.*  
Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.

Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021



# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that **Kum. AISHWARYA** (Reg No. USN 3GN18EE004) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from

as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store, TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant" etc.,

His/Her conduct and behavior during the above said period was good.

*Shan*  
PRINCIPAL  
Guru Nanak Dev Engg. College, Bidar

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021



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THE NARANJA SAHAKARI SAKKARE KARKHANE LTD; BIDAR.

Ref: NSSKB/ADM/2021-22

Date: 07.12.2021

**CERTIFICATE**

This is to certify that Mr. Ambresh B.E. VII SEM (USN:3GN18EE006), student of Guru Nanak Dev Engineering College Bidar, has successfully completed his Internship under guidance of Chief Engineer in our organization with in the permitted period of 04 weeks i.e. from 25.09.2021 to 24.10.2021 as a part of curriculum.

He was regular, punctual and attentive during the Training period at our organization.

For Naranja SSK Ltd,



B.S. Aparanji  
MANAGER  
Managing Director

Managing Director  
Naranja S.S.K. Ltd.  
Imampur-Bidar

PRINCIPAL  
Guru Nanak Dev Engg. College Bidar

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/ST/EE/111/11/107/2021/21

Date: 12-10-2021

## CERTIFICATE

This is to certify that **Kum. ASHA** (Reg No. USN 3GN18EE007) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from **3/3/21 to 12/10/21** as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, **415 Section, Relay Testing, Meter Testing and also a visit to the 11KV/0.4KV Substation, 11KV/0.4KV Section at Division of 11KV/0.4KV Substations & Solar power plant** etc.,

His/Her conduct and behavior during the above said period was good.

*Shan*  
**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.

Superintending Engineer (Ele),  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



## CERTIFICATE

This is to certify that Kum. ASHWINI (Reg No. USN 3GN18EE008) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like,

" etc.,

His/Her conduct and behavior during the above said period was good.

*[Signature]*  
PRINCIPAL  
Guru Nanak Dev Engg. College, Bidar

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021



# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that **Kum. BHAGYASHREE** (Reg No. USN 3GN18EE009) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store, TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

*[Signature]*  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021



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E.C.I.L. X Road, Kurnailuguda, Hyderabad - 500062, Telangana, India.

दिनांक / Date: 13/10/2021

from

has successfully completed the Internship Program

under

10 13/10/2021

He/She has completed the assigned module as per the requirements within the time frame. During the above period, the trainee's conduct was found Good

Geomet

**ORIGINAL OR**



Centre Head

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/FE(O)/A/FE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that **Kum. BHAGYASHREE. P.** (Reg No. USN 3GN18EE011) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from

as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, Relay Testing, Meter Testing and also various activities, Accounts, Internal Audit, ES Section, Division & Circle, Distribution transformer repairs, STC, TA & QC visit to 220/110/11 KV Sub-stations & Solar power plant" etc.,

His/Her conduct and behavior during the above said period was good

*Shan*  
**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021



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No. HR/ST/GE/HR/AR/110/2021/22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Kunt. BHAGYASHREE G. (Reg No. USN 3GN18EE012) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from  
as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs, Store JTA & QC, visit to 220/110/11, 33/11KV Sub-stations & Solar power plant " etc.,

His/her conduct and behavior during the above said period was good.

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele),  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021



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**THE NARANJA SAHAKARI SAKKARE KARKHANE LTD; BIDAR**

Ref: NSSKB/ADM/2021-22

Date: 07.12.2021.

**CERTIFICATE**

This is to certify that Mr.Gagandeep Singh B.E. VII SEM (USN:3GN18EE013), student of Guru Nanak Dev Engineering College Bidar, has successfully completed his Internship under guidance of Chief Engineer in our organization with in the permitted period of 04 weeks i.e. from 25.09.2021 to 24.10.2021 as a part of curriculum.

He was regular, punctual and attentive during the Training period at our organization.

For Naranja SSK Ltd,

B.S. Aparanji  
MA,MBA.LLB

Managing Director

Managing Director  
Naranja S.S.K. Ltd.  
Imampur-Bidar

*Sham*  
PRINCIPAL  
Guru Nanak Dev Engg. College Bidar



Office : 08482-244135  
Tele Fax : (0) : 08482-244136  
E-mail: naranjassk@gmail.com  
naranjasugar@gmail.com

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**THE NARANJA SAHAKARI SAKKARE KARKHANE LTD; BIDAR**

Ref: NSSKB/ADM/2021-22

Date: 07.12.2021

**CERTIFICATE**

This is to certify that Mr. Johnson B.E. VII SEM (USN:3GN18EE014), student of Guru Nanak Dev Engineering College Bidar, has successfully completed his Internship under guidance of Chief Engineer in our organization with in the permitted period of 04 weeks i.e. from 25.09.2021 to 24.10.2021 as a part of curriculum.

He was regular, punctual and attentive during the Training period at our organization.



For Naranja SSK Ltd,

*B.S. Aparanji*  
MA, MBA, LLB  
Managing Director  
Naranja S.S.K. Ltd.  
Imampur-Bidar



एन एस आई सी  
N S I C



राष्ट्रीय लघु उद्योग निगम—तकनीकी सेवा केन्द्र  
THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.  
TECHNICAL SERVICES CENTRE

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E.C.I.L.X Road, Kushaiguda, Hyderabad - 500062, Telangana, India.



क्रमिक / S.No 181724

दिनांक / Date: 13/10/2021

Certificate

This is to certify that Mr. / Ms. Kavya  
son/daughter of Mr. Maruti Yakatpur pursuing BE in EEE from  
(College Name) Guru Nanak Dev Engineering College, Bidar  
Roll No. 3GN18EE015 has successfully completed the Internship Program  
entitled/in the area of Power System Analysis Using Mi Power under  
our guidance. It is a bonafide work carried out by her/him from 14/09/2021 to 13/10/2021  
He/She has completed the assigned module as per the requirements within the time frame.  
During the above period, the trainee's conduct was found Good

Project Coordinator



Centre Head

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that **Mr. KRATIK.G.** (Reg No. USN 3GN18EE017) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from \_\_\_\_\_ as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Testing, Cable Testing, Meter Testing and also Vigilance Activities, Accounts (Internal & External), Section of Division of Circle), Distribution transformer repairs / Change of HT, work to 220V/11kV, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

*Sham*  
**PRINCIPAL**

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR.

