BHARAT
Institute of Engineering and Technology
Approved by AICTE, Affiliated to JNTUH & Accredited by NAAC
Ibrahimpatnam, Hyderabad, Telangana—501510

Bharat Oorja

Annual News Letter—2018-19

Department of Electrical & Electronics Engineering

Inside This Issue

Editorial Board

OUR PROFESSIONAL CHAPTERS

IEEE ISTE

IMPARTING VALUE BASED EDUCATION

Vision of the Institute

To achieve the Autonomous & University status and spread universal education by inculcating discipline, character and knowledge into the young minds and mould them into enlightened citizens

Mission of the Institute

Our mission is to impart high quality education, in a conducive environment, as comprehensive as possible, with the support of all modern technologies and make the students acquire the ability and passion to work wisely, creatively and effectively for the betterment of our society.

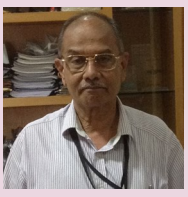
Chairman's Message

The Vision and Mission of Bharat Institute of Engineer-ing & Technology enable the Management to train the stu-dents as good professionals and responsible citizens. The institution relentlessly striving to provide all necessary inputs to enhance their employability and make them wholesome personalities.

Principal's Message

I am extremely happy to release our college newsletter "**Bharat Oorja**". Through this newsletter, the students and their parent along with industries and various share-holders shall observe complete transparency in our day-to-day programmes.

OUR EMINENT DIRECTORS



Prof. G. Kumaraswamy Rao, Director (R&D), BIET

Dr. B. Prasada Rao, Ph.D., I.P.S. Retd.), Director of Training & Placements

Dr. R. Sreehari Rao, Director R & D, Professor of ECE, BIET

Dr. Subir Kumar Chaudhuri, Distinguished Prof. of EEE, BIET

ABOUT EEE DEPARTMENT

The department of Electrical and Electronics Engineering aims at producing qualified engineers in the areas of Power Systems, Power electronics, renewable energy systems, signal processing, control and instrumentation. The application of computational intelligence and electronics cannot be neglected in the advancement of power systems operation and control. The department is well equipped with a group of highly qualified and dynamic teachers. It boasts of laboratory facility to be one of the best in the state. The students are encouraged and motivated to take up challenging projects. Summer training, industrial visits and projects are carefully planned for the students to remain updated with the technology trend. Seminars and short term courses are regularly organized to update the students with latest in the education and industry trends .

B. Tech - Electrical and Electronics Engineering (EEE)

The B.Tech program in Electrical and Electronics Engineering (EEE) was started in the year 2001 with an intake of 60, enhanced to 180 in 2015.The main focus of the department is to produce graduates & post graduates with strong fundamentals in Electrical and Electronics Engineering (EEE) domain. The course was accredited by National Board of Accreditation (NBA) in 2007 with duration of 3 years. The department comprises well qualified faculties.

M. Tech - Electrical Power Engineering (EPE)

M. Tech (Electrical Power Engineering (EPE)) is a two year full time post-graduate programme approved by the All India Council of Technical Education (AICTE) for the students who have a B.E / B. Tech in any branch of engineering. The course is offered by the Department of Electrical & Electronics Engineering by highly qualified and experienced teaching faculty. Intake to this course is 18, selected by J N T University by common Entrance Test. A dedicated project work is taken up by every student for the next two semesters. The project work is of high quality basing used in current industry practices. Project work is supported by leading Electrical Industries and Defence laboratories doing state of art research and development.

M. Tech - Power Electronics and Electrical Drives (PEED)

M. Tech (Power Electronics & Electrical Drives) is a two year full time post-graduate programme approved by the All India Council of Technical Education (AICTE) for the students who have a B.E / B. Tech in any branch of engineering. The course is offered by the Department of Electrical & Electronics Engineering by highly qualified and experienced teaching faculty. Intake to this course is 18, selected by J N T University by common Entrance Test.

VISION AND MISSION — DEPARTMENT OF EEE

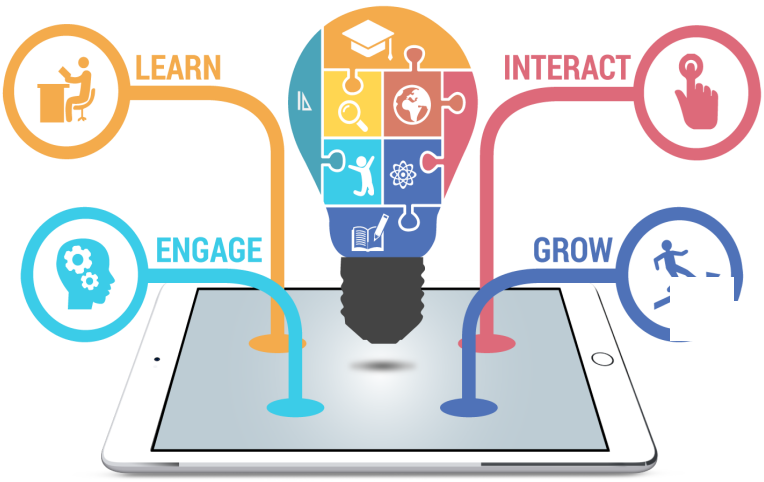
Vision of the Department of Electrical and Electronics Engineering

To impart engineering education of the highest order, producing technically competent and socially responsible engineers.

Mission of the Department of Electrical and Electronics Engineering

To give advanced knowledge and training to students, enabling them to acquire the necessary technical and soft skills that are essential for a career in engineering and management

To make the teaching-learning process exciting and effective by creating the necessary facilities for the same.



OBJECTIVES AND OUTCOMES — DEPARTMENT OF EEE

PROGRAM EDUCATIONAL OBJECTIVES

A graduate of the Electrical and Electronics Engineering Program should:

Program Educational Objective 1: (PEO1)

To prepare students with good foundation in mathematics, science and engineering fundamentals required to comprehend, analyze, formulate solutions for real life engineering problems and enable them to pursue higher studies and /or to find entry level positions in industries.

