HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Gowdavelly (Village), Medchal (Mandal), Ranga Reddy (Dist.) – 501401. TS. India.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

STUDENT SKILL DEVELOPMENT CENTER- EEE

Objective: To attain the gap between Industries and academics, students will be trained on core Emerging Technologies through SSDC.

List of Courses

Department   :   EEE

Reporting Head   :   Dr.O.P.Suresh

Center I/C   :   Mr. Salava V Satyanarayana

Faculty I/C   :   Ms. P.Madhavi

Date Of Establish :   22-1-2018

S.NO	Course	Duration
1	ARDUINO AND SENSOR INTERFACING FUNDAMENTALS USING TINKERCAD	16 Weeks
2	INDUSTRIAL AUTOMATION WITH PLC	16 Weeks
3	PYTHON PROGRAMMING	12 Weeks

Objectives:

1. Train students in core emerging technologies like Arduino programming and Python to close the industry skills gap.
2. Bridge the academic-industry divide by equipping students with practical skills for real-world engineering applications.
3. Foster critical thinking and problem-solving skills essential for tackling engineering challenges.
4. Cultivate a love for lifelong learning by focusing on enduringly relevant skills like programming languages.
5. Develop a curriculum that directly addresses the specific skillset and technologies currently demanded by the electrical and electronics engineering industry.

Outcomes:

1. Bridging the theory-practice gap, the center equips students with hands-on skills for immediate industry impact.
2. Programming and automation courses foster critical problem-solving abilities, empowering students to tackle engineering challenges.
3. Mastering in-demand skills builds student confidence, allowing them to approach careers with a strong foundation.
4. The center ignites lifelong learning, as programming skills continuously adapt to the evolving engineering landscape.
5. Addressing the industry gap directly, the program ensures graduates possess the specific skills and technologies currently used by companies.

How is it benefiting the students?

The Skill Development Center benefits students by equipping them with in-demand skills like Arduino programming and Python, bridging the gap between theory and practical applications in the electrical and electronics engineering industry. This not only strengthens their resumes but also fosters critical thinking and problem-solving abilities, boosting their confidence and preparing them for lifelong learning in a rapidly evolving field.

SYLLABUS

Arduino and Sensor Interfacing Fundamentals Using Tinkercad

Module 1:

- ✓ Introduction to the course
- ✓ Course syllabus overview
- ✓ Introduction to Arduino UNO
- ✓ Overview of Tinkercad simulation environment

Module 2:

- ✓ Interfacing LED with Arduino using Tinkercad
- ✓ Turning LED ON and OFF
- ✓ Implementing sequence of operations
- ✓ Interfacing Buzzer with Arduino

Module 3:

- ✓ Interfacing Tri-Colour (RGB) LED
- ✓ Controlling individual colors
- ✓ Implementing output sequencing logic
- ✓ Review of buzzer control logic

Module 4:

- ✓ Interfacing LDR sensor using Arduino
- ✓ Designing counter logic using LDR sensor
- ✓ Interfacing soil moisture sensor
- ✓ Controlling LED/Buzzer based on sensor values

Module 5:

- ✓ Interfacing ultrasonic sensor using Arduino
- ✓ Writing programs for measuring specific distance
- ✓ Interfacing 16×2 LCD display
- ✓ Displaying text and sensor information on LCD

Module 6:

✓ Interfacing smoke sensor

✓ Controlling LED/Buzzer based on smoke levels (HIGH/LOW logic)

✓ Interfacing PIR sensor

✓ Writing code for object/motion detection

Module 7:

✓ Interfacing relay using Arduino

✓ Writing programs to turn relay ON and OFF

✓ Load control using relay switching

Module 8:

✓ Interfacing temperature sensor

✓ Writing code to measure and display temperature values

✓ Threshold-based temperature monitoring

Module 9:

✓ Interfacing L293D motor driver

✓ Writing code for forward and backward motor rotation

✓ Certification activities

✓ Mini-project design and implementation

INDUSTRIAL AUTOMATION WITH PLC

Module 1:

- ✓ Introduction to PLC hardware
- ✓ Architectural Evolution of PLC
- ✓ Role of PLC in Automation
- ✓ Introduction to the field devices attached to PLC
- ✓ AB PLC fundamental (Block Diagram of PLC)
- ✓ Detail information about PLC component Power supply ,CPU,I/O Modules
- ✓ Communication Cards
- ✓ Various range available in PLC
- ✓ Type of inputs & Outputs
- ✓ Source sink Concept in PLC
- ✓ Scan cycle execution

Module 2:

- ✓ Introduction of PLC software
- ✓ Addressing Concepts
- ✓ Programming instruction arithmetic & logical
- ✓ Leading edge / trailing edge instructions

Module 3:

- ✓ Timer Blocks programming
- ✓ Counter block programming
- ✓ Standard Procedure to be followed in wringing/writing ladder etc
- ✓ Hands on experience on writing programs
- ✓ Creating / Editing a ladder logic
- ✓ Documenting the project