Place : Bidar.

Date : 12-10-2021

# GURU NANAK DEV ENGINEERING COLLEGE

BIDAR- 585 403, KARNATAKA

ACADEMIC YEAR 2021-2022




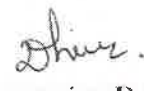
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

## CERTIFICATE

This is to certify that the project entitled "ELECTROMAGNETIC AUTOMATIC BRAKING SYSTEM" is a bonafide work carried out by JOHNSON (3GN18EE014), MAHADEV (3GN18EE020), PRAVEENKUMAR (3GN18EE029) & SHAIK ADNAN (3GN18EE033) in partial Engineering degree. Fulfillment for the award of degree of Bachelor of Engineering in Electrical & Electronics Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the project report satisfies the academic requirements in respect of project work described for the Bachelor of Engineering Degree.

  
Dr. Neelshetty K  
Signature of Guide

  
Dr. Neelshetty K  
Signature of HOD

  
Dr. Dhananjay D Muktedar  
Signature of Principal

Department of Electrical  
& Electronics Engineering,  
G.N.D. Engg College, BIDAR

Guru Nanak Dev Engg. College  
BIDAR

Name of the Examiner

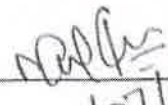
Signature with Date

1) Dr. Neelshetty K

2) Megha

  
PRINCIPAL

Guru Nanak Dev Engg. College, Bidar

  
26/07/2022

## ABSTRACT

Braking is basically a mechanical action applied for slowing down of vehicles or even making the vehicle coming to halt depending upon the circumstances. Automotive vehicles are increasingly being equipped with collision avoidance and warning systems for predicting the potential collision with an external object, such as another vehicle or a pedestrian. Upon detecting a potential collision, such systems typically initiate an action to avoid the collision and/or provide a warning to the vehicle operator. The aim of this project is to design and develop a control system based on an automatic, intelligent and electronically controlled automotive braking system for automobiles is called as "INTELLIGET BRAKING SYSTEM".

When a safety factor of a vehicle is considered a primary factor that flashes in mind is its brakes or braking system. So, a braking system is such a vital component that is necessarily required when a vehicle is considered. It reduces the kinetic energy of the vehicle in conditions when a vehicle has to slow down or also it has to be stopped. Thus, making sure the vehicle and the passengers inside it are safe. Thus, a braking system is always needed to ensure the safety of the drivers and passengers uncountable valued lives.

An Electromagnetic Braking system uses Magnetic force to engage the brake. The disc is connected to a shaft of the wheel driven by the motor and the solenoid coil (electromagnet) is mounted beside the disc. When electricity is applied to the coil, a magnetic field is developed across the armature because of the current flowing across the coil and causes armature to get attracted towards the coil. As a result, it develops a torque and eventually the disc to which the wheel is connected comes to rest. Thus, breaking or stopping the vehicle. In this project the advantage of using the electromagnetic braking system in automobile is studied. These brakes can be incorporated in heavy vehicles as an auxiliary brake. The electromagnetic brakes can be used in commercial vehicles by controlling the current supplied to produce the magnetic flux. Making some improvements in the brakes it can be used in automobiles in future.

  
PRINCIPAL  
Gurukul Dev Engg. College, Bidar





**NSL Sugars Ltd, Unit-II**  
(Lessee of SSKN Aland)

Factory : Bhusnoor  
Aland Taluk - Kalaburagi District  
Karnataka - 585 302  
Fax : 08440-210200  
E-mail : alland.nsl@nslsugars.com  
www.nslsugars.com  
CIN No. U15429KA1999PLC026121

NSL/ALAND/HRD/2021

Date : 08.10.2021

**TO WHOM SO EVER IT MAY CONCERN**

This is to certify that Mr. Mahesh.K Bevinakatti (3GN18EE021) studying VII semester B E.(Electrical and Electronics Engineering) in Guru Nanak Dev Engineering college Bidar, Has successfully completed his internship Work on "Process of Sugar Manufacturing" from 05.09.2021 to 05.10.2021. During this period he has taken good initiative and interest in completing the internship Work.

During the above training period his performance was found satisfactory

We wish him all the best in his future endeavors.

For NSL Sugars Ltd., Unit-II

Authorized Signatory



*Sham*  
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Guru Nanak Dev Engg. College, Bidar

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GURU NANAK DEV ENGINEERING COLLEGE BIDAR, KARNATAKA  
2021-2022

GURU NANAK DEV ENGINEERING COLLEGE  
BIDAR-585403, KARNATAKA

ACADEMIC YEAR 2021-2022



DEPARTMENT OF  
ELECTRICAL AND ELECTRONICS ENGINEERING  
CERTIFICATE

This is to certify that the project entitled "AUTONOMOUS INDUSTRIAL ROBOT WITH SAFETY MANAGEMENT" is a bonafide work carried out by VAIBHAV VANGAPALLI (3GN18EE048), PURUSHOTTAM (3GN18EE031), MD.SHOEB (3GN18EE024) & SYED AHMEDULLAH HUSSAINI (3GN18EE045) in partial fulfillment for the award of Degree of Bachelor of Engineering in Electrical & Electronics Engineering affiliated Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the project report satisfies the academic requirement in report of the project work described for the Bachelor of Engineering Degree.