Program Educational Objective 2: (PEO2)

To teach effective communication skills, leadership, team work, multidisciplinary approach, and an ability to provide engineering solutions in a broader societal context.

Program Educational Objective 3: (PEO3)

To provide academic environment with an awareness of excellence, ethical codes and guidelines, and the lifelong learning needed for a successful professional career.

PROGRAM OUTCOMES (POs)

Graduates from accredited program must achieve the following learning outcomes, defined by broad areas of learning.

PO1:Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2:Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3:Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4:Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5:Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6:The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7:Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8:Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9:Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10:Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11:Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

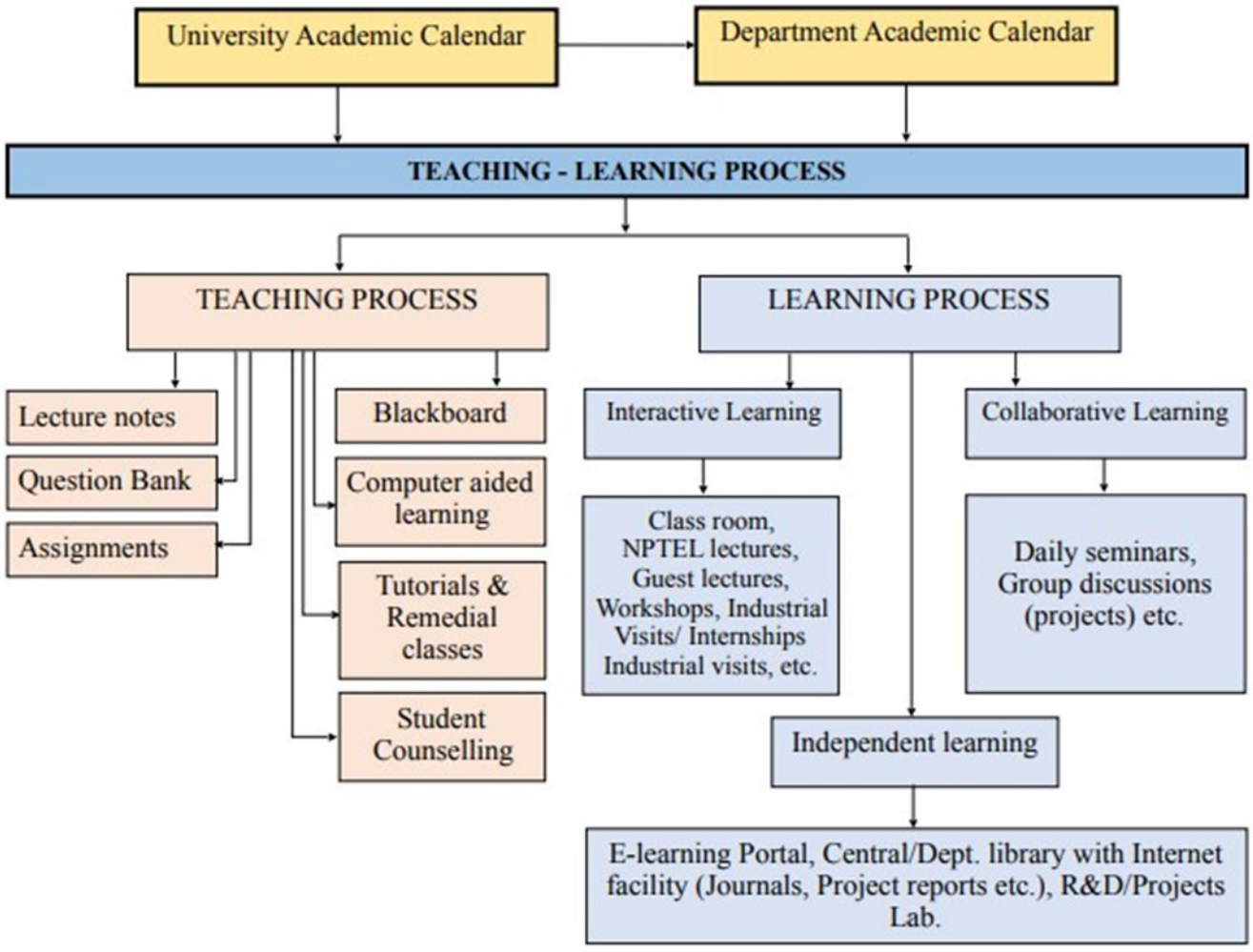
PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Talented to analyze, design, and implement electrical & electronics systems and deal with the rapid pace of industrial innovations and developments.

PSO2: Skillful to use application and control techniques for research and advanced studies in Electrical & Electronics Engineering domain.

DEPARTMENTAL TEACHING—LEARNING PROCESS

Department of Electrical and Electronics Engineering has a planned Teaching – Learning process to create an effective learning environment for the student community and a dynamic teaching platform for the faculty members. The detailed Teaching – Learning process is presented below.



The pedagogic activities of the department aim at student empowerment and improving overall skill set of students. Despite the above mentioned practices, English language usage and campus recruitment training have been also given special attention in empowering student community. Importantly, we shape out Engineers form students at EEE Department, BIET by following a pedagogy that facilitates inception for innovations in the student community.

