

ACADEMIC YEAR (2021-2022)



J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY
T.N.Palayam(po),Gobi(tk)-638506, Erode(dt).

Metric No 1.3.2

S.No	Name of the course	course code	programme offering	project work	internship	Number of students
(2021-2022) Regulation-2017						
1	Project-work	EE 8811	ELECTRICAL & ELECTRONICS ENGINEERING	✓	✓	10
2	Electron devices and circuits	EC 8353	ELECTRICAL & ELECTRONICS ENGINEERING	✓	✓	6
3	Linear Integrated Circuits and Applications	EE 8451	ELECTRICAL & ELECTRONICS ENGINEERING	✓	✓	3
4	Control Systems	IC 8451	ELECTRICAL & ELECTRONICS ENGINEERING	✓	✓	6
5	Microprocessors and Microcontrollers	EE 8551	ELECTRICAL & ELECTRONICS ENGINEERING			3
6	Power Electronics	EE 8552	ELECTRICAL & ELECTRONICS ENGINEERING	✓	✓	7
7	Solid State Drives	EE 8601	ELECTRICAL & ELECTRONICS ENGINEERING			3
8	Special Electrical Machines	EE 8005	ELECTRICAL & ELECTRONICS ENGINEERING	✓		3
9	High Voltage Engineering	EE 8701	ELECTRICAL & ELECTRONICS ENGINEERING	✓		3
10	Renewable Energy Systems	EE 8703	ELECTRICAL & ELECTRONICS ENGINEERING		✓	8
11	Electric Energy Generation,Utilization and Conservation	EE 8015	ELECTRICAL & ELECTRONICS ENGINEERING	✓		3
12	Transmission and Distribution	EE 8402	ELECTRICAL & ELECTRONICS ENGINEERING	✓	✓	6

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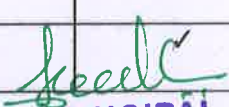
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

2021-2022

S.N O	REG.NO	STUDENT NAME	PROJECT	INTERNSHIP	FIELD VISIT
1	731218105001	ABINAYA S	✓	✓	
2	731218105002	DASAPPA L	✓	✓	
3	731218105003	GAYATHIRI S	✓	✓	
4	731218105004	GOBINATHAN L	✓	✓	
5	731218105005	HARINI K V	✓	✓	
6	731218105006	JEEVITHA R	✓	✓	
7	731218105007	KATHIRVEL P	✓	✓	
8	731218105008	KAVEENA E	✓	✓	
9	731218105012	MERINKUMAR G	✓	✓	
10	731218105013	MICHAL C	✓	✓	
11	731218105014	NAVEENMARSHAL Y	✓	✓	
12	731218105017	POOMANI S	✓	✓	
13	731218105018	PRAVEEN T	✓	✓	
14	731218105019	RANGARAMA K	✓	✓	
15	731218105021	ROOPANDURAI G	✓	✓	
16	731218105022	SANJAYSELVA V	✓	✓	
17	731218105023	SARANYA K	✓	✓	
18	731218105026	SUGANPRIYA S	✓	✓	
19	731218105029	VARATHARAJAN N	✓	✓	
20	731218105030	VASANTH S	✓	✓	
21	731218105301	DILLIP SUNDHI	✓	✓	


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22	731218105302	GOKULNATH A	✓	✓	
23	731218105303	PAVITHRAN M	✓	✓	
24	731219105003	BHARATHIDASAN S			✓
25	731219105004	DEEPA S		✓	✓
26	731219105005	DEEPAK P		✓	✓
27	731219105006	DHARANI P		✓	✓
28	731219105007	DHIVAKARAN R		✓	✓
29	731219105010	JANAKRISHNAN M		✓	✓
30	731219105012	KARTHIKPRABHU P		✓	✓
31	731219105013	MAGESHWARI K		✓	✓
32	731219105014	MURALITHARAN P		✓	✓
33	731219105015	NANDHAKUMAR S		✓	✓
34	731219105016	NANDHINI G			✓
35	731219105017	NIVETHAVARANI V			✓
36	731219105019	SELVI S		✓	✓
37	731219105021	TAMILSELVAM A		✓	✓
38	731219105022	YUVARAJA S			✓
39	731219105301	AMSAVENI.M		✓	✓
40	731220105002	DHINESH.P			✓
41	731220105003	ISAKKIRAJA.P			✓
42	731220105004	KIRUBASANKAR.C			✓
43	731220105005	MUKESH.S		✓	✓

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44	731220105006	NAVEENKUMAR.G		✓	✓
45	731220105007	ROHAN.R		✓	✓
46	731220105009	SIVAGIRI.K			✓
47	731220105011	THIRUMARAN DILEEBAN.S			✓
48	731220105301	MAHESWARL.P			✓
49	731220105302	SUNDARAMOORTHLK			✓

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

S.No	Name of the Course that include experiential learning through Project Work/Internship/Field Visit
1	Project work
2	Electron devices and circuits
3	Linear Integrated Circuits and Applications
4	Control Systems
5	Microprocessors and Microcontrollers
6	Power Electronics
7	Solid State Drives
8	Special Electrical Machines
9	High Voltage Engineering
10	Renewable Energy Systems
11	Electric Energy Generation, Utilization and Conservation
12	Transmission and Distribution

Seeds

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PROJECT WORK

EE8811

PROJECT WORK

L T P C

0 0 20 10

OBJECTIVES:

- To develop the ability to solve a specific problem right from its identification and literature review till the successful solution of the same. To train the students in preparing project reports and to face reviews and viva voce examination.

The students in a group of 3 to 4 works on a topic approved by the head of the department under the guidance of a faculty member and prepares a comprehensive project report after completing the work to the satisfaction of the supervisor. The progress of the project is evaluated based on a minimum of three reviews. The review committee may be constituted by the Head of the Department. A project report is required at the end of the semester. The project work is evaluated based on oral presentation and the project report jointly by external and internal examiners constituted by the Head of the Department.

TOTAL: 300 PERIODS

OUTCOMES:

On Completion of the project work students will be in a position to take up any challenging practical problems and find solution by formulating proper methodology



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OBJECTIVES:**The student should be made to:**

- Understand the structure of basic electronic devices.
- Be exposed to active and passive circuit elements.
- Familiarize the operation and applications of transistor like BJT and FET.
- Explore the characteristics of amplifier gain and frequency response.
- Learn the required functionality of positive and negative feedback systems.

UNIT I PN JUNCTION DEVICES 9

PN junction diode –structure, operation and V-I characteristics, diffusion and transition capacitance -Rectifiers – Half Wave and Full Wave Rectifier,– Display devices- LED, Laser diodes, Zener diode characteristics- Zener Reverse characteristics – Zener as regulator

UNIT II TRANSISTORS AND THYRISTORS 9

BJT, JFET, MOSFET- structure, operation, characteristics and Biasing UJT, Thyristors and IGBT -Structure and characteristics.

UNIT III AMPLIFIERS 9

BJT small signal model – Analysis of CE, CB, CC amplifiers- Gain and frequency response –MOSFET small signal model– Analysis of CS and Source follower – Gain and frequency response- High frequency analysis.

UNIT IV MULTISTAGE AMPLIFIERS AND DIFFERENTIAL AMPLIFIER 9

BIMOS cascade amplifier, Differential amplifier – Common mode and Difference mode analysis – FET input stages – Single tuned amplifiers – Gain and frequency response – Neutralization methods, power amplifiers –Types (Qualitative analysis).

UNIT V FEEDBACK AMPLIFIERS AND OSCILLATORS 9

Advantages of negative feedback – voltage / current, series , Shunt feedback – positive feedback –Condition for oscillations, phase shift – Wien bridge, Hartley, Colpitts and Crystal oscillators.

TOTAL : 45 PERIODS**OUTCOMES:**

Upon Completion of the course, the students will be able to:

- Explain the structure and working operation of basic electronic devices.


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EE8451 LINEAR INTEGRATED CIRCUITS AND APPLICATIONS

L T P C
3 0 0 3

OBJECTIVES:

To impart knowledge on the following topics

- Signal analysis using Op-amp based circuits.
- Applications of Op-amp.
- Functional blocks and the applications of special ICs like Timers, PLL circuits, regulator Circuits.
- IC fabrication procedure.