Mrs. SULAKSHANA W (Asst. Prof.) Dr. NEELSHETTY K

Signature of Guide

Signature of HOD  
Department of Electrical  
& Electronics Engineering  
G.N.D. Engg College, BIDAR

PRINCIPAL

Guru Nanak Dev

Dr. DHANANJAY D M

Signature of Principal  
Guru Nanak Dev Engg. College  
BIDAR

Signature with Date

26/7/22  
26/7/22

Name of the Examiner

1) Dr. Neelshetty K  
2) Megha



## ABSTRACT

Robot is a machine that is usually designed to reduce the amount of human work where it is applicable. It is usually developed for reducing risk factor for human work and increase comfort of any industry or worker. High performance, high accuracy, lower labor cost and the ability to work in hazardous places have put robotics in an advantageous position over many other such technologies. In this project a line tracer robot or follower has been presented which will trace a black line on a white surface or vice-versa. We have made use of sensors to achieve this objective. The main component behind this robot is ATmega328P microcontroller which is a brain of this robot. The idea proposed in this project is by using machine vision to guide the robot.

The presence of hazardous LPG gas leakage in a domestic, work place, also, stored gases container gas which exhibits ideal characteristic is use. For that sake, an alarm unit is used to vibrate an alarm which is buzzer. Buzzer gives an audible sign of the presence of LPG volume. The sensors are widely used to detect essence of propane, iso-butane, LPG and even smoke. The sensor has an advantage to combine a sensitivity response time. If the LPG sensor senses gas leak from work place or home, sensor output goes to active low (logic-0) condition. Arduino UNO is used in the project; low signals are overlooked by the Arduino and gas leakage is been noticed by the Arduino. The Arduino UNO turns on the LCD and buzzer. It even turns on the GSM modem after that, it continues to send messages SMS to mobile number specifically mentioned in the program of the source code for alerting danger to the people.



**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar



## TECHNICAL INTERNSHIP TRAINING CERTIFICATE

*Shamir*  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar

This is to certify that Mr./Ms. Mohd Azhar bearing USN-3GN18EE025 student of B.E. Department of Electrical & Electronics Engineering, GURU NANAK DEV Engineering College Bidar has successfully completed Technical Internship Training conducted on Electrical Engineering & Electronics including Electrical Lighting Design, AutoCAD Software, DIALux Software, Drawing Preparation & Site for Residential & Commercial Projects from 07th September 2021 to 07th October 2021 in Collaboration with KG MECH Electro-Mechanical Pvt. Ltd., Hyderabad as a Partial Fulfillment of Curriculum Requirement.



*Shamir*  
**Managing Director**  
KG MECH Pvt. Ltd.



MECHANICAL | ELECTRICAL | CIVIL | COMPUTERS | HEALTH & SAFETY  
ECIL | Santosh Nagar | Mansubank | Dubai, Pk. +917097673344, +919700910004



Ref: H/A/HR/SM (PR)/76/ 2021

October 19, 2021

## CERTIFICATE

This is to certify that Ms. 'Nikita' (USN. No.3GN18EE026) student of BE - Electrical & Electronics Engineering, Guru Nanak Dev Engineering College, Bidar, Karnataka, has undergone "Internship" in ALH Final Assembly, HAL-Helicopter Division from 20.09.2021 to 19.10.2021

2. Her Punctuality, Conduct, Behaviour and Progress during the period of "Internship" was Satisfactory.

For HAL-Helicopter Division

(G. H. Raju)  
Senior Manager (Public Relations)

ಜಿ ಎಚ್ ರಾಜು/ಜಿ ಎಚ್ ರಾಜು  
ಸಿ.ಎಂ. (ಪಬ್ಲಿಕ್ ರಿಲೇಷನ್) / ಎ.ಪಿ. (ಜನ ಸಂಪರ್ಕ)  
G H RAJU  
SM(Public Relations)  
ಹೆಲಿಕಾಪ್ಟರ್ ವಿಭಾಗ/ಹೆಲಿಕಾಪ್ಟರ್ ವಿಭಾಗ/Helicopter Division  
ಹೆಚ್ ಎಎಲ್/ಎಚ್ಎಲ್/HAL,  
ಬೆಂಗಳೂರು/ಬೆಂಗಳೂರು/Bangalore-560 017

Principal  
Nanak Dev Engg. College, Bidar



# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that **Kum. P. SHARADHA** (Reg No. USN 3GN18EE028) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from **03-09-2021** to **12-10-2021** as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store, TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

Superintending Engineer (Ele)  
O&M Circle, GESCOM, Bidar  
Superintending Engineer (Ele)  
O&M Circle, GESCOM, Bidar

Place : Bidar.

Date : 12-10-2021

**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar



# CERTIFICATE OF COMPLETION



This is to certify that  
**Praveen Kumar**

has successfully completed

**INTERNSHIP** Program of 30 days  
on IOT

technology offered by

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certified by

**AICRA - All India Council for Robotics & Automation**



15th DEC 2021

Issued on:



*Dr. Ashwini Sharma*  
Program Head  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Binda



Ref: H/A/HR/SM (PR)/76/ 2021

October 19, 2021

### CERTIFICATE

This is to certify that Ms. Priya (USN. No.3GN18EE030) student of BE - Electrical & Electronics Engineering, Guru Nanak Dev Engineering College, Bidar, Karnataka, has undergone "Internship" in ALH Final Assembly, HAL-Helicopter Division from 20.09.2021 to 19.10.2021

2. Her Punctuality, Conduct, Behaviour and Progress during the period of "Internship" was Satisfactory.

For HAL-Helicopter Division

(G. H. Raju)

Senior Manager (Public Relations)

उप संचालक (जन संबंध)

उप संचालक (जन संबंध)

G. H. RAJU

SM(Public Relations)

Senior Manager (Public Relations) Helicopter Division

उप संचालक (जन संबंध) HAL

पोस्ट बग संख्या 1790, बंगलूर - 560017

19/10/2021  
Principal

PRINCIPAL  
Guru Nanak Dev Engg. College, Bidar

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Registered Office: 15/1, Cubbon Road, Bangalore-560 001, India

CIN: U39501KA1903CC 001027 E-mail: hr@hal-india.com





# CERTIFICATE OF COMPLETION



This is to certify that  
**Purushottam**

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**INTERNSHIP** Program of **30** days  
on **IOT**

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**Times Institute of Management & Technical Studies**  
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**AICRA - All India Council for Robotics & Automation**