Module 4:

- ✓ Projects on Industrial applications

PYTHON PROGRAMMING

Module.1:

- ✓ Python Fundamentals & Python Installation
- ✓ Python Operators
    1. Arithmetic Operators
    2. Relational Operators or Comparison Operators
    3. Logical operators
    4. Bitwise operators
    5. Assignment operators
    6. Special operators

Module.2:

- ✓ **Flow Control**
    1. Conditional Statements
    2. Transfer Statements
    3. Iterative Statements
- ✓ **Strings data Type**
    1. Mathematical Operators of the String
    2. Comparison and Removing Spaces of String
    3. Joining and Splitting of strings
    4. Formatting

Module.3:

- ✓ **List and Tuple data Structures**
    1. Data Structures
    - Creation of list objects
    - Accessing elements of list
    - Manipulating Elements of list
    - Ordering Elements of list
    2. Tuple data Structures
    - Len
    - Count
    - Index
    - Sorted
    - Cmp

- ✓ **Set and Dictionary data Structure**

  1. Creation of Set objects

  2. Important Functions of Set

  3. Mathematical Operations on set

  4. Functions of Dictionary

Module.4:

- ✓ **Functions**

  1. Built-in Functions

  2. User defined Functions

- ✓ **File and Exception Handling**

  1. Types of Files

  2. Types of Errors

- ✓ **Pattern Programs**

  Types of Program Patterns.

Certifications

S.No	Title of Certification	No.of Students
1	MATLAB	50
2	PLC Programming	302
3	PYTHON	42

Achievements :

- ✓ Three Indian Patents Published by students and faculty on Electric Vehicles

- ✓ 5 Students selected for an internship in IIIT Hyderabad as a part of college research affiliated Program in 2023

- ✓ Two Projects received Best Project awards in the project Expo held at Tamil Nadu in 2021

- ✓ Two Projects received Certificate of Merit in the Project Expo held at Tamil Nadu in 2021

- ✓ 302 students got certified in Industrial automation with PLC (Online/ offline)

- ✓ 50 students got certified in MATLAB Onramp from MathWorks

- ✓ One faculty completed PG Diploma in Automation and two Faculties got certified in PLC.

- ✓ 24 papers published by the students in Peer Reviewed/UGC/SCOPUS International journals along with faculty members.

Participation in Technical Events & Achievements:

S.No	Roll No	Name of the Student	Event Participated	Title of Project	Month/Year
1	20E55A0202	AMAN KUMAR CHOUDHARY	AVISHKARANA-2K22-National level Technical Fest	Smart Dustbin	May-22
2	19E51A0218	N.PRANAY			
3	20E55A0212	D.ANIL SAI	National level Technical Symposium,Promethean 2k22	Mini E-Scooter	Oct-22
4	20E55A0217	M.SOUMITH			
5	20E55A0216	V.VAMSI KRISHNA			
6	21E55A0232	SHAIK ABDUL ADIL			
7	20E55A0207	B.VISHWANTH	Project Expo-Consortium	IoT based college Bus Tracking and Monitoring System	Nov-22
8	19E51A0214	M.MANASA			
9	20E55A0230	V.SAI AKANAKSHA			
10	20E55A0212	D.ANIL SAI			
11	19E51A0212	SAI PREETHAM	National level Technical Symposium,Promethean 2k22	Soap Dispenser	Oct-22
12	20E55A0213	J.HARSHITH			
13	19E51A0211	MAYUK			
14	20E55A0203	KARTHIK			
15	20E55A0212	D.ANIL SAI	National level Technical Symposium,Promethean 2k22	Mini E-Scooter	Oct-22
16	20E55A0217	M.SOUMITH			
17	20E55A0216	V.VAMSI KRISHNA			
18	21E55A0232	SHAIK ABDUL ADIL			
19	19E51A0222	P.AKASH	National level Technical Symposium,Promethean 2k22	Speed Control of DC Motor Using Arduino	Oct-22
20	20E55A0218	ESHWAR VALMIKI			
21	19E51A0209	KRISHNAKANTH			
22	20E55A0210	CH.VAMSI KRISHNA			
23	20E55A0207	B.VISHWANTH	National level Technical Symposium,Promethean 2k22	Generation of Electricity using Pedalling Technology	Oct-22
24	19E51A0214	M.MANASA			
25	20E55A0230	V.SAI AKANAKSHA			
26	20E55A0201	SANDEEP KUMAR			
27	20E55A0207	B.VISHWANTH	Project Expo-Consortium	IoT based college Bus Tracking and Monitoring System	Nov-22
28	19E51A0214	M.MANASA			
29	20E55A0230	V.SAI AKANAKSHA			
30	20E55A0212	D.ANIL SAI			
31	20E55A0202	AMAN KUMAR CHOUDHARY	Project Expo-Consortium	Smart Dustbin	Nov-22
32	19E51A0218	N.PRANAY			
33	20E55A0205	B.PRAVEEN			
34	21E55A0209	G.ARTHI	National level Technical Symposium,Promethean 2k22	Arduino Based Home	Oct-22
35	21E55A0212	G.SHIVA SAI			
36	21E55A0213	G.MAHESH			