UNIT I IC FABRICATION 9

IC classification, fundamental of monolithic IC technology, epitaxial growth, masking and etching, diffusion of impurities. Realisation of monolithic ICs and packaging. Fabrication of diodes, capacitance, resistance, FETs and PV Cell.

UNIT II CHARACTERISTICS OF OPAMP 9

Ideal OP-AMP characteristics, DC characteristics, AC characteristics, differential amplifier; frequency response of OP-AMP; Basic applications of op-amp – Inverting and Non-inverting Amplifiers, summer, differentiator and integrator-V/I & I/V converters.

UNIT III APPLICATIONS OF OPAMP 9

Instrumentation amplifier and its applications for transducer Bridge, Log and Antilog Amplifiers- Analog multiplier & Divider, first and second order active filters, comparators, multivibrators, waveform generators, clippers, clampers, peak detector, S/H circuit, D/A converter (R- 2R ladder and weighted resistor types), A/D converters using opamps.

UNIT IV SPECIAL ICs 9

Functional block, characteristics of 555 Timer and its PWM application - IC-566 voltage controlled oscillator IC; 565-phase locked loop IC, AD633 Analog multiplier ICs.

UNIT V APPLICATION ICs 9

AD623 Instrumentation Amplifier and its application as load cell weight measurement – IC voltage regulators –LM78XX, LM79XX; Fixed voltage regulators its application as Linear power supply - LM317, 723 Variability voltage regulators, switching regulator- SMPS – ICL 8038 function generator IC.

TOTAL : 45 PERIODS

OUTCOMES:

- Ability to acquire knowledge in IC fabrication procedure
- Ability to analyze the characteristics of Op-Amp



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**GPS TRACKING SYSTEM FOR IDENTIFYING OF
INTERNATIONAL BORDER CROSSING FOR
FISHERMAN**



A PROJECT REPORT



Submitted by

ABINAYA.S	731218105001
KAVEENA.E	731218105008
MEHAALYENNIC	731218105013
SARANYA.K	731218105023

*in partial fulfillment for the award of
the degree of*

BACHELOR OF ENGINEERING

In

ELECTRICAL AND ELECTRONICS ENGINEERING

J.K.K MUNIRAJAH COLLEGE OF TECHNOLOGY

ANNA UNIVERSITY: CHENNAI 600025

JUNE - 2022

**PRINCIPAL
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GOBI (Tk), ERODE (Dt).**

BONAFIDE CERTIFICATE

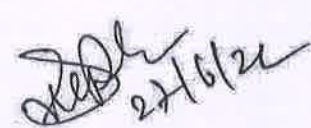
Certified that this project report is **"GPS TRACKING SYSTEM FOR PROTECTION OF FISHERMAN INTERNATIONAL BORDER CROSSING"** is the bonafide work of **"ABINAYA.S (731218105001), KAVEENA.E (731218105008), MEHAALYENNI.C (731218105013), SARANYA.K (731218105023)"** who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



SIGNATURE

**Mr.G.PALANISAMY., M.E.,
ASSISTANT PROFESSOR**

Department of Electrical and
Electronics Engineering,
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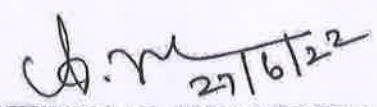


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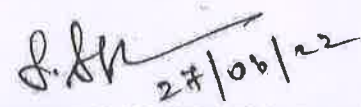
**Dr.C.SARAVANAN., M.E., Ph.D.,
HEAD OF THE DEPARTMENT**

Department of Electrical and
Electronics Engineering,
J.K.K Munirajah College of technology,
T.N.Palayam 638506

Submitted for the Project Viva Voice held on ... 27.06...2022.....



INTERNAL EXAMINER



EXTERNAL EXAMINER



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ABSTRACT

The issues of fishermen stray in each territorial water have come as a potential irritant in the bilateral relations between the neighboring states and countries. International Marine Time Boundary line (IMTL) between countries will always have security problem. Due to carelessness the fishermen may accidentally cross the country border. In such situation they may face attack from the opposite navy. To avoid such situation a device using embedded system has been designed to protect the fishermen.

GPS receiver is used to find the current location of the fishermen. The heart beat sensor continuously monitors Heartbeat of the fishermen. In case of any fire detection in motor side SMS send to concerned person. GSM is used to transfer the data to the cloud storage using IOT. If fishermen navigate beyond the country border a warning message is send from the control room. This device helps the fishermen to handle any hazardous situation and to improve the safety. The fisherman's crossing the borders and identification of locations in the sea is becoming a difficult task with existing equipment's provide to the fisherman's as a result they cross the borders.

In our day-to-day life we hear about many Tamil Fishermen being caught and put under Sri Lankan Naval custody. The sea border between the countries is not easily identifiable, which is the main reason for this offence. Moreover, in cases of imminent natural disasters, failure or delay in notifying concerned personnel to evacuate results in loss of life on a large scale. In this paper we have proposed a method which protects the fishermen by logging their entries and exits in the harbor using embedded system, notifying the country's sea border to them by using Global Positioning System (GPS), Geo Fencing and Mobile Systems.

We use GPS as a method to track the current location of the fishermen. The GPS' current latitude and longitude coordinates are sent to the database the



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CONCLUSION

We can state that with the existing technology it is difficult to identify, track and locate a fishing boat or any domestic vessel offshore by the means of RADAR / Satellite based optimized search for vessels near victim vicinity, or by sending distress signal such as Emergency Positioning Indicating Radio Beacon (EPIRB), Search and Research Transponder (SART) since these methods are proven to be costly and hence it is nearly impossible for the government to completely monitor the coast line and track each and every position of the fishermen going into the sea.

With our proposed model, we can track the location of the boats up to 10 - 15 miles from off coastline by simply tracking the GPS location of their smart phones which can further be extended by using signal repeaters, almost doubling the range. This method is feasible and cost effective because of the abundant use of smart phones with GPS based location services enabled in them. With our system we can ensure to easily track the number of people entering the sea and coming back to the shore with the date and time log of entering and exiting the harbor, hence it is easy to identify the missing native personnel's or illegal immigrant's activities. The entire security is based on User's Private Pin which is unique to each user, once authorized it generates a personal QR code on the server which activates or ends the trip only when scanned using the application with the registered handset.


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**ELECTRICAL VEHICLE SCHEDULED TIME
MANAGEMENT FOR BATTERY CHARGING
TO AVOID FIRE ACCIDENT**



A PROJECT REPORT

Submitted by

GAYATHIRI.S

731218105003

HARINI.K.V

731218105005

JEEVITHA.R

731218105006

SUGANPRIYA.S

731218105026

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

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ELECTRICAL AND ELECTRONICS ENGINEERING

J.K.K. MUNIRAJAH COLLEGE OF TECHNOLOGY

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JUNE 2022


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BONAFIDE CERTIFICATE

Certified that this project report "**ELECTRICAL VEHICLES SCHEDULED TIME MANAGEMENT FOR BATTERY CHARGING TO AVOID FIRE ACCIDENT**" is the bonafide work of **GAYATHIRLS (731218105003), HARINI.K.V (731218105005), JEEVITHA.R (731218105006)** and **SUGANPRIYA.S (73121805026)** that carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



SIGNATURE

Mr.S.M.PRANESH, M.E.,

ASSISTANT PROFESSOR

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T.N.palayam-638506



SIGNATURE

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HEAD OF THE DEPARTMENT

Department of Electrical and
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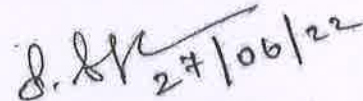
J.K.K Munirajah College of Technology,

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Submitted for the Project Viva Voce held on ...**27.10.6.2022**.....



INTERNAL EXAMINER



EXTERNAL EXAMINE



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ABSTRACT

Now a day electrical vehicles play a major role in transport industries, but this involves high risk of fire accidents due to charging. The combined use of information and communication technologies (ICTs) and smart devices can reduce the risk of fire accidents. This paper presents an intelligent architecture for the prevention of fire accidents that will control the battery charging through relay and smart portable devices. The proposed architecture includes an intelligent algorithm developed to intelligently detect the timing of the battery charging. To verify the proper functioning of this system, we developed a small keyboard to maintain and fix the timing of the battery. We designed a secure mechanism to avoid fire accident in electrical vehicles with the help of Arduino programming.