15th DEC 2021  
Issued on:



*Paulina*  
Program Head

*Dhanu*  
PRINCIPAL  
Guru Nanak Dev Engg. College, Bide



# CERTIFICATE OF COMPLETION



This is to certify that  
**Ranjita BR**

has successfully completed  
\_\_\_\_\_**INTERNSHIP**\_\_\_\_ Program of \_\_\_\_**30**\_\_\_\_ days  
on \_\_\_\_\_**IOT**\_\_\_\_\_

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15th DEC 2021

Issued on:



  
**PRINCIPAL**  
Program Dev Engg. College, Bidar  
Guru Nanak Head



## TECHNICAL INTERNSHIP TRAINING CERTIFICATE

*Sham...*  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar

This is to certify that Mr./Ms. Shaik Adnan bearing USN-3GN18EE033 student of B.E. Department of Electrical & Electronics Engineering, GURU NANAK DEV Engineering College Bidar has successfully completed Technical Internship Training conducted on Electrical Engineering & Electronics including Electrical Lighting Design, AutoCAD Software, DIALux Software, Drawing Preparation & Site for Residential & Commercial Projects from 07th September 2021 to 07th October 2021 in Collaboration with KG MECH Electro-Mechanical Pvt. Ltd, Hyderabad as a Partial Fulfillment of Curriculum Requirement.



*...*  
**Managing Director**  
KG MECH Pvt. Ltd.



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ECIL | Santosh Nagar | Masab Tank | Dubai, U.A. +917097673344, +919700910004



Ref: H/A/HR/SM (PR)/76/ 2021

October 19, 2021

## CERTIFICATE

This is to certify that Ms. Shailaja (USN. No.3GN18EE034) student of BE – Electrical & Electronics Engineering, Guru Nanak Dev Engineering College, Bidar, Karnataka, has undergone "Internship" in ALH Final Assembly, HAL-Helicopter Division from 20.09.2021 to 19.10.2021

2. Her Punctuality, Conduct, Behaviour and Progress during the period of "Internship" was Satisfactory.

For HAL-Helicopter Division

(G. H. Raju)

Senior Manager (Public Relations)

ಜಿ ಎಚ್ ರಾಜು/ಜಿ ಎಚ್ ರಾಜು  
ಸಿ.ಎಂ. (ಪಬ್ಲಿಕ್ ರಿಲೇಷನ್) / ಎ.ಪಿ. (ಜನ ಸಂಪರ್ಕ)

G H RAJU  
SM (Public Relations)

ಹೆಲಿಕಾಪ್ಟರ್ ವಿಭಾಗ/ಹೆಲಿಕಾಪ್ಟರ್ ವಿಭಾಗ/Helicopter Division  
ಎ.ಪಿ.ಎಂ.ಎಂ/ಎ.ಪಿ.ಎಂ.ಎಂ/HAL,  
ಬೆಂಗಳೂರು/ಬೆಂಗಳೂರು/Bangalore-560 017

*Shan*  
PRINCIPAL

Guru Nanak Dev Engg. College, Bidar





# CERTIFICATE OF COMPLETION



This is to certify that  
**shambhavi**

has successfully completed

**INTERNSHIP** Program of **30** days  
on **IOT**

technology offered by

**Times Institute of Management & Technical Studies**

certified by

**AICRA - All India Council for Robotics & Automation**



15th DEC 2021  
Issued on:



*Signature*

Program Head

*Signature*  
**PRINCIPAL**

Principal, Dev Engg. College, Bida



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info@takeitsmart.in

**TAKE IT SMART (OPC) PVT. LTD**

Ref No: 2021/07/28

Date: 1/10/2021

### To Whom It May Concern

This is to Certify that Miss/Mr. SHARAN Bearing USN 3GN18EE037 is a Bonafide Student of GURUNANAK DEV ENGINEERING COLLEGE BIDAR STUDYING ELECTRICAL AND ELECTRONICS ENGINEERING has Undertaken Internship in "FULL STACK WEB DEVELOPMENT" with us from 30<sup>th</sup> AUGUST 2021 to 30<sup>th</sup> SEPTEMBER 2021.

During the period of her/ his Internship program with us, she/ he had been exposed to different processes and was found diligent, hardworking and inquisitive.

We take this opportunity to thank him/her and wish him/her all the best for his/her future.

For, Take it smart (OPC) Pvt.Ltd

*ML*

Mr. MALLIKARJUN KUMBAR  
DIRECTOR

**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar

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3rd phase, Yelahanka New Town  
Bengaluru, Karnataka - 560 064

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# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Mr. SHIVKUMAR (Reg No. USN 3GN18EE040) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs, SMC, T & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

PRINCIPAL  
Superintending Engineer (Ele.)  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No:BDR/SEE/EE(O)/AEEE(O)/2021-22

Date:12-10-2021

## CERTIFICATE

This is to certify that Kum. SHWETA . H (Reg No. USN 3GN18EE041) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store ,TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar  
Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele),  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

# The Mahatma Gandhi Sahakara Sakkare Karkhane (N)

BHALKI - 585 328 Bidar Dist. Karnataka India  
Regn No. DSK LGL RGN 12 91 92 Dated 08-04-1991

Ref No. MGSSK(N)/EST/2022-23/ 16

19-05-2022

## :-: CERTIFICATE :-:

This is to certify that Mr.Siddharth S/o Sunil USN(3GN18EE042), BE-VII<sup>th</sup> Semester a student of Guru Nanak Dev Engineering College Bidar-585403. has successfully completed his Internship on "MANUFACTURING PROCESS OF WHITE CRYSTAL SUGAR" in MGSSK Ltd., Bhalki. from 09-09-2021 to 09-10-2021 during the period he has taken good initiative and interest in completing the study.

He has obtained necessary information and completed his industrial training.

We wish all the best for his future end over.

  
MANAGING DIRECTOR

To,  
Mr.Siddharth S/o Sunil,  
USN(3GN18EE042),  
BE-VII<sup>th</sup> Semester Student,  
Guru Nanak Dev Engineering College Bidar.