DEPARTMENT OF EEE– LIST OF FACULTIES (2018-19)

SNO	Faculty Name	Qualification	Designation	Date of Joining
1	Dr.S.K.Chaudhari	PhD	Professor	25/06/2015
2	Dr. John Arun Kumar	PhD	Professor	17/06/2013
3	Dr.Arul Prakash	PhD	Professor	12/06/2017
4	Dr. Sukhdeo Sao	PhD	Professor	13/08/2018
5	K.Srinivasa Rao	MTech,(PhD)	Assistant Professor	01/07/2014
6	G.Kamalaker Reddy	MTech, (PhD)	Assistant Professor	29/12/2014
7	Dr.Ch. Santhan Kumar	PhD	Assistant Professor	01/08/2017
8	T.Sukanth	MTech, (PhD)	Assistant Professor	11/12/2017
9	S.Suresh	ME,(PhD)	Assistant Professor	09/07/2018
10	Ramji Tiwari	MTech, (PhD)	Assistant Professor	05/07/2018
11	D.ChinnaKullay Reddy	MTech, (PhD)	Assistant Professor	20/06/2018
12	N.Nagasekhara Reddy	PhD	Assistant Professor	18/06/2018
13	K.Vinay Kumar Reddy	MTech	Assistant Professor	30/11/2015
14	Priyansu Chandan Behera	MTech	Assistant Professor	23/06/2017
15	S.Vijay	MTech	Assistant Professor	31/01/2017
16	Ch.Prashanthi	MTech	Assistant Professor	18/07/2017
17	G.Sumana	MTech	Assistant Professor	25/07/2017
18	P.Sravan Kumar	MTech	Assistant Professor	10/07/2017
19	U.V.S.R.Harisha	MTech	Assistant Professor	17/08/2017
20	S.Marlin	ME	Assistant Professor	18/06/2018
21	G.Abhilasha Reddy	MTech	Assistant Professor	30/06/2018
22	Dr N.Balaji	PhD	Associate Professor	25/08/2018
23	B.Vasanth Reddy	MTech	Assistant professor	11/06/2018
24	K.M.Perumal	MTech,(PhD)	Assistant professor	16/08/2018
25	B.Santhoshi Kumari	MTech	Assistant professor	20/08/2018
26	G.Karunakar Reddy	MTech	Assistant professor	20/08/2018
27	B.Vijaya Lakshmi	MTech	Assistant professor	27/08/2018
28	Dr. J.Bhagwan Reddy	PhD	Professor	12/07/2018
29	Dr. Madhirasan	PhD	Assistant professor	12/08/2018
30	A.Manoranjith Kumar	MTech	Assistant professor	30/01/2017
31	V Sampath kumar	MTech	Assistant Professor	05/11/2018
32	Y.V.Prashant	MTech,(PhD)	Assistant professor	17/12/2018
33	Basava Reddy	MTech	Assistant professor	17/12/2018
34	Pramod Kumar Gouda	PhD	Professor	28/12/2018

DEPARTMENT INITIATIVES

Dr. Subir Kumar Chaudhuri, FNAE, Senior LM-IEEE
Distinguished Professor, R&D Director, BIET
Vikram Sarabhai & PM Awardee
Visiting Professor, IIT-Bombay
Outstanding Scientist & Director Retd., RCI-DRDO
Workshop Chairperson, SET2K18

SET LAB

"Systems Engineering and Technology" is an interdisciplinary subject and means to enable the realization of successful systems. It focuses on defining customer needs and required functionality early in the development cycle, along with documenting requirements. It gives direction to proceed with design synthesis and defines system validation need by considering the complete problem.

Hence this workshop explore novel design techniques using State of The Art of the technology for Closed Loop Electronic Systems with Embeddded Applications The theme of the workshop is on Control System, Modelling & Simulation and Closed Loop Electonic System with Embedded Applications. "Hard RT Systems In Closed Loop Environment " with Autonomous Cars, Robotics & Aerospace Vehicles is a challenge and it is vital importance to industrial and national development. This will help us to build the state of the art Incubation Centre at BIET and bridging the gap between Academics and Industry. Presence of International Scientist Prof P.K Menon and leading DRDO technical lab RCI Dir, along with other specialists will enlighten further which was intiated last year by Dr V.K Saraswat , Dr G. Satheesh Reddy and Dr. Jaypal Reddy's presence in our ACPEES-2017 under leadership of Shri.Ch. Venugopal Reddy

The department of Electrical and Electronics Engineering has added one more feather to its cap through this workshop. Already, in EEE Department have progressed and as a first step we have organized National Conference on Advances In Control,Power,Energy & Electronic Systems(ACPEES-2017) in March 2017 in BIET and set up "System Engineering and Technology Lab"."Hands on Engineering" with Embedded Systems & Inverted Pendulum in Closed Loop Scenario is getting configured in collaboration with NI Systems.The 3D Printer with Techarness, Hyd and BIET Alumini has produced proto Gear Boxes in 10 Minutes. The IIT-M robots are driven by BIET softwares in SET lab, EEE & ECE departments along with RCI are working together to integrate Embedded Systems with BLDC Motors. Electronic Modular kit(Edge FX kits) available from professionals where used for various system Integration & study in the department.More than Ten student(B-Tech/ M-Tech) projects are worked out together with RCI & DRDO labs. We have executed a small Bio-Gas Plant for College Canteen and examining Waste-To-Electricity conversion projects in collaboration with Kumamoto University, Japan. Apart from other areas, we are also rapidly developing expertise in the use of world-class Power System Planning Tools. BIET is already in progress to complete a Massive Intelligent building with Solar Power which consists of EEE, ECE and CSE departments to have Concurrent Engineering Approach.

I firmly believe that this International Workshop will go a long way in facilitating a very fruitful interaction between the students, faculty, and experts from industry and academia and make a significant contribution towards our National Development, bringing in International acclaim and appreciation.