				Automation Using Bluetooth	
37	21E55A0216	K.SATHWIKA			
38	21E55A0222	M.UDAY KIRAN		Smart Attendance System	Nov-22
39	21E55A0230	P.MAHESH BABU	Project Expo-Consortium		
40	21E55A0231	S.YASHWANTH			
41	19E51A0203	B.Roshini			
42	19E51A0222	P.Akash			
43	20E55A0219	M.Bharath	Technopilla,MIT Academy,Pune	Smart bag for Womens Safety	
44	20E55A0220	M.Sai Nikhil			Mar-23
45	19E51A0204	E.Chakra Harish			
46	19E51A0213	L. Sindhu Sri			
47	19E51A0221	P.Sai kiran Reddy	Technopilla,MIT Academy,Pune		
48	20E55A0206	B.Sangamesh		Electric Bicycle	Mar-23
49	19E51A0203	B.Roshini			
50	19E51A0222	P.Akash			
51	20E55A0219	M.Bharath		Smart bag for Womens Safety	
52	20E55A0220	M.Sai Nikhil	VALORUS 2023, MLRIT		Mar-23
53	19E51A0204	E.Chakra Harish			
54	19E51A0213	L. Sindhu Sri			
55	19E51A0221	P.Sai kiran Reddy			
56	20E55A0206	B.Sangamesh	VALORUS 2023, MLRIT	Electric Bicycle	Mar-23
57	19E51A0214	M.Manasa			
58	20E55A0230	akanksha		Iot based college bus tracking System	
59	20E55A0207	B.vishwanth			
60	20E55A0212	Anil	VALORUS 2023, MLRIT		Mar-23
61	19E51A0214	M.Manasa			
62	20E55A0230	akanksha	VIDYUT-2023,Vardhaman College of Engineering	Iot based college bus tracking System	
63	20E55A0207	B.vishwanth			
64	20E55A0212	Anil			Mar-23
65	19E51A0212	SAI PREETHAM		IoT bases Automatic Sanitiser	
66	18E51A0212	Divya Sri	VALORUS 2023, MLRIT		Mar-23
67	20E55A0202	AMAN KUMAR CHOUDHARY			
68	19E51A0218	N.PRANAY			
69	20E55A0205	B.PRAVEEN	VALORUS 2023, MLRIT	Smart Dustbin	Mar-23

S.No	Name of the Student	Event Participated	Achievement	Month/Year
1	R.Sandeep	Innofiesta,HITAM	Won Third Prize	Nov-24
2	S.Sai Krishna	Paper Presentation in ADVAYA-2k24, A National Level Management Fest Organised by the Department of Management Studies	Participation	Dec-24
3	B.Lakshmi Prasanna			
4	S.Umesh Chandra			
5	A.Sindhuja			
6	K.Anusha			
7	K.Swathi			
8	K.Pranay			
9	P.Venkata Sai Kumar			
10	K.Malliswari			
11	R.Mahemsh Chandra			
12	Mali Kailash	Synergia-2025, Hyderabad	Won First Prize	Apr-25
13	Akhil Sai Vodnala			
14	L.Akanksha			
15	Akhil Sai Vodnala	IEEE E-Jigyasa Project Expo,NIT Warangal	Participation	Apr-25
16	Wasim			
17	S.Sandeep Reddy			
18	S.Venkat Sai			
19	V.Madhu Vardhan			
20	A.Siddu			
21	A.Devender Sagar			
22	T.Akshay			
23	Akanksha Lingala	National Level Technical Symposium & Idea Pitching,BVRIT,Narsapur	Won Third Prize	August-25
24	Akshitha			
25	G.Nikhitha	National Level Technical Symposium & Idea Pitching,BVRIT,Narsapur	Participation	August-25
26	Nida Naaz			
27	P.Sandhya			
28	Akanksha Lingala	BUILDATHON-2025,Model Showcase Competition,Anurag University	Participation	Sep-25
29	Srivalli			
30	Kalva Pranay	IEEE Section Student Congress-2025,Vardhaman College of Engineering	Participation	Dec-25
31	Gottimukkala Vikram Reddy			
32	Yerra Shiva Kumar			
33	M.Sasidhar			
34	Kalva Pranay	IGNITE-2k26,National Level Project Expo,Narsimha Reddy Engineering College	Participation	Feb-26
35	Gottimukkala Vikram Reddy			
36	Yerra Shiva Kumar			
37	J.Sai Teja			

Technical Talks/Workshops Under SSDC EEE :