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CONCLUSION

In Electric Vehicles, the Battery Management System is the most critical and essential component. BMS assures the reliability and guarantees the safety of the battery and its operation. To maintain the reliability and assure the safety, the BMS must contain the functionality to calculate and monitor the cell balancing and charge controlling mechanisms. Battery is an electrochemical product, and thus acts differently under different environmental and operational conditions. The varying nature of a battery's performance makes it a challenge task to implement these functions. The evaluation of a battery state, which includes the state of life, state of charge, and the state of health, is an important task for a BMS. In this paper, the latest researches and technologies for the state evaluation and improved performance of the batteries are studied. Battery monitoring and charging system with an ARDUINO microcontroller board as the controller takes the measurement of the voltage, charging current, temperature of the battery. It is capable of sending the acquired data to internet by which the condition of the battery can be monitored remotely. With 2 state charging system it can safely charge the lead acid battery and also capable of providing alarm if the temperature and the electrolyte level changes significantly. With some modification this monitoring and charging device can be used for monitoring and charging multiple batteries at a time. Performance and functionality of this system can be improved by using better charging algorithm and sensing elements. The generic chargers made by local vendors are cheaper than proposed system but doesn't have any data logging and monitoring system. On the other hand complete monitoring of a generator set and monitoring the voltage level of the battery is one of its features which makes it very expensive and applicable for industrial applications. The proposed system is dedicated only for charging and monitoring the condition of the lead

COURSE OBJECTIVES

To understand the use of transfer function models for analysis physical systems and

introduce the control system components.

To provide adequate knowledge in the time response of systems and steady state error analysis.

To accord basic knowledge in obtaining the open loop and closed-loop frequency responses of systems.

To introduce stability analysis and design of compensators

UNIT I SYSTEMS AND REPRESENTATION 9

Basic elements in control systems: – Open and closed loop systems – Electrical analogy of mechanical and thermal systems – Transfer function – AC and DC servomotors – Block diagram reduction techniques – Signal flow graphs.

UNIT II TIME RESPONSE 9

Time response: – Time domain specifications – Types of test input – I and II order system response – Error coefficients – Generalized error series – Steady state error – Root locus construction- Effects of P, PI, PID modes of feedback control – Time response analysis.

UNIT III FREQUENCY RESPONSE 9

Frequency response: – Bode plot – Polar plot – Determination of closed loop response from open loop response - Correlation between frequency domain and time domain specifications

UNIT IV STABILITY AND COMPENSATOR DESIGN 9

Characteristics equation – Routh Hurwitz criterion – Nyquist stability criterion- Performance criteria – Effect of Lag, lead and lag-lead compensation on frequency response-Design of Lag, lead and lag-lead compensator using bode plots.

UNIT V STATE VARIABLE ANALYSIS 9

Concept of state variables – State models for linear and time invariant Systems – Solution of state and output equation in controllable canonical form – Concepts of controllability and observability.

TOTAL (L: 45+T:30): 75 PERIODS

COURSE OUTCOMES

At the end of the course, the student should have the :

- Ability to develop various representations of system based on the knowledge of Mathematics, Science and Engineering fundamentals.
- Ability to do time domain and frequency domain analysis of various models of linear system.



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EE8551

MICROPROCESSORS AND MICROCONTROLLERS

L T P C
3 0 0 3

OBJECTIVES:

To impart knowledge on the following Topics

- Architecture of μ P8085 & μ C 8051
- Addressing modes & instruction set of 8085 & 8051.
- Need & use of Interrupt structure 8085 & 8051.
- Simple applications development with programming 8085 & 8051

UNIT I 8085 PROCESSOR 9

Hardware Architecture, pinouts – Functional Building Blocks of Processor – Memory organization – I/O ports and data transfer concepts– Timing Diagram – Interrupts.

UNIT II PROGRAMMING OF 8085 PROCESSOR 9

Instruction -format and addressing modes – Assembly language format – Data transfer, data manipulation & control instructions – Programming: Loop structure with counting & Indexing –Look up table - Subroutine instructions - stack.

UNIT III 8051 MICRO CONTROLLER 9

Hardware Architecture, pinouts – Functional Building Blocks of Processor – Memory organization – I/O ports and data transfer concepts– Timing Diagram – Interrupts- Data Transfer, Manipulation, Control Algorithms & I/O instructions, Comparison to Programming concepts with 8085.

UNIT IV PERIPHERAL INTERFACING 9

Study on need, Architecture, configuration and interfacing, with ICs: 8255, 8259, 8254, 8279, - A/D and D/A converters & Interfacing with 8085 & 8051.

UNIT V MICRO CONTROLLER PROGRAMMING & APPLICATIONS 9

Simple programming exercises- key board and display interface –Control of servo motor-stepper motor control- Application to automation systems.

TOTAL : 45 PERIODS

OUTCOMES:

- Ability to acquire knowledge in Addressing modes & instruction set of 8085 & 8051.

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EE8552

POWER ELECTRONICS

L T P C
3 0 0 3

OBJECTIVES:

To impart knowledge on the following Topics

- Different types of power semiconductor devices and their switching
- Operation, characteristics and performance parameters of controlled rectifiers
- Operation, switching techniques and basics topologies of DC-DC switching regulators.
- Different modulation techniques of pulse width modulated inverters and to understand harmonic reduction methods.
- Operation of AC voltage controller and various configurations.

UNIT I POWER SEMI-CONDUCTOR DEVICES 9

Study of switching devices, SCR, TRIAC, GTO, BJT, MOSFET, IGBT and IGCT- Static characteristics: SCR, MOSFET and IGBT - Triggering and commutation circuit for SCR-Introduction to Driver and snubber circuits.

UNIT II PHASE-CONTROLLED CONVERTERS 9

2-pulse, 3-pulse and 6-pulse converters— performance parameters –Effect of source inductance— Firing Schemes for converter—Dual converters, Applications-light dimmer,Excitation system, Solar PV systems.

UNIT III DC TO DC CONVERTERS 9

Step-down and step-up chopper-control strategy— Introduction to types of choppers-A, B, C,D and E -Switched mode regulators- Buck, Boost, Buck-Boost regulator, Introduction to Resonant Converters, Applications-Battery operated vehicles.

UNIT IV INVERTERS 9

Single phase and three phase voltage source inverters (both 120° mode and 180° mode)—Voltage & harmonic control—PWM techniques: Multiple PWM, Sinusoidal PWM, modified sinusoidal PWM – Introduction to space vector modulation –Current source inverter,Applications-Induction heating, UPS.

UNIT V AC TO AC CONVERTERS 9

Single phase and Three phase AC voltage controllers—Control strategy- Power Factor Control – Multistage sequence control –single phase and three phase cyclo converters –Introduction to Matrix converters, Applications –welding .

TOTAL : 45 PERIODS

OUTCOMES:

- Ability to analyse AC-AC and DC-DC and DC-AC converters.
- Ability to choose the converters for real time applications.

PRINCIPAL

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PASSWORD BASED PROTECTION TO AVOID 2/4 WHEELER VEHICLE THEFT



A PROJECT REPORT

Submitted by

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In partial fulfillment for the award of the degree

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In

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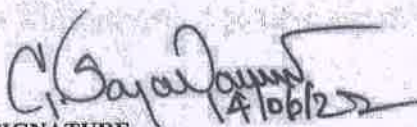
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Certified that this project report "**PASSWORD BASED PROTECTION TO AVOID 2/4 WHEELER VEHICLE THEFT**" Is the bonafide work of **G.MERINKUMAR (731218105012)**, **Y.NAVEEN MARSHAL (731218105014)**, and **M.PAVITHRAN (731218105303)** who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.