  
PRINCIPAL  
Guru Nanak Dev Engg. College, Bidar

Copy to:-

1) EST.

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Kum. SUMAN. H (Reg No. USN 3GN18EE043) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store, TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

PRINCIPAL  
Superintending Engineer (Ele.)  
Guru Nanak Dev Engg. College, Bidar  
O&M Circle, GESCOM, Bidar.

Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

मानव संसाधन विभाग  
हेलिकॉप्टर प्रभाग (हेक)  
हिन्दुस्तान एरोनाटिक्स लिमिटेड  
पोस्ट बैग संख्या 1790, बेंगलूर - 560017, भारत



HR DEPARTMENT  
HELICOPTER DIVISION (HC)  
HINDUSTAN AERONAUTICS LIMITED  
Post Bag No.1790, Bangalore-560 017, India  
Ph. (दूरभाष) : 91-80-2231 7891, 2232 2918  
Fax (फैक्स) : 91-80-22314717

Ref: H/A/HR/SM (PR)/76/ 2021

October 19, 2021

## CERTIFICATE

This is to certify that Ms. Swati (USN. No.3GN18EE044) student of BE – Electrical & Electronics Engineering, Guru Nanak Dev Engineering College, Bidar, Karnataka, has undergone "Internship" in ALH Final Assembly, HAL-Helicopter Division from 20.09.2021 to 19.10.2021

2. Her Punctuality, Conduct, Behaviour and Progress during the period of "Internship" was Satisfactory.

For HAL-Helicopter Division

(G. H. Raju)  
Senior Manager (Public Relations)

ಜಿ ಎಚ್ ರಾಜು/ಜಿ ಎಚ್ ರಾಜು  
ಹಿ.ಎ. (ಜನ ಸಂಪರ್ಕ) / ಬಿ.ಪಿ. (ಜನ ಸಂಪರ್ಕ)  
G H RAJU  
SM (Public Relations)  
ಹೆಲಿಕಾಪ್ಟರ್ ವಿಭಾಗ/ಹೆಲಿಕಾಪ್ಟರ್ ವಿಭಾಗ/Helicopter Division  
ಎಚ್ ಎಎಲ್/ಎಎಲ್ಎಲ್/HAL,  
ಬೆಂಗಳೂರು/ಬೆಂಗಳೂರು/Bangalore-560 017

पंजीकृत कार्यालय : 15/1, कब्बन रोड, बेंगलूर - 560001, भारत  
Registered Office: 15/1, Cubbon Road, Bangalore-560 001, India  
CIN: U35301KA1963GOI001622 E(†): hr.hcop@hal-india.com

Principal  
Guru Nanak Dev Engg. College, Bidar





PRINSTON SMART ENGINEERING

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar

# Certificate of Internship Full Stack Web Development

Syed Ahmed Ulla Hussaini

Guru Nanak Dev Engineering College, Bidar

3GN18EE045

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
August 15th to September 15th, 2021.



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## TECHNICAL INTERNSHIP TRAINING CERTIFICATE

This is to certify that Mr./Ms. Syed Zeeshan bearing USN-3GN18EE046 student of B.E. Department of Electrical & Electronics Engineering, GURU NANAK DEV Engineering College Bidar has successfully completed Technical Internship Training conducted on Electrical Engineering & Electronics including Electrical Lighting Design, AutoCAD Software, DIALux Software, Drawing Preparation & Site for Residential & Commercial Projects from 07th September 2021 to 07th October 2021 in Collaboration with KG MECH Electro-Mechanical Pvt. Ltd, Hyderabad as a Partial Fulfillment of Curriculum Requirement.



PRINCIPAL

Guru Nanak Dev Engg. College, Bidar



  
Managing Director  
KG MECH Pvt. Ltd.



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ECIL | Santosh Nagar | Masabtank | Dubai, Ph. +917097673344, +919700910004

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



## CERTIFICATE

This is to certify that Mr. VAIBHAV (Reg No. USN 3GN18EE048) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like,

" etc.,

His/Her conduct and behavior during the above said period was good.

Place : Bidar.

Date : 12-10-2021

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.

Superintending  
Engineer (Ele)

**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



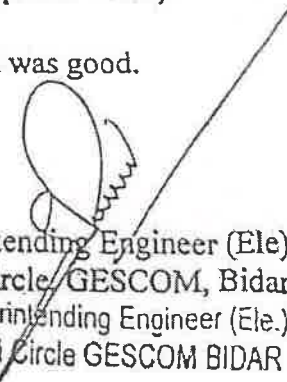
No: BDR/SEE/EE(O)/AEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Mr. VARUNKUMAR (Reg No. USN 3GN18EE050) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store, TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

  
Superintending Engineer (Ele.),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

  
PRINCIPAL

Guru Nanak Dev Engg. College, Bidar





# Bidar Kissan Shakhar Karkhana Limited

Factory Site : Village Mogdal, National Highway No. 9, Taluk & Dist : Bidar, Karnataka  
Regd. Off : Village Mogdal, Post Markunda, Taluk & Dist : Bidar, Pin-585 227, Karnataka  
Cell : 9620220113/ 9620220116, Email : bidarksklmogdal@gmail.com

GSTIN No. : 29AAECB0672N1ZC

CIN : U15429KA2000PLC026372

Ref No.:

Date :

BKSKL/Adm/Elec/ 2021-22

04/10/2021

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. VEERSHETTY student of Guru Nanak Dev Engineering College, Bidar, who is pursuing his B.E. (Electrical & Electronics) USN No:3GN18EE051, has successfully completed his internship at M/s "BIDAR KISSAN SHAKHAR KARKHANA Ltd., Mogdal from 03/09/2021 to 01/10/2021. During the period he was found to be sincere and hard working.

We wish him all the best for his future endeavors.

