



Dec 2022, Volume 11.

The Right Spark



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



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From Editor's Desk:

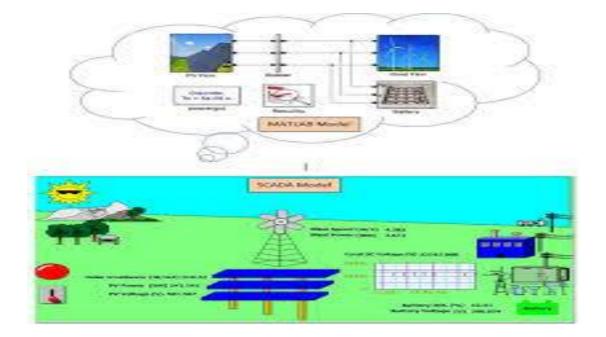
The evaluation of the IOT in the electrical power industry transformed the way things performed in usual manner. IOT increased the use of wireless technology to connect power industry assets and infrastructure in order to lower the power consumption and cost. Some of the examples of IOT usage include SCADA, smart metering, building automation, smart grid, and connected public lighting.



SCADA_is one of the major application areas of IOT. SCADA allows the centralized monitoring and control of remote located generation and transmission systems. It consists of sensors, actuators, controllers and communication devices at the remote field place, and central master unit with communication systems at the controlling side. It collects the data from sensors in the field and provides a user interface in HMI at central station. Also, it stores the time-stamped data for later analysis.

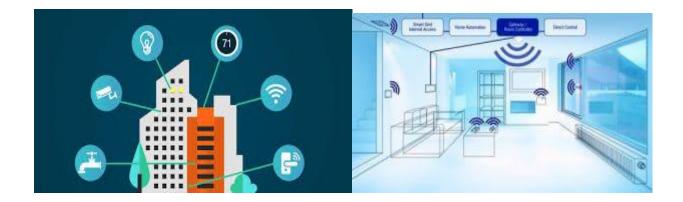


IOT SCADA is a step beyond SCADA that has been in use from earlier days. It provides realtime signal acquisition and data logging through IOT servers and internet technologies. It integrates the individual devices, machines, sensors and other electrical equipment with internet by realizing the functionality of supervision and control.

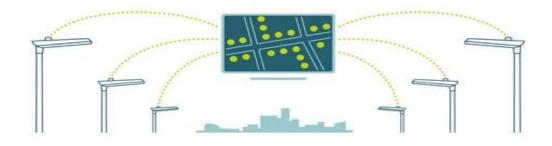


Building Automation

IOT based solutions enable the efficient way of monitor and control of buildings to property owners as they connect lighting systems, elevators, environmental systems and other electrical appliances with internet and communication technologies. It saves the power consumption by automatically turning off the lights when rooms are not occupied and also by making sure of not drawing too much power by appliances. IOT based appliances provide remote monitoring and control through mobile and web applications to the end users or owners. IoT sensors can monitor air quality, humidity, temperature, and other metrics to help identify and address issues before they become health hazards. IoT can adjust lighting levels based on the time of day to mimic natural light.



Connected Public Lighting



This is the part of a project under smart cities where wireless IOT solutions are deployed to connect IP based lights. This smart public lighting uses intelligent-connected outdoor LED luminaries which are centrally controlled from the control station. This type of infrastructure also facilitates dynamical adjustment of illumination based on environmental changing conditions. This would dramatically result lower operating costs and power consumption.



INSTITUTE VISION & MISSION

Vision

To produce eminent and ethical engineers and managers for society by imparting quality professional education with emphasis on human values and holistic excellence.

<u>Mission</u>

IM1	To incorporate benchmarked teaching and learning pedagogies in curriculum.
IM2	To ensure all round development of students through judicious blend of curricular, co-curricular and extracurricular activities.
IM3	To support cross-cultural exchange of knowledge between industry and academy
IM4	To provide higher/continued education and research opportunities to the employees of the institution.

DEPARTMENT VISION & MISSION

Vision

Excel in education, research and technological services in electrical engineering.

Mission

DM1	Impart quality education to produce globally competent engineers and successful entrepreneurs for meeting the current and future needs of power industry.
DM2	Engage in research and development in cutting edge and sustainable technologies.
DM3	Enhance industrial collaboration and professional ethics to serve the society.

Program specified Outcomes (PSO'S):

PSO1	Able to utilize the knowledge of Power Electronics in collaboration with Electrical Machines to provide an engineering solution in the areas related to Electrical Drives.
PSO2	To develop new cutting edge Technologies in Power Systems associated with efficient conversion and control of electrical power.
PSO3	Able to use software for design, simulation and analysis of electrical systems.