I strongly acknowledge the support extended by Avionics Society(ICAS) along with IEEE Hyderabad Section, Computer Society of India, Aeronautical Society of India , National Instruments Corporation and RCI with other DRDO labs

(S. K. Chaudhuri)

AIM: INTEGRATION AND CONTROL OF EMBEDDED ELECTRICAL SYSTEM WITH LAB VIEW SOFTWARE IN SET LAB, EEE-BIET (11-16th March,2019) FOR GENERATING INNOVATIVE IDEAS USING "HANDS ON ENGINNERING"

BIET, EEE Department has established a System Engineering and Technology Lab (SET) to facilitate the work on Control System, Embedded System with associated electronics. A suitable configuration was worked out in collaboration with NI-R&D Centre, Bangalore with Dr. S. K. Chaudhuri and his team, in the end of the year 2016. The finalized configuration was demonstrated in the National Conference conducted by EEE Dept., BIET in March 24th - 26th 2017. The equipment was demonstrated in the workshop in working condition by NI senior persons and Dr.S.K. Chaudhuri in presence of delegates like Dr. V. K. Saraswat, NITI AAYOG, permanent member along with Dr. Satish Reddy, Scientific Advisor, DRDO and many other top level Scientist, Industrialist and Academicians. Senior Directors of BIET were also present during the demonstration. Two standalone systems in Windows 10 and Ubuntu environment with i3 PC platform and associated IO's and software were installed in set lab in the end of 2018

In 2019 a Short Term Training Program- **STTP-2K19** has been worked out in **SET LAB of EEE Dept**. in consultation with **NBA coordinator**. In this direction, **Director R&D** has taken initiative to have a full scale STTP with faculties involved in SET LAB (09 members) as well as few other faculty members (10) and students (12) of **EEE** for this programme. And also some of **ECE** Faculty (06) and students (03); **CSE** Dept. Faculty (02) and students (02) and **other college participants** (06) attended for **"Integration and Control of Embedded Electrical System with Lab View Software". This "HANDS ON ENGINNERING" programme** will be useful for the participants (**total:50 members**) **Academic, Development and Research work leading to innovative solutions. This will also help us to get projects from R&D institutes and organizations which demands thorough Testing, Verification and Validation. Following objectives were met in this programme:**

1. NI System, MyRio Embedded Platform with full IOs and sensors along with an Inverted Pendulum for Embedded Control System Testing Verification and Validation is functional with LABVIEW SOFTWARE.

2. Robotic Platform with full IOs and sensors is also functional with LABVIEW SOFTWARE for diving ROBOT in various trajectory profiles.

3. DATA Acquisition System (MyDAQ) is also functional for collecting various data with number of sensors for necessary analysis and design with LABVIEW SOFTWARE and MyRIO embedded state of the art platform.

4. All Control System Tools were used for time response, frequency response, bode plot etc. with various P, PI, PID Controllers for both hardware plant (Inverted Pendulum etc.) as well as Software Model in Real Time.

5. All the necessary object and executable codes are available with SETLAB members and source code with necessary authentication will be available with Dr. SKC. This will facilitate to change control system design with necessary changes for Embedded Software. Further, the plant code will also be transferred to SETLAB as promised by NI System.

6. A perpetual license for LABVIEW etc. is given to SETLAB for two systems.

(Robotics kit)

(My Rio Platform)

(Inverted Pendulum)

(My DAQ)

Dr.S.K.Chaudhur
Distinguished Prof-EEE

SET Lab using LabVIEW software for design real time control systems to meet the demands of advanced civilizations

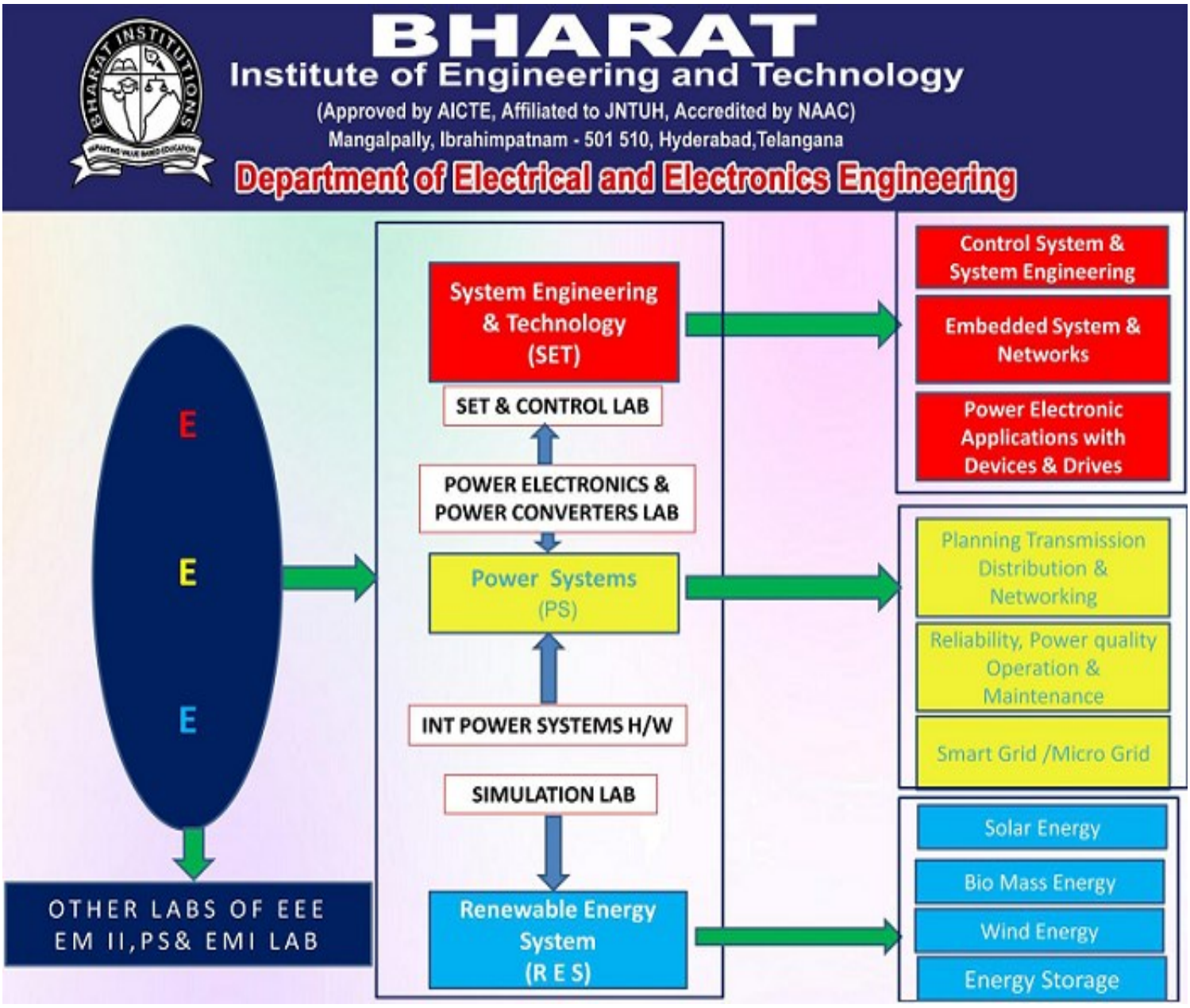
Laboratory Virtual Instrument Engineering Workbench (**LabVIEW**) is a system-design platform and development environment for a visual programming language from National Instruments. LabVIEW is systems engineering software for applications that require test, measurement, and control with rapid access to hardware and data insights.