Thanking you

Yours faithfully

GM (Admin)  
BKSK Ltd. Mogdal



*Shaw...*  
PRINCIPAL

Guru Nanak Dev Engg. College, Bidar



एन एस आई सी  
N S I C



राष्ट्रीय लघु उद्योग निगम—तकनीकी सेवा केन्द्र  
**THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.**  
**TECHNICAL SERVICES CENTRE**

(भारत सरकार का उद्योग / A Government of India Enterprises)

ई.सी.आई.एस. एन एस आई सी, कुशाग्रगुडा, हैदराबाद - 500062, तेलंगाना, भारत  
E.C.I.L.X Road, Kushaiguda, Hyderabad - 500062, Telangana, India.



*Shau...*  
**PRINCIPAL**

कार्यांक / S.No 181722

दिनांक / Date: 13/10/2021

**Certificate**

This is to certify that Mr. / Ms Vijaylaxmi  
son/daughter of Mr. Veerashetty pursuing BE in EEE from

(College Name) Guru Nanak Dev Engineering College, Bidar

Roll No. 3GN18EE052 has successfully completed the Internship Program  
entitled/in the area of Power System Analysis Using Mi Power

\_\_\_\_\_ under  
our guidance. It is a bonafide work carried out by her/him from 14/09/2021 to 13/10/2021

He/She has completed the assigned module as per the requirements within the time frame.  
During the above period, the trainee's conduct was found Good

*Project*  
Project Coordinator



Centre Head



**MICRO EMBEDDED SOLUTIONS**

world of the electronics

#485, 1<sup>st</sup> Stage, 6<sup>th</sup> Phase, 10<sup>th</sup> cross,  
Mahaganapathinagar, Thimmaiah Road,  
Rajajinagar, Bangalore - 560010

ph: 9242838716

email: jagannath@mesoln.com

Date: 30-09-2021.

Place: Bangalore.

**To Whomsoever It May Concern**

This is to certify that **Mr/Ms. ANKUSH** student of **Electrical Engineering** at **GURU NANAK DEV ENGINEERING COLLEGE OF BIDAR** bearing USN No: **3GN19EE400** has successfully completed Internship on **(Embedded and IOT)** in our company from 30/08/2021 to 30/09/2021.

We wish him/her all success in his/her future endeavor

For Micro Embedded Solutions.

  
(JAGANNATH.A.)

Proprietor

MICRO EMBEDDED SOLUTIONS  
#485/1, 1<sup>st</sup> Stage, 6<sup>th</sup> Phase,  
Mahaganapathinagar,  
Rajajinagar, Bangalore - 560010.  
Web: www.mesoln.com



**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar

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

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that **Kum. GANGA** (Reg No. USN 3GN19EE401) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store ,TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

  
Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/NITE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Mr. GURUNATH (Reg No. USN 3GN19EE402) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, F&T Section of Division & Circle), Distribution transformer repairs, Store, P.V. & Q.C. visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar





# CERTIFICATE OF COMPLETION



This is to certify that  
**Manjunath**

has successfully completed  
**INTERNSHIP** Program of **30** days  
on **IOT**

technology offered by

**Times Institute of Management & Technical Studies**

certified by

**AICRA - All India Council for Robotics & Automation**



15th DEC 2021

Issued on:



*[Signature]*  
Program Head

PRINCIPAL

Guru Nanak Dev Engg. College, Bide





# GEMINI GRAAPHICS PVT. LTD.

## SPECIALITY PAPER DIVISION

(ISO 9001:2008 and 27001:2013) (CIN: U72900KA1983PTC005487)

SURVEY NO. 64/1, 106/107, VILLAGE KAMTHANA, TQ. & DIST. BIDAR - 585 226.

Phone # 91 - 8482 - 200010 / 200011 Fax # 91 - 8482 - 232029 / 232238.

E-mail : paperunit@geminiagraaphics.co.in Website : www.geminiagraaphicsindia.com

REF:GGPL:BDR:PD:2021-2022/032

October 07,2021

### To Whomsoever It May Concern

This is to certify that Mr. Nagesh, USN (3GN19EE404), B.E student of Electrical and Electronics Engineering Branch. Department of Guru Nanak Dev Engineering College, Bidar affiliated to Visvesvaraya Technological University, Belagavi, has completed his internship in our organization, under the guidance of Mr. Kashinath Bhande, Deputy General Manager Gemini Graaphics Private Limited Kamthana Bidar (Paper Division), from 08.09.2021 to 07.10.2021.

During this internship period his conduct and performance was found satisfactory.

We wish his all the best in his future endeavour.

For Gemini Graaphics Private Limited,

*Shripad Kulkarni*  
(Shripad Kulkarni)  
General Manager.

Place : Bidar

Date : 07.10.2021



*Shau..*

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



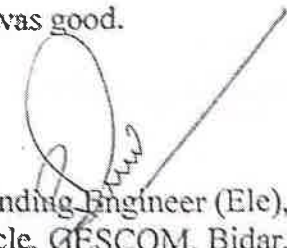
No: BDR/SEE/EE(O)/AEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Kum. RENUKA (Reg No. USN 3GN19EE405) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store ,TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

  
Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.

Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021



PRINCIPAL

Guru Nanak Dev Engg. College, Bidar

# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



## CERTIFICATE

This is to certify that Kum. SABA SAMREEN (Reg No. USN 3GN19EE406) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from 03-09-2021 to 12-10-2021 as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCO, Bidar like,

" etc.,

His/Her conduct and behavior during the above said period was good.

Superintending Engineer (Ele),  
O&M Circle, GESCO, Bidar.

03/09/2021

*Shau...*

**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar.

Place : Bidar.

Date : 12-10-2021



No: BDR/SEE/EE(O)/APPT(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Mr. SHIVALING SWAMY (Reg No. USN 3GN19EE407) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from

as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " III Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts Internal Audit, EST Section of Division & Circle, Distribution transformer repairs, Store J.A & OC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.  
Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

Place : Bidar.