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27/06/22
INTERNAL EXAMINER


27/06/22
EXTERNAL EXAMINER


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ABSTRACT

Vehicle security has been one of the most pressing concerns for the last few years. There has been a number of researches to increase the security of the vehicle. This paper presents the design and fabrication process of a security system for vehicles using a password protected initiation. A simple portable hardware module has been made by assembling a liquid crystal display (LCD), a 4*4 matrix membrane keypad and a relay switch on a printed circuit board (PCB). The whole system works on an intricate algorithm implemented in an Arduino processor. The fuel injection in the engine of the vehicle is controlled by the relay added in the fuel line near the fuel pump and switches on only when the owner of the vehicle enters the correct password in the module.

The module acts as an extra key lock for the engine in addition to the ignition key. Along with the security system, a cost-effective performance monitoring system is fabricated by using proximity switch which acts as a motion sensor and shows the speed of the vehicle at any instant in the display. The two projects have been crafted into a state of the art system which remains active even after the ignition key is bypassed. This significantly improves the security and surveillance concerns of the vehicle and in turn prevents any sort of theft or insecurities of the vehicle. This paper gives an optimum insight on the amount of work done on the project and presents an extensive view on the scope of betterment that can be done to this project.

CONCLUSION

The attachable module created for a certain vehicle helps the owner to set up a Password protected initiation of the vehicle. At the initial phase of installation of the module in the vehicle the owner gets to set up a security password for the module which can change later on. Once the password is set the module is good to go. In case the owner forgets the current password, a **unique master password** is given to overwrite the current password. Every time the owners want to start the car, has to put in the password. The ignition system of the vehicle will repudiate to start until the given password matches the preset password. A full functional performance monitoring system which includes **speedometer** is **fabricated at a very low cost** using the proximity switch. In perspective of the Bangladesh, this is a very crucial and sophisticated part. Most of the public vehicles (CNGs, Taxis etc.) in the subcontinent lack a decent speedometer that relays absolute information about its speed. With the module comes an ardent solution to such a plight.

- The module manufactured will help in pruning the current hurdles associated with the transportation sector of Bangladesh to some extent. Although this module is well working there's scope for enhancement for the module:
- The speedometer data from the module can be relayed to a distant device through usage of **Wi-Fi**. A **mobile application** can be developed to track down the vehicle and receive real-time data from module. Besides the mobile app can be developed to such an extent that the password can be overrode.
- For commercial purposes, the system can be designed in stronger way and marketed as an industrial package.



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**CLOUD RECORDING FOR DIABETES
REGULATION OF BLOOD AND GLUCOSE
LEVEL**



A PROJECT REPORT

Submitted by

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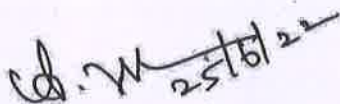
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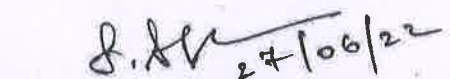
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INTERNAL EXAMINER


EXTERNAL EXAMINER


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ABSTRACT

Diabetic patients need ongoing surveillance, but this involves high costs for the government and family. The combined use of information and communication technologies (ICTs) and smart devices can reduce these costs, helping the diabetic patient. This paper presents an intelligent architecture for the surveillance of diabetic disease that will allow physicians to remotely monitor the health of their patients through sensors integrated into smart phones and smart portable devices. The proposed architecture includes an intelligent algorithm developed to intelligently detect whether a parameter has exceeded a threshold, which may or may not involve urgency. To verify the proper functioning of this system, we developed a small portable device capable of measuring the level of glucose in the blood for diabetics and body temperature. We designed a secure mechanism to establish a wireless connection with the Smartphone.



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CHAPTER 6

CONCLUSION & FUTURE SCOPE

Using the IoT to collect diabetes related data from medical devices has potential to improve development of machine learning algorithms to find historical patterns and interpret new sensor and food-intake events toward estimation of insulin doses to maintain BG within target ranges. The current study started development of such an IoT system to store the data to Google Sheets as a web service. A simulation was used for this initial development instead of physical devices being used by human subjects. Once the data is collected, such as in Google Sheets, analysis can be done toward development of a machine learning model.

Consideration of the type of control for insulin administration at food-intake was considered an open-loop control, and insulin administration to counter high BG was considered a closed-loop control. The open-loop control is proactive and could result in more timely control, but with a risk of errors in estimating food-intake and insulin dose. The closed-loop control is reactive and has the disadvantage of time lags prior to correction of high BG, but the method does not require error prone estimations of future behavior. The results support the idea that a combination of open-loop and closed-loop control would improve BG regulation, making the system more robust. Further development and testing of this preliminary concept is required prior to clinical application.

Further directions include improvements to the simulation, food-intake and closed-loop control algorithms. Once a sufficient amount of data is collected in Google Sheets, analysis could begin toward development of a machine learning model. Other future directions include adapting physical devices to transfer sensor information to Google Sheets for storage. A missing link in making a fully automated sensing system is monitoring food-intake and

physical exercise. Future work could explore ways for engineered devices to monitor these behaviors, reducing the load on the human to manually monitor and report this behavior for determination of insulin administration.



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EE8601

SOLID STATE DRIVES

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OBJECTIVES:

To impart knowledge on the following Topics

- Steady state operation and transient dynamics of a motor load system.
- Analyze the operation of the converter/chopper fed dc drive, both qualitatively and quantitatively.
- Operation and performance of AC motor drives.
- Analyze and design the current and speed controllers for a closed loop solid state DC motor drive.

UNIT I DRIVE CHARACTERISTICS 9

Electric drive – Equations governing motor load dynamics – steady state stability – multi quadrant Dynamics: acceleration, deceleration, starting & stopping – typical load torque characteristics – Selection of motor.

UNIT II CONVERTER / CHOPPER FED DC MOTOR DRIVE 9

Steady state analysis of the single and three phase converter fed separately excited DC motor drive – continuous conduction – Time ratio and current limit control – 4 quadrant operation of converter /chopper fed drive-Applications.

UNIT III INDUCTION MOTOR DRIVES 9

Stator voltage control – V/f control – Rotor Resistance control – qualitative treatment of slip power recovery drives – closed loop control – vector control – Applications.

UNIT IV SYNCHRONOUS MOTOR DRIVES 9

V/f control and self-control of synchronous motor: Margin angle control and power factor control – Three phase voltage/current source fed synchronous motor – Applications.

UNIT V DESIGN OF CONTROLLERS FOR DRIVES 9

Transfer function for DC motor / load and converter – closed loop control with Current and speed feedback – armature voltage control and field weakening mode – Design of controllers; current controller and speed controller – converter selection and characteristics.

TOTAL : 45 PERIODS

OUTCOMES:

- Ability to understand and suggest a converter for solid state drive.
- Ability to select suitability drive for the given application.


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EE8005

SPECIAL ELECTRICAL MACHINES

L T P C
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OBJECTIVES:

To impart knowledge on the following Topics

- Construction, principle of operation, control and performance of stepping motors.
- Construction, principle of operation, control and performance of switched reluctance motors.
- Construction, principle of operation, control and performance of permanent magnet brushless D.C. motors.
- Construction, principle of operation and performance of permanent magnet synchronous motors.
- Construction, principle of operation and performance of other special Machines.

UNIT I STEPPER MOTORS

9

Constructional features –Principle of operation –Types – Torque predictions – Linear Analysis – Characteristics – Drive circuits – Closed loop control – Concept of lead angle -Applications.

UNIT II SWITCHED RELUCTANCE MOTORS (SRM)

9

Constructional features –Principle of operation- Torque prediction–Characteristics Steady state performance prediction – Analytical Method – Power controllers – Control of SRM drive- Sensor less operation of SRM – Applications.

UNIT III PERMANENT MAGNET BRUSHLESS D.C. MOTORS

9

Fundamentals of Permanent Magnets- Types- Principle of operation- Magnetic circuit analysis- EMF and Torque equations- Power Converter Circuits and their controllers -Characteristics and control- Applications.

UNIT IV PERMANENT MAGNET SYNCHRONOUS MOTORS (PMSM)

9

Constructional features -Principle of operation – EMF and Torque equations - Sine wave motor with practical windings - Phasor diagram - Power controllers – performance characteristics -Digital controllers – Applications.