WORKSHOPS:

1. <u>A Five days Workshop on Value added course on IOT based sensors and wire less</u> evaluation organized by ACIIT team from 11-10-2022 to 15-10-2022:-

The Department of EEE organized a Five day Workshop on Value added course on IOT based sensors and wireless evaluation from "11-1-2022 to 15-10-2022 by **ACIIT team for IV-1 & III-I students** A workshop focusing on IoT-based sensors would typically result in participants gaining practical skills in interfacing various types of sensors with microcontrollers, understanding data collection and transmission protocols, developing basic IoT applications, and acquiring knowledge about cloud platforms for data storage and analysis, all while learning how to design and build simple IoT projects using sensors to monitor real-world conditions; essentially, providing a hands-on understanding of how to utilize sensors within an interconnected IoT system.



2. A Five day Workshop on IOT based sensors organized by ACIIT team from 11-10-2022 to 15-10-2022:

The Department of EEE organized a Five day Workshop on Value added course on IOT based sensors and wireless evaluation from "11-1-2022 to 15-10-2022 by **ACIIT team** for **II-I students.** They discussed about

- (a) Identifying suitable sensor types for various IoT applications based on parameters like accuracy, range, power consumption.
- (b) Understanding different wireless communication protocols (e.g., Zigbee, LoRaWAN, Bluetooth LE) and their suitability for IoT sensor networks.
- (c) Familiarity with network topologies (mesh, star, tree) and their implications for sensor network design.
- (d) Implementing basic sensor data processing algorithms on embedded platforms.



<u>GUESTLECTURES</u>

1. A Guest Lecture on Advanced switch gear was organized by Mr.Madan Kumar (HIEE,Hyderabad) on 7-11-2022 for IV B.Tech II sem. Key takeaways from a guest lecture on switchgear and protection included

(a) The critical role of switchgear in maintaining system stability and reliability by isolating faults.

(b) The importance of selecting appropriate protective relays based on fault characteristics and system design.

(c) The need for proper coordination between protective devices to achieve selective tripping.

(d) The ongoing development of advanced protection technologies to enhance system performance.



2. A Guest Lecture on Guest Lecture on "Career opportunities after B.Tech" -was organized by Department of EEE on September 20th 2022. The lecture began with a brief introduction of the resource person Mr. Aditya, Motivational speaker and faculty of ACE Engineering Academy. The session began with a brief overview of the importance of competitive exams (ESE/GATE/PSUs) and how conceptual knowledge of students is important for attaining success at these exams. The session aimed at highlighting the major career opportunities after completing B.tech and also how to prepare for campus recruitment and how to get a core job. Discussion was carried out on different career options available after B.Tech. Guest Speaker also emphasized on the significance of personal grooming, body language and mannerism to be adopted before appearing for an interview. The session ended with an interactive question answer session. The lecture has proven to be very inspiring and informative for the students.



RESULTS

I YEAR II SEM TOPPERS:

Sno	Regd.No.	Name of the Student	CGPA
1	21JR1A0219	GOVATHOTI RATNA BABU	8.92
2	21JR1A0210	PATHAN SUMAYYA	8.85
3	21JR1A0206	GUNTAKA PAVANI	8.85

II YEAR II SEM TOPPERS:

Sno	Regd.No.	Name of the Student	CGPA
1	21JR5A0205	VEDURUPARTHI MANASA	8.74
2	21JR5A0211	PREM KUMAR GUNTOTI	8.70
3	20JR1A0202	ANGIREKULA LAVANYA	8.70

III YEAR II SEM TOPPERS:

Sno	Regd.No.	Name of the Student	CGPA
1	18JR1A0238	PASAM RAJESH	12.50
2	19JR5A0202	ULLANGULA GOWRI	12.50
3	18JR1A0241	REDDY SATISH	12.33

STUDENT PARTICIPATION OUTSIDE THE

<u>COLLEGE</u>

1. CH.Harika (20JR5A0201) participated in **IDEATHON** held at VR SIDDHARTHA ENG.COLLEGE and won 1st prize.

PLACEMENTS

S.NO	ROLL NO	NAME OF THE STUDENT	ON / OFF CAMPU S PLACE MENT	NAME OF THE EMPLOYER	CTC(LPA)
1.	18JR1A0214	M.PRAVALIKASAI SREE	ON	HCL	4.0 LPA
2.	18JR1A0222	RAMINENISRAVANI	ON	HCL	4.0 LPA
3.	18JR1A0233	GUNTUPALLIBHANU PRAKASH	ON	HCL	4.0 LPA
4.	18JR1A0203	BEJJADA BINDUPRIYA	ON	TCS	4.0 LPA
5.	18JR1A0209	KATTA LAKSHMI PRIYANKA	ON	TCS	4.0 LPA
6.	18JR1A0217	N.DHARANIPRASANTHI	ON	TCS	4.0 LPA
7.	18JR1A0219	PASUPUKETI SAIJYOTHI	ON	TCS	4.0 LPA
8.	18JR1A0251	VEMALA PRASANTHBABU	ON	TCS	4.0 LPA
9.	18JR1A0218	P.LAKSHMI VASUNDHARA	ON	ZENSAR	4.0LPA