S.No	Year	Title of the program	Date of the program
1	2018-2019	Industrial Automation with PLC and SCADA	31-08-2018 to 01-09-2018
2	2019-2020	Industrial Automation with PLC	13-02-2020 to 15-02-2020
3	2020-2021	Industrial Automation with various controllers	03-04-2021
4	2020-2021	Electrical Vehicles-Your Opportunity to grow	16-06-2021
5	2021-2022	Industrial Automation with PLC & SCADA	30-11-2021
6	2021-2022	Hands-on Session on PLC Programming & SCADA	28-12-2021
7	2022-2023	Real Time Applications of Sensors with IOT	31-03-2023 to 01-04-2023
8	2022-2023	Design Thinking	02-01-2023
9	2022-2023	Remote labs Under IEEE	24-04-2023
10	2022-2023	National Energy Conservation Day	14-12-2022
11	2023-2024	Awareness Session on how to prevent pollution	02/12/2023
12	2023-2024	Awareness Session on Energy Conservation Day	14/12/2023
13	2023-2024	Guest Lecture on Industrial Automation and Career Opportunities	03/01/2024
14	2023-2024	Workshop on Internet of Things: Build your own smart world with Arduino	10/01/2024
15	2023-2024	Two day Workshop on Optimizing Industrial Process: A Hands-on SCADA Workshop	31/05/2024-01/06/2024
16	2024-2025	Industry Visit to Olectra Greentech Ltd's,Electric manufacturing Unit	02/08/2024
17	2024-2025	FDP on Sustainable Futures: A Faculty Development Program on Green Building and Energy Management	03/10/2024-05/10/2024
18	2024-2025	Awareness on Energy Conservation	14/12/2024
19	2024-2025	Lecture on Problem-Solution Fit&Product Market Fit	30/12/2024
20	2025-2026	Lecture on Entrepreneurship for Economic Empowerment(EAP)	11/10/2025
21	2025-2026	Training Program on Industrial Automation with PLC & SCADA	04/03/2026

Prototypes Developed@SSDC EEE Center

S.No	Name of Working Model
1	Electric Tri Cycle
2	Realtime monitoring of loads automation
3	Hybrid Two-Wheeler for Reliable Mobility
4	Electric Bi-Cycle
5	Generation Of Electricity using Pedalling
6	Smart Mobility Electric wheel chair
7	Smart Helmet
8	Smart Wheel Chair
9	Smart Attendance system

Working Models related to SDG:

➢ **SMART MOBILITY WHEELCHAIR:** AI-DRIVEN PERFORMANCE OPTIMIZATION, ADAPTIVE CONTROLS, AND ENHANCED SAFETY WITH OBSTACLE DETECTION

The Smart Mobility Wheelchair project focuses on developing an AI driven electric wheelchair with multi-mode control and enhanced safety features for users with mobility impairments. Built around the ESP32 microcontroller, it supports joystick, gesture, touch, and smartphone control via the RemoteXY platform. The wheelchair uses dynamic braking and ultrasonic obstacle detection to ensure safe navigation. It incorporates 24V, 250W PMDC motors powered by a 22.2V, 20Ah lithium-ion battery managed through a Battery Management System. AI algorithms analyse data like speed, battery cycles, and distance to optimize performance and predict maintenance needs. The software uses PWM for smooth motor control and braking via relay logic. Real-time monitoring through serial output helps in debugging and tuning. With a top speed of approximately 7.2 km/h and torque output of 49.6 NM, it balances performance and safety. The frame supports up to 100 kg and offers good stability on various terrains. Testing confirmed responsive, wireless control and smooth acceleration. Overall, the system enhances mobility, independence, and user experience through smart technologies.

## ➢ MULTIFUNCTIONAL ELECTRIC BICYCLE

A multifunctional electric bicycle is a modern, eco-friendly vehicle that combines traditional pedaling with electric motor assistance to make riding easier and more efficient. Designed for versatility, it typically includes features such as pedal-assist and throttle modes, allowing riders to travel longer distances or tackle hills with less effort. These bikes are often equipped with practical additions like cargo racks, foldable frames for easy storage, smart displays showing speed and battery life, built-in lighting systems, and even GPS tracking and mobile app connectivity. Whether used for commuting, recreation, delivery, or off-road adventures, multifunctional e-bikes offer a convenient, sustainable, and cost-effective alternative to cars for short and medium-distance travel.

➢ CRUISING WITH CONFIDENCE:ELCTRIC TRICYCLE FOR EMPOWERED HANDICAPPED TRAVEL

This project mainly helps to improve the ease of travelling for handicapped people integrating with new technology of electric tricycles. A normal tricycle requires a lot of human effort to move from one place to another place. This is solved by our electric tricycle which requires no effort from the person to travel.