UNIT V OTHER SPECIAL MACHINES

9

Constructional features – Principle of operation and Characteristics of Hysteresis motor-Synchronous Reluctance Motor–Linear Induction motor-Repulsion motor- Applications.

TOTAL : 45 PERIODS

OUTCOMES:

- Ability to analyze and design controllers for special Electrical Machines.
- Ability to acquire the knowledge on construction and operation of stepper motor.



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SOLAR BASED TRAPPER FOR PEST CONTROL



A PROJECT REPORT

Submitted by

POOMANIS

(731218105017)

ROOPAN DURAI.G

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SANJAY SELVA.V

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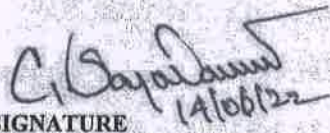
JUNE-2022

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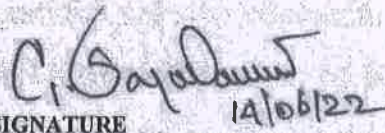
BONAFIDE CERTIFICATE

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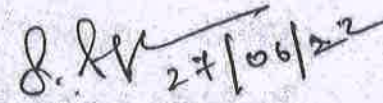

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INTERNAL EXAMINER


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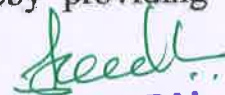

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ABSTRACT

Tamil Nadu has all along been one of the states with a creditable performance in agricultural production with the farmers relatively more responsive and receptive to changing technologies and market forces. Agriculture is the main occupation of our agriculture people. Farmers encounter the problems of various types of insect pests that harm crops and result in loss of productivity each year. Therefore, it is necessary for farmers to use pesticides to prevent crop damage. However, when pesticides are used in large quantity, they cause adverse impacts on people, animals and the environment. Instead of using pesticides, the government has to support other ways to prevent insect pests, including the use of biological agents and some insects etc.

A previous study has shown that the ultraviolet light of light emitting diode tube could be used to lure "Coconut His pine Beetle" (*Plesispa reichei* Chapuis), a damaging pest of coconut and a range of palm species. This study aimed to develop Solar Energy-Based Insect Pests Trap by using ultraviolet light emitting diode tube to lure the insect pests and 12 volt battery as power supply to light emitting diode tube. The battery charging system derives electrical energy from 20 watts of solar cell for use at night. This proposed Solar Energy-Based Insect Pests Trap has an automatic control system to lure insect pests when there is no sunlight and the system will be stop when the sun shines.

The State has as an area of 130.33 Lakhs, with a gross cropped area of around 59.42 Lakhs. The Government policy and objectives have been to ensure stability in agricultural production and to increase the agricultural production in a sustainable manner to meet the food requirement of growing population and also to meet the raw material needs of agro based industries, thereby providing employment opportunities to the rural population.



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CONCLUSION

This solar energy-based insect pest trap research chose general materials to be adapted for pest trapping such as electronic mosquito trap and clear acrylic board. Then simple design was created for easily teach to farmers. The Solar Energy-Based Insect Pest Trap can trap many pests such as *Coccinellidae*, *Nephotettix nigropicta*, Adult cotton leaf worm, Leaf minor fly, Rhinoceros beetle, and *Brontispa longissima* Gestro. They are general pests in farm around Thailand but small number can be destroyed because there was only one side of wire mesh. LED bulbs with 12 volts were safer to use more than fluorescent bulbs with 220 volts. If the electrical short or leakage current was happened, the users would not get seriously hurt. This trap did not appropriate for tall and leafy trees because the sunlight could not shine on the trap, the solar cells could not produce electric energy to battery. The trap should be improved for lighter scattering as 360 degrees from the trap. The ways into LED should be provide more for more Insects and effectively trap.



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VOICE OPERATED ROBOT FOR ASSISTING

COVID-19 PATIENTS

A PROJECT REPORT

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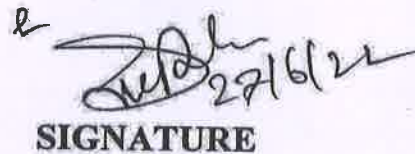
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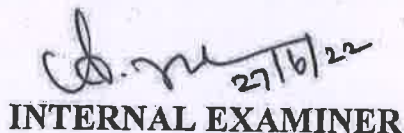

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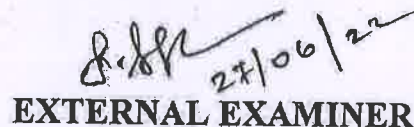
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ABSTRACT

The epidemic at the beginning of this year, due to a new virus in the corona virus family, is causing many and is bringing the world economy to its knees. Moreover, situations of this kind are historically cyclical. The symptoms and treatment of infected patients are, for better or worse even for new viruses, always the same: more or less severe flu symptoms, isolation and full hygiene. By now man has learned how to manage epidemic situations, but deaths and negative effects continue to occur. What about technology? What effect has the actual technological progress we have achieved? In this review, we wonder about the role of robotics in the fight against COVID. It presents the analysis of scientific articles, industrial initiatives and project calls for applications from March to now highlighting how much robotics was ready to face this situation, what is expected from robots and what remains to do. The end of 2019 and the start of 2020 remained the time of the world's largest medical emergency due to Coronavirus disease known as COVID-19, outbreak in all over the world. We designed an automated robotic assistance system for the patients who are kept in quarantine. In the proposed system, doctors can remotely monitor the medical condition of patients by maintaining social distance. A robotic cart will provide food and medicine to the patient. The proposed system also contains an emergency system where the doctor and paramedical staff can be called through the LCD panel installed beside the patient's bed or through the mobile application. The article portrays the three levels of the development of the model: the equipment level, which contains the sensors, actuators and robot execution. The design level, which defines the distinctive practical services; and the application level which illustrate the administrations offered by the system. The setup will enable the medical staff to deal with the maximum patients at less time. Also, it will enable them to make social distancing to pay more attention to severely affected patients.


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CHAPTER 6

CONCLUSION

An unprecedented disaster such as the corona virus pandemic forces us to re-think the role of technology in the operation of healthcare services. COVID-19 pandemic serves as a catalyst to prompt discussions about the importance of publicly or privately funded research well ahead of an unexpected pandemic that might happen in the future and the innovative usage of existing technology to overcome the limitations of the current management scheme of healthcare systems. Although wearable technologies demonstrate tremendous potential in dealing with infectious diseases such as the novel corona virus, the aforementioned limitations hinder widespread adoption. While limitations such as privacy concerns require immediate attention, there is no doubt that wearable technologies can not only work as an early warning system but also as life-saving devices. When we emerge out of this crisis, it is of paramount importance that we should continue our undivided attention and research into these paradigm changes and technologies.

6.1 FEATURE SCOPE

1. This research work has been narrowed down to short range Bluetooth module. Using a long-range modules and other connectivity devices will result in connectivity with the robot for long distances.
2. Power Optimization such sleep and wakeup schedules can be incorporated.
3. Image processing can be implemented in the robot to detect the color and the objects.
4. A thermal camera can be installed to sense the heat emitted by bodies useful in military purposes to detect enemies on the lines

PV SOLAR PANEL GRID AND BATTERY VOLTAGE MONITORING OVER IOT



A PROJECT REPORT

Submitted by

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JUNE 2022

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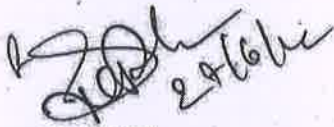
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BONAFIDE CERTIFICATE

Certified that this project report is **"PV SOLAR PANEL GRID AND BATTERY VOLTAGE MONITORING OVER IOT"** "The bonafide work of **"DILLIP SUNDHI (731218105301), GOKULNATH.A (731218105302), and KATHIRVEL.P (731218105007)"** is carried out the project work under my supervision.