10.	18JR1A0203	BEJJADA BINDU PRIYA	ON	INFOSYS	4.0 LPA
11.	18JR1A0210	KORRAPAI PRIYANKA	ON	INFOSYS	4.0 LPA
12.	19JR5A0205	KAKANI KRISHNA	ON	WIPRO	3.75LPA
13.	18JR1A0242	ARSHAD AHEMAD SHAIK	ON	WIPRO	3.75LPA
14.	18JR1A0204	CHIMATA LAKSHMITRIVENI	ON	WIPRO	3.75LPA
15.	19JR5A0202	GOWRI ULLANGULA	ON	WIPRO	3.75LPA
16.	18JR1A0205	ANUSHA DEVABHAKTUNI	ON	WIPRO	3.75LPA
17.	18JR1A0208	GUDIPATI YASHODAPRIYA	ON	WIPRO	3.75LPA
18.	19JR5A0205	KAKANI KRISHNA	ON	WIPRO	3.75LPA
19.	18JR1A0237	NUTANGI VINAY KUMAR	ON	WIPRO	3.75LPA
20.	18JR1A0251	PRSANTH BABU VEMALA	ON	WIPRO	3.75LPA
21.	18JR1A0210	KORRAPATI PRIYANKA	ON	WIPRO	3.75LPA
22.	18JR1A0219	SAI JYOTHI PASUPULETI	ON	WIPRO	3.75LPA
23.	18JR1A0246	SHAIK SOHAIL	ON	WIPRO	3.75LPA
24.	18MG1A0211	THEMPALLI SRAVYA SRI	ON	WIPRO	3.75LPA

25.	18JR1A0206	GADDE NAGA SRAVANI	ON	WIPRO	3.75LPA
26.	18JR1A0201	A.MOUNIKA	ON	WIPRO	3.75LPA
27.	18JR1A0203	BEJJADA BINDU PRIYA	ON	WIPRO	3.75LPA
28.	18JR1A0207	K.DIVYA	ON	WIPRO	3.75LPA
29.	18JR1A0214	M.PRAVALIKASAI SREE	ON	WIPRO	3.75LPA
30.	18JR1A0223	SHAIK KARISHMA	ON	WIPRO	3.75LPA
31.	18JR1A0226	A.SRINIVAS	ON	WIPRO	3.75LPA
32.	18JR1A0231	G.SAI KRISHNA REDDY	ON	WIPRO	3.75LPA
33.	18JR1A0236	N.SYAM KUMAR	ON	WIPRO	3.75LPA
34.	18JR1A0207	GADE VENKATA RAMANA	ON	CAPGEMINI	3.75LPA
35.	18JR1A0209	KATTA LAKSHMI PRIYANKA	ON	CAPGEMINI	3.75LPA
36.	18JR1A0211	KOTU SUPRIYA	ON	CAPGEMINI	3.75LPA
37.	18JR1A0239	POTHAKAMUR IBHARGAV	ON	CAPGEMINI	3.75LPA
38.	18JR1A0201	A.MOUNIKA	ON	DXC TECHNOLOG Y	3.6 LPA
39.	18JR1A0209	K.LAKSHMI PRIYANKA	ON	DXC TECHNOLOG Y	3.6 LPA

40.	18JR1A0225	T.KRISHNA MADHURI	ON	DXC TECHNOLOG Y	3.6 LPA
41.	18JR1A0202	A.PRIYANKA	ON	DXC TECHNOLOG Y	3.6 LPA
42.	18JR1A0208	G.YASODHA PRIYA	ON	DXC TECHNOLOG Y	3.6 LPA
43.	18JR1A0241	REDDY SATISH	ON	DX C TECHNOLOG Y	3.6 LPA
44.	19JR5A0204	GUDURU VIJAYA RAM	ON	DXC TECHNOLOG Y	3.6 LPA
45.	18JR1A0235	LALA PAVAN KALYAN	ON	DXC TECHNOLOG Y	3.6 LPA
46.	18JR1A0220	P.HARI CHANDANA	ON	MPHASIS	3.6 LPA
47.	18JR1A0223	SHAIK SHANU	ON	MPHASIS	3.6 LPA
48.	18JR1A0221	R.JYOTHI SWEASHIKA	ON	MPHASIS	3.6 LPA
49.	18JR1A0237	N.VINAY KUMAR	ON	MPHASIS	3.6 LPA
50.	18JR1A0247	S.V.R.SAI VIGNESH	ON	MPHASIS	3.6 LPA
51.	18JR1A0248	T.RAM CHARANSAI	ON	MPHASIS	3.6 LPA
52.	18JR1A0211	KOTU SUPRIYA	ON	SAVANTIES	1.8 LPA
53.	18JR1A0214	M.PRAVALIKA SAI SREE	ON	SAVANTIES	1.8 LPA
54.	18JR1A0234	K.AKASH	ON	SAVANTIES	1.8 LPA