➢ SMART HELMET
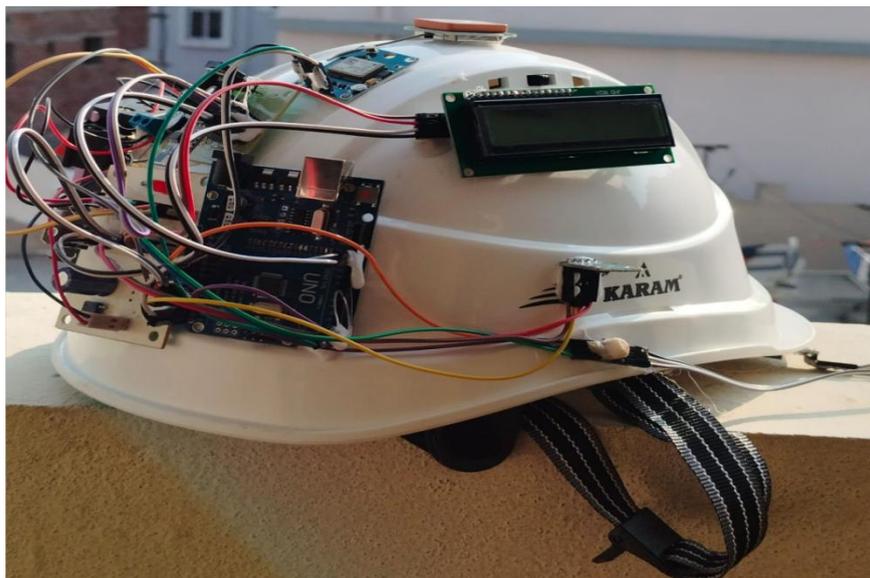
Safety of electric line workers is a major concern in power distribution systems. Accidents such as falls from height, sudden imbalance, or shock-induced movements can lead to severe physical injuries, even when helmets are worn. This project introduces Smart Safety Jacket, which works in coordination with the Smart Helmet.

The jacket is designed using a normal safety cloth jacket, embedded with electronics and mechanical protection systems such as a servo-controlled safety belt and shock-absorbing pads. This system focuses on physical injury prevention, making it reliable, fast-acting, and cost-effective.

➤ HYBRID TWO-WHEELER FOR RELIABLE MOBILITY

In recent years, the demand for efficient, economical, and eco-friendly transportation has increased significantly. With the rising cost of petrol and growing environmental concerns, electric scooters have emerged as a popular alternative. However, electric vehicles also face challenges such as limited battery range, long charging times, and inadequate charging infrastructure. These drawbacks make it difficult for users to depend solely on electric scooters for daily commuting needs. To overcome these limitations, this project proposes the development of a Hybrid Scooter that can operate on both petrol and electric power. By integrating two power sources into a single vehicle, the hybrid scooter offers greater flexibility and reliability. Users can switch between fuel modes based on availability, convenience, or efficiency, ensuring uninterrupted travel and reduced environmental impact.

➤ DESIGNING OF AUTONOMOUS EV VEHICLE
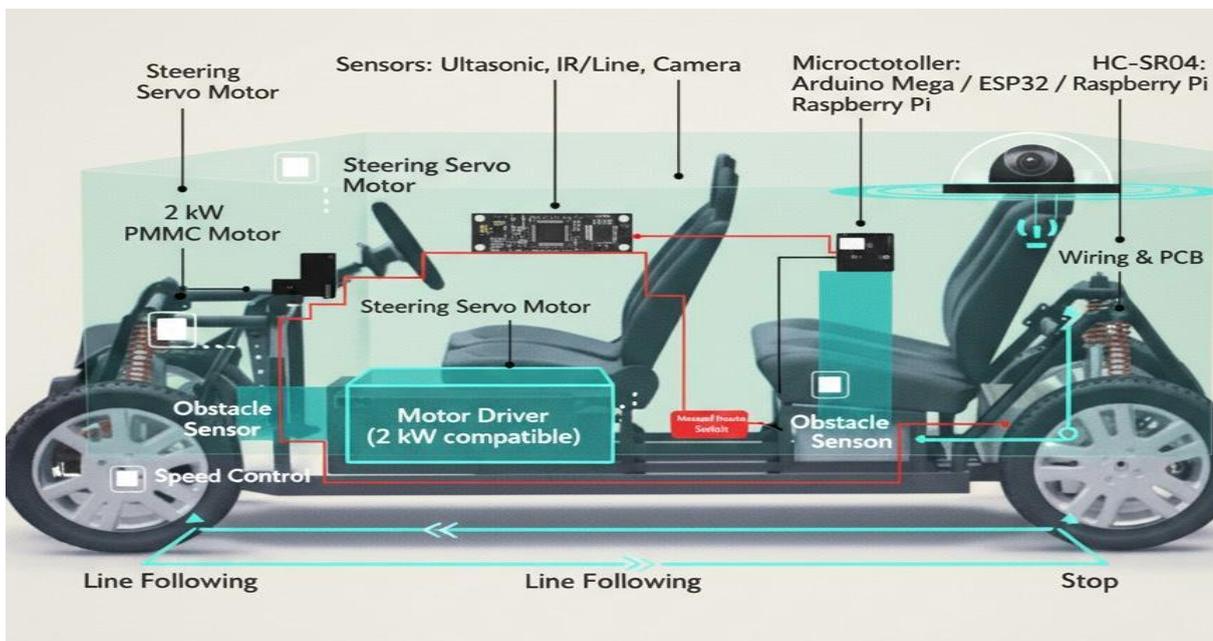
While electric vehicles offer environmental benefits, human-driven systems are still prone to errors,