SIGNATURE

Dr.C.SARAVANAN., M.E., Ph.D

HEAD OF THE DEPARTMENT

Department of Electrical and
Electronics Engineering,
J.K.K Munirajah College of
Technology, T.N.palayam-638506



SIGNATURE


Mr.T.S. THAMBIRAN M.E.,

SUPERVISOR

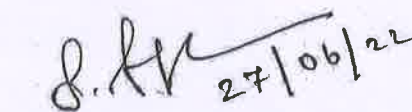
ASSISTANT PROFESSOR

Department of Electrical and
Electronics Engineering,
J.K.K Munirajah College of
Technology, T.N.palayam- 638506

Submitted for the Project Viva Voce held on 27-06-2022



INTERNAL EXAMINER



EXTERNAL EXAMINER



PRINCIPAL

**JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY**

**T.N. PALAYAM (Po)-638 506.
GOBI (TK), ERODE (DT)**

ABSTRACT

The Internet of Things has a vision in which the internet extends into the real world, which incorporates everyday objects. The IOT allows objects to be sensed or controlled remotely over existing network infrastructure, creating opportunities for pure integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit in addition to reduced human intervention.

This technology has many applications like solar cities, Smart villages, Micro grids and Solar Street lights and so on. As Renewable energy grew at a rate faster than any other time in history during this period. The proposed system refers to the online display of the power usage of solar energy as a renewable energy. This monitoring is done through Arduino Microcontroller using flask framework. Smart Monitoring displays daily usage of renewable energy. This helps the user to analysis of energy usage. Analysis impacts on the renewable energy usage and electricity issues.

CONCLUSION

The need of electricity is rising day by day and traditional sources of energy are not producing enough to meet this graph. This exponential need also effects on electricity cost and human lives. Internet of things revolutionizing human lives in every field of life. Solar panels are not traditional source of electricity that may fulfill the need of energy. In this paper, an IOT based approach for monitoring the solar power consumption is presented and a prototype is developed to simulate the results.

The underlying approach records the solar panel perimeters like current, voltage and temperate via sensors and transfer over cloud using Arduino. Results are displayed via onboard screen as well as mobile application. Users will be able to track, monitor and control their panel virtually to maximize the electricity. In future, we will implement reinforcement learning algorithm to predict the future usage and electricity production of solar panels.



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INTERNSHIP

EE8701

HIGH VOLTAGE ENGINEERING

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OBJECTIVES:

To impart knowledge on the following Topics

- Various types of over voltages in power system and protection methods.
- Generation of over voltages in laboratories.
- Measurement of over voltages.
- Nature of Breakdown mechanism in solid, liquid and gaseous dielectrics.
- Testing of power apparatus and insulation coordination

UNIT I OVER VOLTAGES IN ELECTRICAL POWER SYSTEMS 9

Causes of over voltages and its effects on power system – Lightning, switching surges and temporary over voltages, Corona and its effects – Bewley lattice diagram- Protection against over voltages.

UNIT II DIELECTRIC BREAKDOWN 9

Properties of Dielectric materials - Gaseous breakdown in uniform and non-uniform fields –Corona discharges – Vacuum breakdown – Conduction and breakdown in pure and commercial liquids, Maintenance of oil Quality – Breakdown mechanisms in solid and composite dielectrics- Applications of insulating materials in electrical equipments.

UNIT III GENERATION OF HIGH VOLTAGES AND HIGH CURRENTS 9

Generation of High DC voltage: Rectifiers, voltage multipliers, vandigriff generator: generation of high impulse voltage: single and multistage Marx circuits – generation of high AC voltages: cascaded transformers, resonant transformer and tesla coil- generation of switching surges – generation of impulse currents - Triggering and control of impulse generators.

UNIT IV MEASUREMENT OF HIGH VOLTAGES AND HIGH CURRENTS 9

High Resistance with series ammeter – Dividers, Resistance, Capacitance and Mixed dividers - Peak Voltmeter, Generating Voltmeters - Capacitance Voltage Transformers, Electrostatic Voltmeters – Sphere Gaps - High current shunts- Digital techniques in high voltage measurement.

UNIT V HIGH VOLTAGE TESTING & INSULATION COORDINATION 9

High voltage testing of electrical power apparatus as per International and Indian standards – Power frequency, impulse voltage and DC testing of Insulators, circuit breakers, bushing, isolators and transformers- Insulation Coordination& testing of cables.

TOTAL : 45 PERIODS

OUTCOMES:

- Ability to understand Transients in power system.
- Ability to understand Generation and measurement of high voltage.



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EE8703

RENEWABLE ENERGY SYSTEMS

L T P C
3 0 0 3

OBJECTIVES:

To impart knowledge on the following Topics

- Awareness about renewable Energy Sources and technologies.
- Adequate inputs on a variety of issues in harnessing renewable Energy.
- Recognize current and possible future role of renewable energy sources.

UNIT I RENEWABLE ENERGY (RE) SOURCES 9

Environmental consequences of fossil fuel use, Importance of renewable sources of energy, Sustainable Design and development, Types of RE sources, Limitations of RE sources, Present Indian and international energy scenario of conventional and RE sources.

UNIT II WIND ENERGY 9

Power in the Wind – Types of Wind Power Plants(WPPs)–Components of WPPs-Working of WPPs- Siting of WPPs-Grid integration issues of WPPs.

UNIT III SOLAR PV AND THERMAL SYSTEMS 9

Solar Radiation, Radiation Measurement, Solar Thermal Power Plant, Central Receiver Power Plants, Solar Ponds.- Thermal Energy storage system with PCM- Solar Photovoltaic systems : Basic Principle of SPV conversion – Types of PV Systems- Types of Solar Cells, Photovoltaic cell concepts: Cell, module, array ,PV Module I-V Characteristics, Efficiency & Quality of the Cell, series and parallel connections, maximum power point tracking, Applications.

UNIT IV BIOMASS ENERGY 9

Introduction-Bio mass resources –Energy from Bio mass: conversion processes-Biomass Cogeneration-Environmental Benefits. Geothermal Energy: Basics, Direct Use, Geothermal Electricity. Mini/micro hydro power: Classification of hydropower schemes, Classification of water turbine, Turbine theory, Essential components of hydroelectric system.


UNIT V OTHER ENERGY SOURCES 9

Tidal Energy: Energy from the tides, Barrage and Non Barrage Tidal power systems. Wave Energy: Energy from waves, wave power devices. Ocean Thermal Energy Conversion (OTEC)- Hydrogen Production and Storage- Fuel cell : Principle of working- various types -construction and applications. Energy Storage System- Hybrid Energy Systems.

TOTAL : 45 PERIODS

OUTCOMES:

- Ability to create awareness about renewable Energy Sources and technologies.
- Ability to get adequate inputs on a variety of issues in harnessing renewable Energy.


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EE8015

ELECTRIC ENERGY GENERATION, UTILIZATION AND CONSERVATION

L T P C
3 0 0 3

OBJECTIVES:

To impart knowledge on the following Topics

- To study the generation, conservation of electrical power and energy efficient equipments.
- To understand the principle, design of illumination systems and energy efficiency lamps.
- To study the methods of industrial heating and welding.
- To understand the electric traction systems and their performance.

UNIT I ILLUMINATION 9

Importance of lighting – properties of good lighting scheme – laws of illumination – photometry -types of lamps – lighting calculations – basic design of illumination schemes for residential, commercial, street lighting, factory lighting and flood lighting – LED lighting and energy efficient lamps.

UNIT II REFRIGERATION AND AIR CONDITIONING 9

Refrigeration-Domestic refrigerator and water coolers - Air-Conditioning-Variou types of air-conditioning system and their applications, smart air conditioning units – Energy Efficient motors: Standard motor efficiency, need for efficient motors, Motor life cycle,Direct Savings and payback analysis, efficiency evaluation factor.

UNIT III HEATING AND WELDING 9

Role of electric heating for industrial applications – resistance heating – induction heating –dielectric heating - electric arc furnaces. Brief introduction to electric welding – welding generator, welding transformer and the characteristics.

UNIT IV TRACTION 9

Merits of electric traction – requirements of electric traction system – supply systems –mechanics of train movement – traction motors and control – braking – recent trends in electric traction.

UNIT V DOMESTIC UTILIZATION OF ELECTRICAL ENERGY 9

Domestic utilization of electrical energy – House wiring. Induction based appliances, Online and OFF line UPS, Batteries - Power quality aspects – nonlinear and domestic loads – Earthing –Domestic, Industrial and Substation.