55.	18JR1A0244	SHAIK MANSOOR JANI	ON	SAVANTIES	1.8 LPA
56.	19JR5A0207	PALLEPAGA SAKETH	ON	SAVANTIES	1.8 LPA
57.	18JR1A0238	PASAM RAJESH	ON	SLAP	1.8LPA
58.	18JR1A0249	VAMSI KRISHANA THOKALA	ON	SLAP	1.8LPA
59.	19JR5A0206	MADASU VAMSI VARMA	ON	SLAP	1.8LPA
60.	19JR5A0208	PRABHAKAR PERAVALI	ON	SLAP	1.8LPA
61.	19JR5A0209	SIVA MAHENDRA SANDALA	ON	SLAP	1.8LPA
62.	18JR1A0228	BOGEM SATISH	ON	SLAP	1.8LPA
63.	19JR5A0208	PRABHAKAR PERAVALI	ON	NVH	1.8LPA
64.	19JR5A0206	MADASU VAMSIVARMA	ON	NVH	1.8LPA
65.	18JR1A0232	GUNTAKA PAVAN KUMAR REDDY	ON	NVH	1.8LPA
66.	19J15A0250	DEVARI NAGARJUNA	ON	NVH	1.8LPA
67.	18JR1A0233	SHAIK MOHAMMADAKRAM	ON	NVH	1.8LPA
68.	18JR1A0240	PULIMADDI VIJAY KUMAR	ON	NVH	1.8LPA
69.	18JR1A0233	GUNTUPALLIBHANU PRAKASH	ON	KPIT	1.8LPA

S.No	Name of the Faculty	Designation	Area of Specialization	Date of Joining
1	M.RajaNayak	Assistant Professor	High voltage Engineering	1-7-2022
2	K.Vasanthi	Assistant Professor	Power Electronics	1-7-2022
3	J.Santhi Kanakadurga	Assistant Professor	Power Electronics	1-7-2022
4	T.NagaRaju	Assistant Professor	Power Systems	1-7-2022
5	A.Gamyaveni	Assistant Professor	Power Systems	28-8-2022

NEW FACULTY RECRUITMENT

FDPS/WORKSHOPS/WEBINARS ATTENDED

S.NO	Name of the Faculty	Title of the FDP	No. of Days	Organization address	Date of the FDP / Work Shop / STTP / Webinar	Category
1	M. Raja Nayak	Research, Publication and Patent in Humanities and Sciences,	8	SRM Institute of Science And Technology, Ramapuram Campus, Chennai-600089	22nd to 30th August 2022.	FDP
2	M. Raja Nayak	Accreditation and Outcome Based Education	8 Weeks	IIT Madras	Aug-Oct, 2022.	FDP
3	T.Nagaraju	Emerging Technologies in Electrical Engineering	7	PACE Institute of Technology & Sciences, Ongole.	28 Nov to 2 nd Dec, 2022.	FDP
4.	M. Raja Nayak	Emerging Technologies in Electrical Engineering	7	PACE Institute of Technology & Sciences, Ongole.	28 Nov to 2 nd Dec, 2022.	FDP
5.	Y.Rajesh Babu	Emerging Technologies in Electrical Engineering	7	PACE Institute of Technology & Sciences, Ongole.	28 Nov to 2 nd Dec, 2022.	FDP

6.	J.Santhi Kanaka durga	Design and Modelling of IOT, AI &ML Systems	5	ATAL Academy, AICTE	1-5, Aug, 2022	Work Shop
7.	K.Vasanthi	Design and Modelling of IOT, AI &ML Systems	5	ATAL Academy, AICTE	1-5, Aug, 2022	Work Shop
8.	M. Raja Nayak	Adaptive Control Schemes for Grid-Tied Inverters to Improve Power Quality of Micro-Grid Systems	1	SRM TRP Engineering college, Trichy	17.08.2022.	Webinar

COLLEGE CENTRAL EVENTS

1. Awareness program on Breast cancer was organized on behalf of EEE department by Dr. Tarun Gogineni, Surgical Oncologist on 18-10-2022.