Quanser Qube using LabVIEW MyRio:

DEPARTMENT OF EEE– RESEARCH FACILITIES

Department of EEE is actively engaging in research areas ranging from practical implementation to theoretical investigations. The main activity is to gear up B.Tech & M.Tech students under JNTUH curriculum through course and laboratory works in R&D direction. Department of EEE is subdivided into three areas like academic, development & research work and all these are being combined to achieve appropriate goals with the help of administrative support.

EEE DEPARTMENT R & D AREAS



The Development & Research group in consultation with the academic work schedule has broken-up the activities along with 10 specific subareas. These are supported by 9 laboratories. (Refer Figure 1.) This is further shown with charts for laboratory link and subject link as specified by JNTUH.

DEPARTMENT OF EEE– RESEARCH FACILITIES

R&D CHART with FOCUSED AREAS & LABORATORIES

S.No	Focused Areas	Specific Sub-areas of Research	Laboratories
1	System Engineering & Technology (SET)	1. System Engineering & Control system (with NI and other Embedded system). 2. Embedded System with Power Electronics for Control system & Networks (Edge FX Kits Automation). 3. Power Electronics applications with Devices, Drives and Embedded System.	1. Control Systems 2. Power Electronics* 3. Power Electronic Control of Drives
2	Power System (PS)	1.Power System Planning, Transmission, Distribution and Networking (Software tools, SCADA, etc.). 2. Reliability, Quality, Operation & maintenance of Power systems (Edge FX Kits Automation) 3. Smart Grid/ Micro Grid (Embedded System, etc.	1. Power System 2. Simulation 3. Electrical Machines-I 4. Electrical Machines-II 5. Electrical Measurements
3	Renewable Energy System (RES)	1. Solar Energy. 2. Biomass Energy. 3. Wind Energy. 4. Energy Storage.	1.Power Electronics*

R&D CHART WITH FOCUSED AREAS & RELATED COURSES

S.No	Focused Areas	Specific Sub-areas of Research	Subjects
1	System EngineerinSystem Engineering & Technology (SET)	1. System Engineering & Control system (with NI and other Embedded system) 2. Embedded System with Power Electronics for Control system & Networks (Edge FX Kits Automation) 3. Power Electronics applications with Devices, Drives and Embedded System	1. Control System 2. Modern Control Theory 3. Micro Processors & Interfacing Devices 4. Power Electronics 5. Static Drives 6. Embedded System Applications to Power Electronics
2	Power System (PS)	1.Power System Planning, Transmission, Distribution and Networking (Software tools, SCADA, etc.) 2. Reliability, Quality, Operation & maintenance of Power systems (Edge FX Kits Automation) 3. Smart Grid/ Micro Grid (Embedded System, etc.)	1. Power System-I 2. Power System-II 3. Power System Analysis 4. Switch Gear & protection 5. Power System Operation & Control 6. Electrical Distribution System 7. High Voltage Engineering 8. Fundamentals of HVDC and FACTS 9. Extra High Voltage Engineering
3	Renewable Energy System (RES)	1. Solar Energy 2. Biomass Energy 3. Wind Energy 4. Energy Storage	1. Renewable Energy System 2. Power Electronics Applications to Renewable Energy Systems 3. Energy Storage System

SOLAR TREE

K.Srinivas Rao
(Project guide)

Installed Capacity: 1KW
Grid-Tied: OFF System
Panel Specifications:
Open Circuit Voltage: 21.5V
Short Circuit Current: 3.71A
Maximum Power: 60W
Maximum Power Voltage: 17.5V
Maximum Power Current: 3.5A

Project Batch

M.Vaibhav

K.Sravan Kumar

V.Digna Reddy

- K.Rani
- M.Prashanth
- J.Yashwanth Reddy
- K.Yadartha
- R.Prudhvinath
- K.Ambika
- D.Mani
- D.Sai Kumar

DEPARTMENT OF EEE– RESEARCH PUBLICATIONS (2018-19)

S.No	List of authors	Title of the paper	Name of the journal/conference	Month and year of publication	DOI/ISBN/ONLINE ISSN	SCI/SCOPUS/UGC APPROVED
1	D C K REDDY	Performance of DQ based controller for solar wind hybrid power system	Recent advances in electrical and electronic engineering	July 2019		10.2174/235209651166 6180514111606
2	Ramji Tiwari	Artificial neural network based control strategies for PMSG-based connected wind energy conversion system	International Journal of Materials and Product Technology.	*In Press		SCI
3	Ramji Tiwari	Photovoltaic Array Reconfiguration to Extract Maximum Power Under Partial Shaded Conditions	***Book Title** - Distributed Energy Resources in Microgrids 1st Edition Integration, Challenges and Optimization	*August 2019	9780128177747	-
4	Dr.Arulprakash	COMPANIONABILITY OF MODIFIED Z – SOURCE INVERTER WITH SOLAR POWER GENERATION FOR A 3Ø- ASYNCHRONOUS MOTOR	2nd International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2018)	September 2018	ISBN:978-93-87433-40-3	-
5	Dr.Arulprakash	COMPANIONABILITY OF MODIFIED Z – SOURCE INVERTER WITH SOLAR POWER GENERATION FOR A 3Ø-ASYNCHRONOUS MOTOR	Journal of Emerging Technologies and Innovative Research (JETIR)	September 2018	(ISSN-2349-5162)	-