TOTAL : 45 PERIODS

OUTCOMES:

- To understand the main aspects of generation, utilization and conservation.
- To identify an appropriate method of heating for any particular industrial application

Seede
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EE8402

TRANSMISSION AND DISTRIBUTION

L T P C
3 0 0 3

OBJECTIVES:

- To study the structure of electric power system and to develop expressions for the computation of transmission line parameters.
- To obtain the equivalent circuits for the transmission lines based on distance and to determine voltage regulation and efficiency.
- To understand the mechanical design of transmission lines and to analyze the voltage distribution in insulator strings to improve the efficiency.

UNIT I TRANSMISSION LINE PARAMETERS 9

Structure of Power System - Parameters of single and three phase transmission lines with single and double circuits -Resistance, inductance and capacitance of solid, stranded and bundled conductors, Symmetrical and unsymmetrical spacing and transposition – application of self and mutual GMD; skin and proximity effects -Typical configurations, conductor types and electrical parameters of EHV lines.

UNIT II MODELLING AND PERFORMANCE OF TRANSMISSION LINES 9

Performance of Transmission lines - short line, medium line and long line – equivalent circuits, phasor diagram, attenuation constant, phase constant, surge impedance -transmission efficiency and voltage regulation, real and reactive power flow in lines – Power Circle diagrams - Formation of Corona – Critical Voltages – Effect on Line Performance.

UNIT III MECHANICAL DESIGN OF LINES 9

Mechanical design of OH lines – Line Supports –Types of towers – Stress and Sag Calculation – Effects of Wind and Ice loading. Insulators: Types, voltage distribution in insulator string, improvement of string efficiency, testing of insulators.

UNIT IV UNDER GROUND CABILITIES 9

Underground cabilities - Types of cabilities – Construction of single core and 3 core Cabilities -Insulation Resistance – Potential Gradient - Capacitance of Single-core and 3 core cabilities- Grading of cabilities - Power factor and heating of cabilities– DC cabilities.

UNIT V DISTRIBUTION SYSTEMS 9

Distribution Systems – General Aspects – Kelvin's Law – AC and DC distributions -Techniques of Voltage Control and Power factor improvement – Distribution Loss –Types of Substations -Methods of Grounding – Trends in Transmission and Distribution: EHVAC,HVDC and FACTS (Qualitative treatment only).

TOTAL : 45 PERIODS

OUTCOMES:

- To understand the importance and the functioning of transmission line parameters.
- To understand the concepts of Lines and Insulators.



PRINCIPAL

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GOBI (Tk), ERODE (Dt).**



Internship

1 message

Thu 19 Aug 2021 at 11.40 am

From: C SARAVANAN <hodeee@jkkmct.edu.in>

Date: Thu 19 Aug 2021 at 11.40 am

Subject: Internship - reg

To: MANAGING DIRECTOR<mohammed.fayaz@gmail.com>

Dear SIR ,

I am requesting to be joining your TECHNOLOGICS GLOBAL PVT LTD. The requirements are exactly what I have prepared for and hoped to do. I feel confident that I can make a significant contribution to your organization while at the same time learning from your staff.

Additionally, I shall complete all insurance forms for the new intern orientation. I look forward to working with you and your fine team. I appreciate your confidence in me and providing the chance to work with and observe your outstanding staff. (Students name: 1. ROOPANDURAI G, 2. SANJAYSELVA V, 3. POOMANI S, 4. GOKULNATH A, 5. DILLIP SUNDHI, 6. KATHIRVEL P, 7. SUGANPRIYA S, 8. HARINI K V, 9. JEEVITHA R, 10. GAYATHIRI S)

Sincerely,

Head Of The Department -(EEE),

JKK Munirajah College of Technology,

T.N.Palayam, Erode-638506, Tamilnadu.

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (TK), ERODE (Dt).



Internship

1 message

Mon, 23 2021 at 4.45PM

From: MANAGING DIRECTOR <mohammed.fayaz@gmail.com>

Date: Mon 23 2021 at 4.45 PM

Subject: Internship - reg

To: C SARAVANAN <hodeeee@jkkmct.edu.in>


Dear Hod,

We are pleased to offer you an internship program with TECHNOLOGICS GLOBAL PVT LTD for a period from 30th Aug 2021 to 13th Oct 2021. You should note that any information and data collected from you during the course of your internship should be kept confidential at all times. We appreciate your interest in our company.

With Regards,

MD

TECHNOLOGICS GLOBAL PVT LTD


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T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



TECHNOLOGICS



Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. ROOPANDURAI G**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in “**TECHNOLOGIES GLOBAL PVT LTD**”.

He has worked on project titled “**SOLAR BASED TRAPPER FOR TEST CONTROL**”

During this tenure **Mr. ROOPANDURAI G** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)



TECHNOLOGICS



Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. SANJAYSELVA V**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in “**TECHNOLOGICS GLOBAL PVT LTD**”.

He has worked on project titled “**SOLAR BASED TRAPPER FOR TEST CONTROL**”

During this tenure **Mr. SANJAYSELVA V** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)

PRINCIPAL
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T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



TECHNOLOGICS



Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. POOMANI S**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days(30th Aug to 13th OCT) Internship Training in “**TECHNOLOGIES GLOBAL PVT LTD**”.

He has worked on project titled “**SOLAR BASED TRAPPER FOR TEST CONTROL**”

During this tenure **Mr. POOMANI S** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

PRINCIPAL
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T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)



TECHNOLOGICS



Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. GOKULNATH A**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days(30th Aug to 13th OCT) Internship Training in **"TECHNOLOGIES GLOBAL PVT LTD"**.

He has worked on project titled **"PV SOLAR PANEL GRID AND BATTERY VOLTAGE MONITORING OVER IOT"**

During this tenure **Mr. GOKULNATH A** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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GOBI (TK), ERODE (Dt).

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)



TECHNOLOGICS



Date: 13.10.2021


TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. DILLIP SUNDHI**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days(30th Aug to 13th OCT) Internship Training in **“TECHNOLOGICS GLOBAL PVT LTD”**.

He has worked on project titled **“PV SOLAR PANEL GRID AND BATTERY VOLTAGE MONITORING OVER IOT”**

During this tenure **Mr. DILLIP SUNDHI** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.


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GOBI (Tk), ERODE (Dt).

MANAGING DIRECTOR


(Mr. Mohamed Fayaz)



TECHNOLOGICS



Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. KATHIRVEL P**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days(30th Aug to 13th OCT) Internship Training in "**TECHNOLOGIES GLOBAL PVT LTD**".

He has worked on project titled "**PV SOLAR PANEL GRID AND BATTERY VOLTAGE MONITORING OVER IOT**"

During this tenure **Mr. KATHIRVEL P** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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GOBI (Tk), ERODE (Dt).

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)



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ISO9001:2008

Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. SUGANPRIYA S**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days(30th Aug to 13th OCT) Internship Training in **“TECHNOLOGIES GLOBAL PVT LTD”**.

She has worked on project titled **“ELECTRIC VEHICLE SCHEDULED TIME MANAGEMENT BATTERY CHARGING TO AVOID FIRE ACCIDENT”**

During this tenure **Mr. SUGANPRIYA S** has involved in her work with dedication. We found him pretty and active in whatever the task we have given her. She is a confident person, punctual, hardworking and inquisitive.

We wish her all the best for his future endeavors.

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)



TECHNOLOGICS



Date: 13.10.2021


TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. HARINI K V**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in “**TECHNOLOGIES GLOBAL PVT LTD**”.


She has worked on project titled “**ELECTRIC VEHICLE SCHEDULED TIME MANAGEMENT BATTERY CHARGING TO AVOID FIRE ACCIDENT**”

During this tenure **Mr. HARINI K V** has involved in her work with dedication. We found him pretty and active in whatever the task we have given her. she is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.


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GOBI (Tk), ERODE (Dt).

MANAGING DIRECTOR


(Mr. Mohamed Fayaz)



TECHNOLOGICS



Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. JEEVITHA R**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days(30th Aug to 13th OCT) Internship Training in “**TECHNOLOGICS GLOBAL PVT LTD**”.