Date : 12-10-2021

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar



PRINSTON SMART ENGINEERS

# Certificate of Internship Electrical Design

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar

SHRUTI GADBALLI

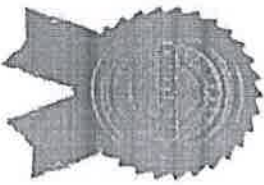
GURU NANAK DEV ENGINEERING COLLEGE BIDAR

3GN19EE408

Intern Has Successfully Completed The Internship.

Intern Was Found To Be Good And Disciplined.

Sept 1st to Sept 30th, 2021.



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# GULBARGA ELECTRICITY SUPPLY COMPANY LIMITED



No: BDR/SEE/EE(O)/AEEE(O)/2021-22

Date: 12-10-2021

## CERTIFICATE

This is to certify that Mr. SRINATH (Reg No. USN 3GN19EE409) student of Electrical and Electronics Engineering branch of Guru Nanak Dev Engineering college, Bidar has carried out internship in this Circle from \_\_\_\_\_ as requested by the Principal GNDEC, Bidar and across the practices followed in various Sub-divisions of GESCOM, Bidar like, " HT Rating, Relay Testing, Meter Testing and also Vigilance Activities, Accounts (Internal Audit, EST Section of Division & Circle), Distribution transformer repairs / Store ,TA & QC, visit to 220/110/11, 33/11kV Sub-stations & Solar power plant " etc.,

His/Her conduct and behavior during the above said period was good.

Place : Bidar.

Date : 12-10-2021

Superintending Engineer (Ele),  
O&M Circle, GESCOM, Bidar.

Superintending Engineer (Ele.)  
O&M Circle GESCOM BIDAR

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar.

# The Mahatma Gandhi Sahakara Sakkar Karkhane (P)

BHALKI-585328 Bidar Dist. Karnataka State  
Regn. No. DSK LGL/RGN/12/91-92 Dated: 08-04-1991

MGSSK(N)/EST/2022-23/ [C]

19-05-2022

Ref No.

Date

## :-: CERTIFICATE :-:

This is to certify that Mr. Vijaykumar USN(3GN19EE410), BE-VII<sup>th</sup> Semester a student of Guru Nanak Dev Engineering College Bidar-585403, has successfully completed his Internship on "MANUFACTURING PROCESS OF WHITE CRYSTAL SUGAR" in MGSSK Ltd., Bhalki, from 02-09-2021 to 02-10-2021 during the period he has taken good initiative and interest in completing the study.

He has obtained necessary information and completed his industrial training.

We wish all the best for his future end over.

  
MANAGING DIRECTOR

To,

Mr. Vijaykumar,  
USN(3GN19EE410),  
BE-VII<sup>th</sup> Semester Student.  
Guru Nanak Dev Engineering College Bidar.



PRINCIPAL  
Guru Nanak Dev Engg. College, Bidar

Copy to:-

1) EST.



PRINSTON SMART ENGINEERS

*Shariq*

PRINCIPAL

Guru Nanak Dev Engg. College, Bidar

# Certificate of Internship Electrical Design

MOHAMMED IMRAN

GURU NANAK DEV ENGINEERING COLLEGE BIDAR

3GN16EE020

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
August 15th to Sept 30th, 2021.



PSEED2046

*Shariq*



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*Shamir*

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# Certificate of Internship

## Electrical Design

SHAIK PARWAZ AHMED

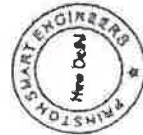
GURUNANAK DEV ENGINEERING COLLEGE, BIDAR

3GN16EE035

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
August 15th to Sept 30th, 2021.



PSEED2053



*Shamir*

www.prinstonsmart.com



*Shamir*

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Guru Nanak Dev Engg. College, Bidar



PRINCETON SMART ENGINEERS

# Certificate of Internship

## Electrical Design

AVINASH G BADIGER

GURUNAK DEV ENGINEERING COLLEGE, BIDAR

3GN17EE008

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
August 15th to Sept 30th, 2021.



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*[Signature]*

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*[Signature]*

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Guru Nanak Dev Engg. College, Bidar



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Guru Nanak Dev Engg. College, Bidar





PRINSTON SMART ENGINEERS

# Certificate of Internship

## Electrical Design

KRISHNA SAIGAL

GURU NANAK DEV ENGINEERING COLLEGE BIDAR

3GN17EE015

Intern Has Successfully Completed The Internship.

Intern Was Found To Be Good And Disciplined.

Sept 1st to Sept 30th, 2021.



PSEED2084



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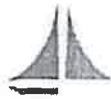
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PRINSTON SMART ENGINEERS

# Certificate of Internship

## Electrical Design

SANTOSH REDDY

GURUNANAK DEV ENGINEERING COLLEGE, BIDAR

3GN17EE038

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
August 15th to Sept 30th, 2021.



PSEED2054



*[Signature]*

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*[Signature]*

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PRINSTON SMART ENGINEERS

# Certificate of Internship

## Electrical Design

SUHASINI MELDODDI

GURUNANAK DEV ENGINEERING COLLEGE, BIDAR

3GN17EE042

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
August 15th to Sept 30th, 2021.



PSEED2037



*[Signature]*

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*[Signature]*

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Guru Nanak Dev Engg. College, Bidar

**GURU NANAK DEV ENGINEERING COLLEGE**

**BIDAR-585403, KARNATAKA**

**ACADEMIC YEAR 2021-2022**

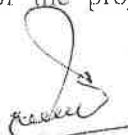



**DEPARTMENT OF  
ELECTRICAL AND ELECTRONICS ENGINEERING**

**CERTIFICATE**

This is to certify that the project entitled "MONITORING AND ALERTING OF PATIENT HEALTH REMOTELY" is a Bonafede work carried out by **ABDULHAMEED NADAF** (3GN18EE400), **SANTOSH REDDY** (3GN17EE038), **MOHAMMED IMRAN** (3GN16EE020), **SHAIK PARWAZ AHMED** (3GN16EE035) in partial fulfillment for the award of Degree of Bachelor of Engineering in Electrical & Electronics Engineering Affiliated Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the project report satisfies the academic requirement in report of the project work described for the Bachelor of Engineering Degree