limiting safety and efficiency. There is a need for intelligent autonomous systems that can assist or control vehicle operation under specific conditions. This project aims to address this challenge by implementing a Level-2 autonomous system on the developed EV platform, enabling sensor-based perception, real-time decision-making, and controlled vehicle operation to enhance safety, reliability, and smart mobility in controlled environments.

> **LOAD AUTOMATION USING RADAR SENSOR:**
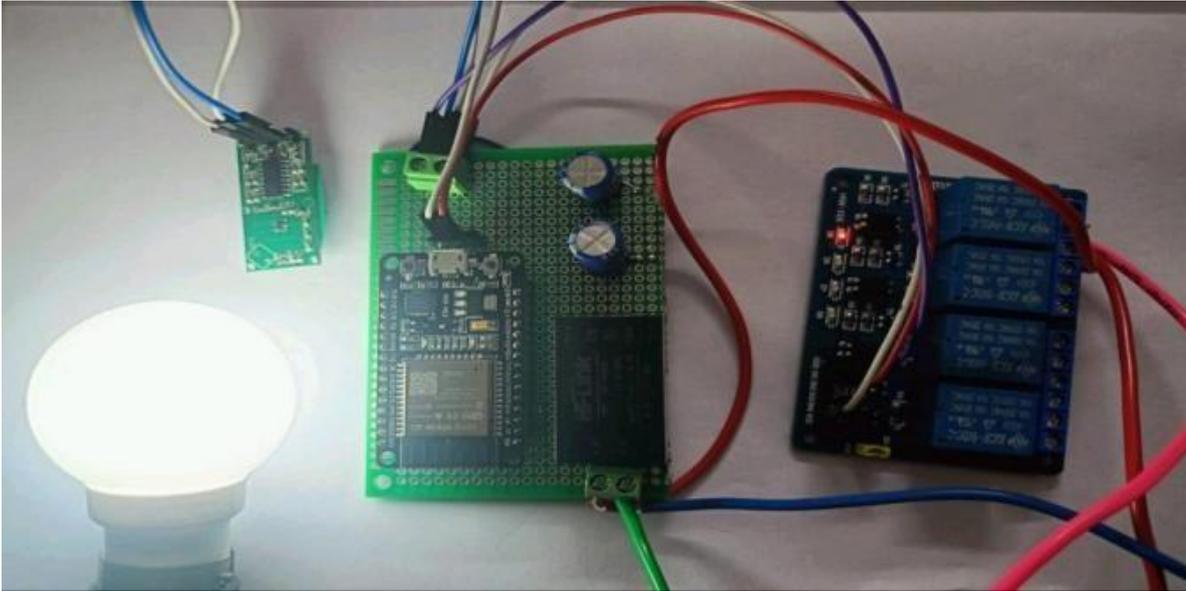
Generally we control Electrical appliances like light,fans using switches directly by switching ON or OFF.This research paper explores about the designing a controller by merging IoT Technology, advanced sensors, and Aurdino-based automation. Now, the Internet of Things integration into modern automation has transformed home and industrial systems. This project is aimed at developing a smart automation of loads using NodeMCU, WiFi dashboard, Blynk application, and relay modules. This system allows users to control electrical appliances remotely using a smartphone or web interface due to its ability to enhance ease of use, energy efficiency, and user control.

Above are some working models for the SSDC EEE department. These can be aligned with current trends in electrical engineering and can also support **Project-Based Learning (PBL)** and **Sustainable Development Goals (SDGs)**