She has worked on project titled “**ELECTRIC VEHICLE SCHEDULED TIME MANAGEMENT BATTERY CHARGING TO AVOID FIRE ACCIDENT**”

During this tenure **Mr. JEEVITHA R** has involved in her work with dedication. We found him pretty and active in whatever the task we have given her. She is a confident person, punctual, hardworking and inquisitive.

We wish her all the best for her future endeavors.

PRINCIPAL

**JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).**

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)



TECHNOLOGICS

TECHNOLOGICS



Date: 13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. GAYATHIRI S**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in “**TECHNOLOGIES GLOBAL PVT LTD**”.

She has worked on project titled “**ELECTRIC VEHICLE SCHEDULED TIME MANAGEMENT BATTERY CHARGING TO AVOID FIRE ACCIDENT**”

During this tenure **Mr. GAYATHIRI S** has involved in his work with dedication. We found him pretty and active in whatever the task we have given her. She is a confident person, punctual, hardworking and inquisitive.

We wish her all the best for her future endeavors.

PRINCIPAL

**JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).**

MANAGING DIRECTOR

(Mr. Mohamed Fayaz)



Internship

1 message

Fri 20 Aug 2021 at 10.10 am

From: C SARAVANAN <hodeee@jkkmct.edu.in>

Date: Fri 20 Aug 2021 at 10.10 am

Subject: Internship - reg

To: HR VENTURE <venture@controlsystems.com>

Dear SIR ,

I am requesting to be joining your **Venture Controls**. The requirements are exactly what I have prepared for and hoped to do. I feel confident that I can make a significant contribution to your organization while at the same time learning from your staff.

Additionally, I shall complete all insurance forms for the new intern orientation. I look forward to working with you and your fine team. I appreciate your confidence in me and providing the chance to work with and observe your outstanding staff. (Students-1. VARATHARAJAN N,2. VASANTH S, 3. PRAVEEN T, 4. ABINAYA S, 5. KAVEENA E, 6. MEHAALYENNI C, 7. SARANYA K, 8. PAVITHRAN M, 9. NAVEENMARSHAL Y, 10. MERINKUMAR G, 11. GOBINATHAN L, 12. DASAPPA L, 13. RANGARAMA K)

Sincerely,

Head Of The Department --(EEE),

JKK Munirajah College of Technology,

T.N.Palayam, Erode-638506, Tamilnadu.

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



Internship

1 message

Sat, 21 2021 at 4.02PM

From: HR VENTURE <venture@controlsystems.com>

Date: Sat 21 2021 at 4.02 PM

Subject: Internship - reg

To: C SARAVANAN <hodeeee@jkkmct.edu.in>

Dear Sir,

On behalf of the **Venture controls** Coimbatore, we would like to notify you of this opportunity for an internship. On your acceptance of this offer, you can continue an internship with the company on from **30th Aug 2021 to 13th Oct 2021**. We assure you that the details of your particulars we have collected during your program should be saved in our covert privately. We appreciate your interest in our company.

With Regards,

HR,

VENTURE CONTROLS,

COIMBATORE.

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



VENTURE CONTROLS

DIVERSE TECHNOLOGY | SEAMLESS INTEGRITY

13.10.2021


TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. VARATHARAJAN N**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

He has worked on project titled "VOICE OPERATED ROBOT FOR ASSISTING COVID PARENTS".

During this tenure **Mr. VARATHARAJAN N** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.


PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).


For Project Manager

Head Office Address:

Dev Regnant, 1 st floor, No.409 C, Crosscut Road, Gandhipuram, Coimbatore-12

Mobile no : 9952414532 Tel no : 0422 4204532



VENTURE CONTROLS

DIVERSE TECHNOLOGY | SEAMLESS INTEGRITY

13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that Mr. VASANTH S, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

He has worked on project titled "VOICE OPERATED ROBOT FOR ASSISTING COVID PARENTS".

During this tenure Mr. VASANTH S has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.


PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).


For Project Manager

Head Office Address:

Dev Regnant, 1st floor, No.409 C, Crosscut Road, Gandhipuram, Coimbatore-12

Mobile no : 9952414532 Tel no : 0422 4204532



VENTURE CONTROLS

DIVERSE TECHNOLOGY | SEAMLESS INTEGRITY

13.10.2021

TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Mr. PRAVEEN T**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

He has worked on project titled "VOICE OPERATED ROBOT FOR ASSISTING COVID PARENTS".

During this tenure **Mr. PRAVEEN T** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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This is so certify that **Ms. MEHAALYENNI C**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "**VENTURE CONBTROLS**".

She has worked on project titled "**GPS TRACKING SYSTEM FOR IDENTIFYING OF INTERNATIONAL BORDER CROSSING FOR FISHERMAN**".

During this tenure **Ms MEHAALYENNI C** has involved in his work with dedication. We found her pretty and active in whatever the task we have given her. She is a confident person, punctual, hardworking and inquisitive.

We wish her all the best for his future endeavors.


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This is so certify that **Ms. KAVEENA E**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

She has worked on project titled "GPS TRACKING SYSTEM FOR IDENTIFYING OF INTERNATIONAL BORDER CROSSING FOR FISHERMAN".

During this tenure **Ms. KAVEENA E** has involved in his work with dedication. We found her pretty and active in whatever the task we have given her. She is a confident person, punctual, hardworking and inquisitive.

We wish her all the best for his future endeavors.


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TO WHOM SO EVER IT MAY CONCERN

This is so certify that **Ms. SARANYA K**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

She has worked on project titled "GPS TRACKING SYSTEM FOR IDENTIFYING OF INTERNATIONAL BORDER CROSSING FOR FISHERMAN".

During this tenure **Ms. SARANYA K** has involved in his work with dedication. We found her pretty and active in whatever the task we have given her. She is a confident person, punctual, hardworking and inquisitive.

We wish her all the best for his future endeavors.

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This is so certify that Ms. ABINAYA S, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

She has worked on project titled "GPS TRACKING SYSTEM FOR IDENTIFYING OF INTERNATIONAL BORDER CROSSING FOR FISHERMAN".

During this tenure Ms. ABINAYA S has involved in his work with dedication. We found her pretty and active in whatever the task we have given her. She is a confident person, punctual, hardworking and inquisitive.

We wish her all the best for his future endeavors.

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This is so certify that **Mr. PAVITHRAN M**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "**VENTURE CONBTROLS**".

He has worked on project titled "**PASSWORD BASED PROTECTION TO AVOID 2/4 WHEELER VEHICLE THEFT**"

During this tenure **Mr. PAVITHRAN M** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.


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This is so certify that **Mr. NAVEENMARSHAL Y**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

He has worked on project titled "PASSWORD BASED PROTECTION TO AVOID 2/4 WHEELER VEHICLE THEFT"

During this tenure **Mr. NAVEENMARSHAL Y** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.


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This is so certify that **Mr. MERINKUMAR G**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

He has worked on project titled "PASSWORD BASED PROTECTION TO AVOID 2/4 WHEELER VEHICLE THEFT"

During this tenure **Mr. MERINKUMAR G** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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This is so certify that **Mr. GOBINATHAN L**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "**VENTURE CONBTROLS**".

He has worked on project titled "**CLOUD RECORDING FOR DIABETES REGULATION OF BLOOD AND GLUCOSE LEVEL**"

During this tenure **Mr. GOBINATHAN L** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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This is so certify that **Mr. DASAPPAL**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "VENTURE CONBTROLS".

He has worked on project titled "CLOUD RECORDING FOR DIABETES REGULATION OF BLOOD AND GLUCOSE LEVEL"

During this tenure **Mr. DASAPPA L** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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This is so certify that **Mr. RANGARAMA K**, 4th Year B.E Electrical and Electronics Engineering in J.K.K. Munirajah College of Technology, T.N. Palayam has successfully completed 45 days (30th Aug to 13th OCT) Internship Training in "**VENTURE CONBTROLS**".

He has worked on project titled "**CLOUD RECORDING FOR DIABETES REGULATION OF BLOOD AND GLUCOSE LEVEL**"

During this tenure **Mr. RANGARAMA K** has involved in his work with dedication. We found him pretty and active in whatever the task we have given him. He is a confident person, punctual, hardworking and inquisitive.

We wish him all the best for his future endeavors.

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