  
Signature of Guide  
Mrs. SHUBHA.S

  
Signature of HOD  
Dr. NEELSHETTY K

  
Signature of Principal  
Dr. DHANANJYA D MUKTEDAR


Name of the Examiner

1) Megha

2) Dr. Neelshetty K

Signature with Date

  
26/07/22

  
26/7/2022

  
**PRINCIPAL**  
Guru Nanak Dev Engg. College, Bidar

## ABSTRACT

This project is significant in various ways because in today's world, everyday many lives are affected because the patients are not timely and properly operated. Also, for real time parameter values are not efficiently measured in clinic as well as in hospitals. Sometimes it becomes difficult for hospitals to frequently check patient's conditions. Also continuous monitoring of ICU patients is very difficult. To deal with these types of situations, our system is beneficial. Our system is designed to be used in hospitals and homes also for measuring and monitoring various parameters like temperature, ECG and heart rate. The results can be recorded using Arduino and uploaded to cloud using thinkercad Platform. The system will also generate an alert notification in Doctors Twitter account. Our system is useful for monitoring health system of every person through easily attach the device and record it. In which we can analyze patient's condition through their past data, we will recommend medicines if any emergency conditions.

In this project the patient health parameters like Temperature, ECG and heart rate can be collected by using the different sensors, and the data could be communicated to Cloud through Arduino, the uploaded data can be sent as an alert to Doctors twitter account, so that doctor can monitor the health condition and suggest medicine in emergency condition as a first aid, which leads to saving the patient's life.



Guru Nanak

PR

Ridar



# GURU NANAK DEV ENGINEERING COLLEGE

BIDAR-585403, KARNATAKA

ACADEMIC YEAR 2021-2022



## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING CERTIFICATE

This is to certify that the project entitled "PIEZOELECTRIC ROAD" is a bonafide work carried out by **MAHESHA (3GN17EE017)**, **BHANDARI APPARAO (3GN18EE405)** in partial fulfillment for the award of Degree of Bachelor of Engineering in Electrical & Electronics Engineering Affiliated Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that the project report satisfies the academic requirement in report of the project work described for the Bachelor of Engineering Degree

Signature of Guide

Mrs. MEGHA

Signature of HOD

Dr. NEELSHETTY K  
Department of Electrical  
& Electronics Engineering

Name of the Examiner G.N.D. Engg College, BIDAR

Signature of Principal

Dr. DHANANJYA D MUKTEDAR  
PRINCIPAL

Guru Nanak Dev Engg College

BIDAR  
Signature with Date

1) Proj. Megha

2) Dr. Neelshetty K

*[Signature]*

PRINCIPAL

Guru Nanak Dev Engg. College Bidar

## ABSTRACT

This study has been undertaken to investigate the self-sustainable and Eco-friendly model that has been suggested to implement the Power Generation Unit for Road Transport By using Piezoelectric Sensors, which will convert the pressure and mechanical energy from the vehicles into electrical energy and making a Prototype for the same.

In order to satisfy the rising energy demands of global consumption, a new cleaner and renewable power source need to be explored, conceptualized, and developed. Fossil fuel consumption results in a drastic amount of CO emissions and greenhouse gasses being pumped into the air raising concerns on rising sea levels, increasing average temperature, carbon footprint and extreme weathering conditions. The increase of energy demand will cause a price increase on fossil fuel. Being dependent on renewable energy to account for a greater global consumption level is essential to overcome the risks associated with fossil fuels. A piezoelectric road that will produce electricity from the stress experienced by the roads due to the movement of automobiles. The main principle behind this is the piezoelectric effect. Piezoelectric effect is the ability of a material to generate electric charge by applying mechanical stress. The energy is produced from the consumer's participation and it does not require any separate source of input energy. The vitality of this technology arises as fossil fuels is being over consumed which makes it challenging to provide sufficient power in the next era as an effect of growing population.



**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar



PRINSTON SMART ENGINEERS

# Certificate of Internship Electrical Design

VIVEKANAND RATNAKAR

.GNDEC BIDAR

3GN18EE417

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
August 15th to Sept 30th, 2021.



PSEED2043



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*Dhara*  
Guru Nanak Dev Engg. College



# CERTIFICATE OF COMPLETION



This is to certify that  
**LAXIMIKANT**

has successfully completed  
\_\_\_\_\_**INTERNSHIP**\_\_\_\_ Program of. \_\_\_\_**30**\_\_\_\_ days  
on \_\_\_\_\_**DATA SCIENCE (AI & ML , PYTHON)**\_\_\_\_\_

technology offered by

**Times Institute of Management & Technical Studies**

certified by

**AICRA - All India Council for Robotics & Automation**



15th DEC 2021

Issued on:



*Sharma*

Program Head

*Sharma*

**PRINCIPAL**

Guru Nanak Dev Engg. College, Bidar

TO WHOM IT MAY CONCERN

**Internship certificate**

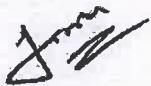
**Awarded to**

**SHAH MUQEEM ULLAH QUADRI**

**(University Reg no. 3GN16EE034)**

**For successfully completing the Internship on IOT AND EMBEDDED SYSTEMS from 15th August 2021 to 30th September 2021 with a professional commendable work attitude throughout the mentioned duration .**

**For eIDEA Soft Solutions LLP**



**Nadeem Jamadar**  
**Managing Partner**



**PRINCIPAL**

**Prin. Manak Dev Engg. College, Bidar**





PRINSTON SMART ENGINEERS

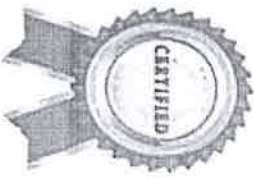
# Certificate of Internship Electrical Design

RADHIKA

GURU NANAK DEV ENGINEERING COLLEGE BIDAR

3GN17EE409

Intern Has Successfully Completed The Internship.  
Intern Was Found To Be Good And Disciplined.  
Sept 1st to Sept 30th, 2021.



PSEED2085



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future professionals



PRINCIPAL

Guru Nanak Dev Engg. College, Bidar