List of Papers Published in Journals/Conferences

S.No	Name of the Author	Title of Paper	Name of Journal	Year
1	S.V.SATYANARAYANA	Three Phase fault Rectification using Multi Functional	IJRAT	2019
2	I.RANJITH			
3	K.ARUN			
4	N.KIRAN KUMAR			
5	S.V.SATYANARAYANA	Review Paper on PLC and its applications in industrial	IJRCS	2020
6	G. SAI RAJASRI			
7	P.MADHAVI	Automated Irrigation System using PLC	IJCRT	2020
8	BALAPURAM AARTHI REDDY			
9	BODDU NANDINI			
10	GINNARAM VYSHNAVI			
11	P. VIJAYA LAKSHMI			
12	S.V.SATYANARAYANA	Motor Controlling in Industries Using PLC	JES	2020
13	P.MADHAVI			
14	B.SRINIVAS			
15	B.KASINADH			
16	S.V.SATYANARAYANA	Review Paper on PLC and its applications in industrial	IJRCS	2020
17	S.V.SATYANARAYANA	Automation of Parking slot system Analysis with	Solid State Technology	2020
18	G. SAI RAJASRI			
19	AALA MADHU	Control Scheme and Performance Analysis of Dual- Frequency Single-Phase Grid-Connected inverter interfaced with Weak and	Mukt Shabd	2021
20	KUNTE NAVYA SRI			
21	RANGRECE VINAY			
22	MOHAMMED ADIL			
23	MOHAMMED MOIZ UDDIN			
24	B.Dheeraj	Design and Fabrication of customized	IJAEMA	2021
25	S.Devender			
26	S.Anirudh			
27	Ramu			
28	K. Abhishek Kumar	MONITORING OF STREET LIGHTS USING GSM	Mukt Shabd	2021
29	R.Hemalatha			
30	T.Sindhuja			
31	V.Devi Maha Lakshmi			
32	D.SWATHI	DC-DC Boost Converter Using Lab view	Mukt Shabd	2021
33	K.PRAVALIKA			
34	ABDUL GHANI			
35	T.ASMITHA			
36	B.SRINIVAS	IOT based Feeder Control	Mukt Shabd	2021
37	S.V.Sathyanarayana	Smart Bag for Womens Safety	Published in IEEE XPLORE	Mar-23
38	P.Madhavi			
39	B.Roshini			
40	P.Akash			
41	M.Bharath			
42	M.Sai Nikhil			

43	S.V.Sathyanarayana			
44	M.Manasa			
45	akanksha			
46	B.vishwanth	Iot based college bus tracking System	Published in IEEE XPLORE	Mar-23
47	anil			
48	P.Madhavi	MultiFunctional Electric Bicycle	International Conferences Advances in Electrical & Electronics Engineering	Feb-23
49	S.V.Sathyanarayana			
50	E.Chakra Harish			
51	L. Sindhu Sri			
52	P.Sai kiran Reddy			
53	B.Sangamesh			
54	S.V.Sathyanarayana	Big Data Analytics for Electrical Systems using Machine learning Algorithms	TEMSTET & Published in W3S	Feb-23
55	P.Madhavi			
56	Pillalamarri Madhavi	Prediction of Power and Current for Self Charging E-Bicycle Using Machine Learning Algorithms	ICPEEV-2024& Published in IEEE XPLORE	26-28 Sep 2024
57	Salava V Satyanarayana			
58	Pillalamarri Madhavi	Prediction of Voltage Discharge for Electric Tricycle Using Machine Learning Algorithms	ICPEEV-2024& Published in IEEE XPLORE	26-28 Sep 2024
59	Salava V Satyanarayana			
60	Pillalamarri Madhavi	Effectiveness of a PBL curriculum in Preparing Electrical Engineering Students for Industry through SSDC	RRSPBL-2024& Published in JEET	19-21 Dec 2024
61	Salava V Satyanarayana			
62	Salava V Satyanarayana	Life Guardian: Enhancing Health Awareness Through Sensor Fusion	ICSGET-2024	July 2024
63	Pillalamarri Madhavi			
64	K.Sathwika			
65	Shaik Abdul Adil			
66	Arthi			
67	L.Suman			
68	Dr.O.P.Suresh	Solar Wireless Electric Vehicle Charging System	ICSGET-2024	July 2024
69	Salava V Satyanarayana			
70	P Hema Bindhu			
71	K.Anand			
72	N.Srujith Kumar			
73	V.Sujith			
74	Pillalamarri Madhavi	IoT & Sensor-Driven Automation in Streamlined Lab	PICET 2024	Oct 2024
75	Salava V Satyanarayana			
76	Yashwanth Sannidhi			
77	Uday Kiran Mamindla			
78	Mahesh Babu Puttapaka			
79	Mangali Shiva Kumar			
80	Pillalamarri Madhavi	Compact High Efficiency Power Inverter System	Industrial Engineering Journal	Feb 2025
81	Salava V Satyanarayana			
82	Rohit Kumar			
83	Mali Kailash			
84	T.Vinay Kumar			

85	Pillalamarri Madhavi			
86	Salava V Satyanarayana			
87	Lingala Akanksha	Creation of Web Page for SSDC	Industrial Engineering Journal	Apr 2025
88	Mankali Akshitha			
89	Ramagiri chandra Saicharan			
90	Gunji Poojitha			
91	Salava V Satyanarayana			
92	Pillalamarri Madhavi			
93	Sindhuja	RADAR-DRIVEN AUTOMATION	Industrial Engineering Journal	Apr 2025
94	Bharath			
95	Sai Priya			
96	Pranay			
100	Salava V Satyanarayana		International Journal of Engineering Science and Advanced Technology (IJESAT)	Aug 2025
101	AkhilSai Vodnala			
102	Rapelli Sandeep	Smart Laboratory Real Time Monitoring and Prediction		
103	Md.Wasim Akhram Ali			
104	S.Sandeep Reddy			
105	Pillalamarri Madhavi			
106	Pillalamarri Madhavi	Prediction of energy requirement and supply using supervised machine learning algorithms	AIP Conference Proceedings	Sep 2025
107	Salava V Satyanarayana			