S.No	List of authors	Title of the paper	Name of the journal/conference	Month and year of publication	DOI/ISBN/ONLINE ISSN	SCI/SCOPUS/UGC APPROVED
6	Ch.Santhan Kumar	Enhanced grey wolf optimizer based MPPT algorithm of PV System under partial shaded condition	International Journal of Renewable Energy Development	Oct-2018	ISSN : 22524940	Web of Science/Scopus
7	Ch.Venkateswara Rao	Energy economy occurrence in favor of a technical institute	International journal of electronics, electrical and computational system	April-2018	ISSN : 2348117X	
8	Ch.Venkateswara Rao	Solar pv system precise by using p&o for maximum output	International journal of engineering computational Research & Technology	June 2018	ISSN : 24569852	
9	Ch.Venkateswara Rao	Novel methodologies to improve the career of engineering	i-managers journal of educational technology	Sep-2017	ISSN:0973 0559	UGC Approved
10	Ch.Venkateswara Rao	Electrical evaluation and quotation of an edifice	Proceedings of the International multi-conference on computing, communication, electrical and nano technology	April-2018		

ONE WEEK SHORT TERM TRAINING PROGRAMME (STTP) FOR INTEGRATION AND CONTROL OF EMBEDDED ELECTRICAL SYSTEM WITH LAB VIEW SOFTWARE IN SET LAB, EEE-BIET

Integration and Control of embedded electrical system with lab view software in set lab, EEE-BIET (11-16th march,2019) for generating innovative ideas using "Hands On Engineering"

GUEST LECTURE ON "MODERN TECHNOLOGIES IN INDIAN RAILWAYS"

The Department of Electrical and Electronics Engineering has organized a Guest lecture on "Modern Technologies in Indian Railways" by Er. C. Anand, Divisional executive Engineer/TRD Electric Loco-shed, South Central Railways, Secunderabad on 16.02.2019. Co-ordinated by Dr. J. Bhagwan Reddy, Professor in EEE. attended by 2nd and 4th year B. Tech. (EEE) Students and Dr. Gouda Academic I/C EEE also present.

INDUSTRIAL VISIT - on 2nd FEBRUARY, 2019

The department of Electrical and Electronics Engineering has organized a industrial visit for the 2nd year students to LOWER JURALA HYDRO ELECTRIC PROJECT(LJHEP),Atmakur,Gadwal on 2nd February, 2019.

"THE SCIENCE OF TODAY IS THE TECHNOLOGY OF TOMORROW".
SEMINAR ON "RESEARCH METHODOLOGY", ON 31ST JANUARY, 2019.

The department of electrical and electronics conducted seminar on "RESEARCH METHODOLOGY" by Dr. D. P. Kothari , former director of IIT Delhi and VIT, vellore, on 31.01.2019.

GUEST LECTURE ON INTERNSHIP, ON 28TH JANUARY, 2019.

It is obvious that technology has exceeded our humanity, so the department of electrical and electronics conducted guest lecture on " Awareness on internship" by Mr.P.S.P Raju,Business Development Manager,CL Educate, on 28.01.2019.

INDUSTRIAL VISIT TO GIS STATION 220/132KV ON 9TH & 10TH JANUARY, 2019.

The department of Electrical and Electronics Engineering has organised an Industrial Visit for III Year EEE Students on 9th and 10th January 2019 to Gas Insulated Switchgear Station, Erragadda, Hyderabad.

"THE ESSENCE OF TEACHING IS TO MAKE LEARNING CONTAGIOUS"
ISTE SPONSORED ONE DAY NATIONAL LEVEL WORKSHOP ON "REAL TIME POWER QUALITY ASSESSMENT & ENERGY AUDIT" ON 5TH JANUARY, 2019.

The department of Electrical and Electronics Engineering conducted an ISTE sponsored one day national level workshop on "Real Time Power Quality assessment & Energy Audit", by Mr. R. Sampath, Regional Manager, HIOKI, Hyderabad branch, organized by Mr. Suresh, EEE Dept., Bharat Institute of Engineering and Technology, Hyderabad on 05th January 2019.

INDUSTRIAL VISIT TO 200/132 KV GAS INSULATED SUBSTATION, ERRAGADDA, HYDERABAD ON 01/10/2018

The students of EEE Department Bharat Institute of Engineering and Technology has visited 200/132 KV Gas Insulated Substation under the guidance of faculty members CH. Santhan Kumar, Assistant Professor, Mr. Banarraju, Associate Professor, Mrs Haritha, Assistant Professor.

The students have been given elaborate knowledge about

1. Power transformer
2. The switch guard of the substation.
3. Brief explanation about different equipment.
4. Layout o 220KV incoming and 132KV outgoing.

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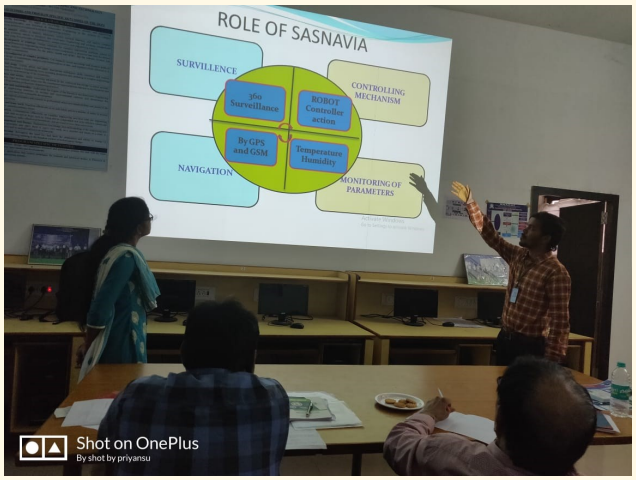
NPTEL CERTIFICATION