Certified Trainers :

S V Sathyanarayana (Centre I/C)

Mr. Salava V. Satyanarayana is an Associate Professor in the Department of Electrical and Electronics Engineering at Hyderabad Institute of Technology and Management (HITAM), Hyderabad, India, and is currently pursuing his Ph.D. in Electrical and Electronics Engineering at Acharya Nagarjuna University College of Engineering and Technology. His research focuses on power systems, high-voltage applications, and machine learning-based prediction models. He has published more than 20 research articles in reputed journals and conferences and holds three patents related to electric vehicles. His areas of interest include high-voltage engineering, smart grids, renewable energy integration, machine learning applications in power systems, and IoT-enabled energy solutions.
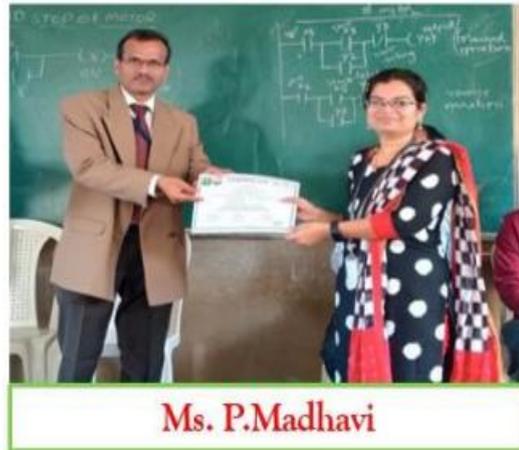
Ms. P.Madhavi

Ms.P.Madhavi is an Assistant Professor in the Department of Electrical and Electronics Engineering at Hyderabad Institute of Technology and Management (HITAM), Hyderabad, India, and is currently pursuing her Ph.D. in Electrical and Electronics Engineering at Jawaharlal Technological University,Hyderabad.Her research focuses on Power Electronics,Electric Vehicles and AI based prediction models. She has published more than 15 research articles in reputed journals and conferences and holds three patents related to electric vehicles. Her areas of interest include Renewable energy and Electric Vehicle integration with Artificial Intelligence applications.

Technical Talks@SSDC EEE Center:

Technical talk on Electric Mobility Wheel Chair

Talk on Entrepreneurship for Economic Empowerment(EAP) with CITD,Hyderabad

WORKSHOPS :

Two-Day Workshop on Real Time Applications of Sensors with IOT

Two-Day Workshop on Optimizing Industrial Processes: A Hands-on SCADA Workshop

Receiving Top performer - PLC certification

Receiving Best paper Award- NCRCEST

Receiving Best Project Team - PLC certification

- ✓ Industry-Relevant Curriculum

- ✓ Focus on Practical Skills

- ✓ Flexible Learning Options

- ✓ Practical Teaching Methodologies

- ✓ Continuous Skill Upgradation

Student Testimonials

It's a great place to grab knowledge with the experience teacher and with proper guide lines. Specially in PLC course we learned how to work on actual industrial projects. Now I am very confident to face the interviews of core companies. Thanks to SSDC.

G.Sai Rajasri

SSDC helped me to learn the new electrical technologies like MATLAB and PLC. It gave me a confidence to do my mini and major projects in my academic curriculum. I personally suggest to all if you want to learn and get your first job in electrical industry, be a student of SSDC training.

Ashish

Planned activities for the Upcoming year (2026-2027):

S NO	Name of Planned Activity	Expected Outcome
1	Training on ARDUINO INTERFACING WITH TINKERCAD, PLC, PYTHON	Students acquire comprehensive knowledge and practical abilities in critical industry skills.
2	Guest Lectures by Industry Professionals	Students gain insights into emerging technologies and career paths in Electrical & Electronics Engineering.
3	Workshops on IoT, Industrial Automation	Students acquire practical skills and hands-on experience with industry-relevant software and hardware.
4	Student-Led Tech Talks	Students enhance their understanding of recent advancements and develop communication skills by presenting on relevant topics.
5	Semester-Long Skill-Based Projects	Students apply learned skills to solve real-world engineering problems, fostering critical thinking and problem-solving abilities.
6	Industry Visits to Companies Using Taught Technologies	Students gain exposure to practical applications of the technologies learned in the Skill Development Center.
7	Internal & Inter-Collegiate Skill Development Competitions	Students showcase their acquired skills, receive feedback, and gain valuable competitive experience.
8	Mentorship Program	Senior students provide guidance and support, promoting knowledge sharing and fostering a supportive learning environment.
9	Attending International Conferences to present their work	Students gain exposure to cutting-edge research, network with professionals, and broaden their understanding of the field.