S. No.	Name of the Faculty	Designation	Name of Course(s)	Course wise S. No.	Mentor Status	Date(s) of Exam
1.	Dr JOHN ARUN KUMAR	Professor	Computer Aided Power System Analysis	81.	Yes	28-04-2019
2.	DR J BHAGWAN REDDY	Professor	Non-Conventional Energy Resources	82.	Yes	28-04-2019
3.	Dr A.ARULPRAKASH	Associate Professor	Electric Vehicles - Part 1	83.	Yes	28-04-2019
4.	Dr BALAJI N	Associate Professor	Electric Vehicles - Part 1	84.	Yes	28-04-2019
5.	D CHINNA KULLAY REDDY	Assistant Professor	Teaching And Learning in Engineering (TALE)	85.	Yes	27-04-2019
6.	VANKADARA SAMPATH KUMAR	Assistant Professor	Electric Vehicles - Part 1	86.	Yes	28-04-2019
7.	SANTHAN KUMAR CHERUKURI	Assistant Professor	Electric Vehicles - Part 1	87.	Yes	28-04-2019
8.	KATLA SRINIVASA RAO	Assistant Professor	Electrical Machines - II	88.	Yes	27-04-2019
9.	MURUGAPERUMAL K	Assistant Professor	Non-Conventional Energy Resources	89.	Yes	28-04-2019
10.	G ABHILASHA REDDY	Assistant Professor	Advance power electronics and Control	90.	Yes	31-03-2019
11.	G. KAMALAKER	Assistant Professor	Advances in UHV Transmission and Distribution	91.	Yes	31-03-2019
12.	SUKANTH	Assistant Professor	Electric Vehicles - Part 1	92.	Yes	28-04-2019
13.	RAMJI TIWARI	Assistant Professor	Advance power electronics and Control	93.	Yes	31-03-2019
14.	BASAVAREDDY	Assistant Professor	Electric Vehicles - Part 1	94.	Yes	28-04-2019
15.	LOGESWARI N	Assistant Professor	Advance power electronics and Control	95.	Yes	31-03-2019
16.	VIJAY PRASHANT YADARAJU	Assistant Professor	Electric Vehicles - Part 1	96.	Yes	28-04-2019
17.	B VIJAYALAXMI	Assistant Professor	Power System Dynamics, Control and Monitoring	97.	Yes	28-04-2019
18.	VASANTH REDDY B	Assistant Professor	Control engineering	98.	Yes	27-04-2019
19.	SURESH	Assistant Professor	Fundamental of Power Electronics	99.	Yes	28-04-2019
20.	NAGASEKHARA REDDY NAGURU	Assistant Professor	Electric Vehicles - Part 1	100.	Yes	28-04-2019
21.	DR. M. MADHIARASAN	Associate Professor	Advance power electronics and Control	101.		31-03-2019
22.	B SANTHOSHKUMARI	Assistant Professor	Control engineering	102.		27-04-2019

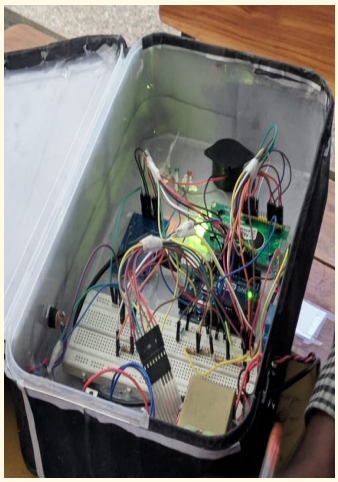
DEPARTMENT OF EEE– STUDENT ACTIVITIES (2018-19)

TECHNICAL FEST CONDUCTED ON 29TH AND 30TH MARCH, 2019

PAPER PRESENTATION EVENT



PROJECT EXPO EVENT



FLASH MOB EVENT

MAGAZINE—IGNITRA 2K19 RELEASE

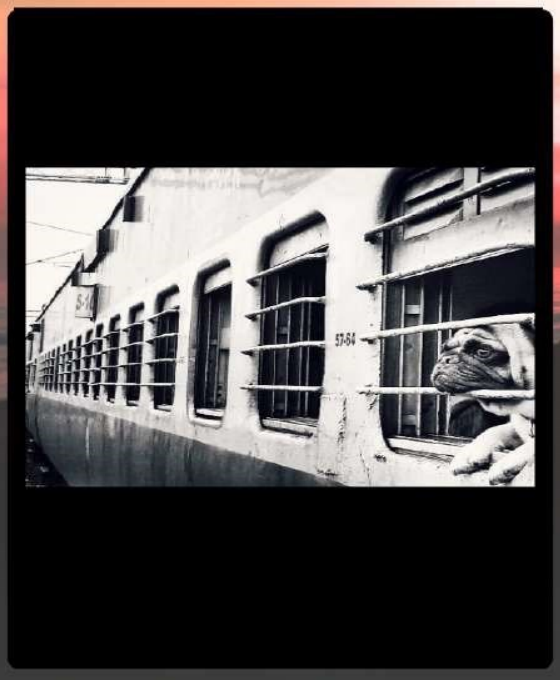
SPORTS

PHOTOGRAPHY

KAUSTHUBH PHOTOGRAPHY:

DEVA'S PHOTOGRAPHY:

GANESH PHOTOGRAPHY:



Art Gallery


Behind Every Pretty
Smile There might Be An
Untold Story


ASHA

ACADEMY TOPPERS

IVth YEAR

N.DIVYA

P.SRI HARSHA

IIIrd YEAR

AISHWARYA VERMA

A.DEVARAJ

IInd YEAR

K.RAMYA SRI

G.AKHILA

Ist YEAR

S.MANISHA

D.KAVYA

Placements 2K18-2K19

TECH STEEDS

Y.Vaishnavi

RAM GROUPS

G.Nagasai Chowdary

FACE ACADEMY

D.Nikitha Reddy

M.Nitin Sourabh

ICICI

P.Sri Harsha

Akshay Kumar

Kaustubh Sonni

G.Naveena Reddy

TRIANT

P.Sri Harsha

Kaustubh Sonni

G.Naveena Reddy

Q SPIDERS

N.Yamini Reddy

VECTOR WINGS

T.Muthu chary

N.Yamini Reddy

D.Deekshith Reddy

Konam Gopi

M.Nitin sourab

K.Vinay Goud

C.Shankar

T.Keerthana

CH.Pranaya

P.Uma

B.Sai Vani

B.Jaya Laxmi

B.Rajashekhar

G.Naveena Reddy

Jaya Sri

Renewable Energy System: Need, Challenges and Research Scope

Dr.M.MADHIARASAN

Abstract: With respect to the growing economy, the source of energy plays a major role and deriving the energy from the renewable energy resources, which are available in plenty, will lead to developing an energy model, aid for proper allocation of the resources and enhance power system performance. This article addresses the important, problem associated with renewable energy and scope of research in the field of renewable energy system. Therefore, this article aid to give a novel contribution from students and researchers.

Need for Renewable Energy System: The conventional energy sources, such as fuel, natural gas, and coal are damaging the economic progress, human life, and the surrounding environment. So, the Kyoto protocol aims to stabilize and reduce the greenhouse gas concentrations in the atmosphere in order to prevent the dangerous anthropogenic interference with the climate system. The above-said issues can be resolved by using renewable energy systems, of which wind energy, solar energy is the most famous and is an abundant resource within the ambit of renewable energy systems.

Challenges Associated with Renewable Energy System: The beforehand planning of future electricity power production from intermitted resources (solar, wind and etc.) is a tough and critical process compared to nonrenewable energy resource due to the meteorological effect. The problem associated with renewable energy system integrated into the energy system are as follows:

Grid security and outage problem
Power quality problem
Scheduling and dispatch problem
Requirement of ancillary services
Issue related to energy balancing
Operation and control problem
Damaging high cost power equipments
Economical problem

Scope of Research in Renewable Energy: In the rapid growth of renewable energy system most of research work are concentrated to develop novel power converter, control scheme and forecasting model to achieve the better performance with regard to power quality, scheduling, economic dispatch, control and planning. With in the ambit of renewable energy, lots of research scope are available such as modeling more specific to wind and solar energy generation to address energy crisis problem, develop more efficient and cost effective power converter to address the grid integration issues, power loss and power quality issues, model control and maximum power point tracking scheme to extract maximum power from the renewable energy, protect the high power equipments. Due to the volatile and flicks nature of renewable energy sytem which may not obtain feasible performance thus forecasting of wind speed and solar irradiance is required in order to overcome limitations and improve performance with respect to scheduling, dispatch, planning for resource allocation and economy.

Conclusion: Thus, this article aid to students and researchers identifies the bridge gap to model the most capable forecasting model, develop new power converters and control scheme. Hence, overcome the challenges with respect to renewable energy system which leverage enhanced power system and improve the economy.

AUTHOR:

TIME

Time is slow

When you wait..!

Time if fast

When you are late..!

Time is deadly

When you are sad..!

Time is long

When you feel bored..!

Time is endless

When you are in pain..!

Every time, time is determined by your feelings and your psychological conditions and not by clock.

So, have a nice time always...

K. SRINIVASA RAO,

LOVE YOURSELF

All the teens hear aloud and aloud,
Obligations are imminent wake and awake,
Hear aloud and hear prudent,
Ponder a lot and ponder a big. Conjecture quick and work stiff,
Grasp the good and vacate bad, Know yourself be yourself, Arise and awake like a sun.
Know the change, be the change,
Lift up the thought of change,
Cross the snag catch the grail, Love yourself like yourself. Summary:

My dear upcoming citizens (youth) put you ears towards me hear carefully. Responsibilities are coming towards you, be bold, be strong. Be active and be careful. Think a lot and think a big.

Think smart and work hard to reach your goal. Be with the good and leave the bad. Know the purpose of your living and don't change your attitude because of someone, do good and be good. Shine and awake like a sun.

Know the change in you and try to bring a change in the field of your career. Spread your thoughts among yourselves. Don't give up and face the barriers to reach your goal. Finally be yourself and love yourself.

Dr.ARUL PRAKASH

LIFE IS ALL ABOUT ELECTRICITY

TRANSFORMER: Step up your dreams, passion & love. Step down your anger, worries & sadness

MOTOR: Keep moving fast & continuously with high efficiency *GENERATOR*: Generate wisdom through your knowledge.

CONDUCTOR: Have least resistance for friends, good company & thoughts *INSULATOR*: High resistance for your weaknesses

SEMICONDUCTOR: Enjoy your hard times; they will make you only strong because behind clouds sun is still shining

FUSE: Protect yourself first from danger

SWITCH: Have reliable control over emotions & feelings

BATTERY: Store energy & be strong

CAPACITOR: Lead your life during struggles

INDUCTOR: Avoid ego during your success

CIRCUIT BREAKER: Know the problem & take appropriate action before it affects you *CONTROLLER*: Trust yourself, analyze your inputs & take proper decision, be smart & reliable, have high speed processor for fast actions & decisions *SENSORS*: Keep analyzing yourself & keep measuring your values

LIGHT: Keep lighting through your knowledge when its dark

LIGHTNING ARRESTOR: Ground sudden surges in your life

EARTHING: Keep your feet on ground for your safety & maintaining relationships

B.PAVAN

III-EEE-B SEC

DEPARTMENT OF EEE– GALLERY

FACULTY OF EEE DEPARTMENT (GROUP PHOTO)

IV YEAR EEE STUDENTS (GROUP PHOTO)

DEPARTMENT OF EEE– GALLERY

III YEAR EEE STUDENTS (GROUP PHOTO)

II YEAR EEE STUDENTS (GROUP PHOTO)

Strength does not come from winning. your struggles develop your strengths. when you go through hardships and decide not to surrender, that is strength.

~ *Mahatma Gandhi*

WALT DISNEY

(1901-1966)

All our dreams can come true if we have the courage to pursue them.