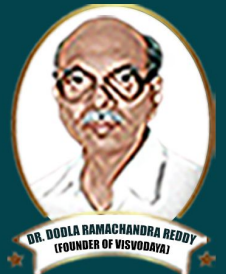




PBR VISVODAYA INSTITUTE OF TECHNOLOGY AND SCIENCE

KAVALI, NELLORE (Dist.)



DR. DOOLA RAMACHANDRA REDDY
(FOUNDER OF VISVODAYA)

ECLECTIC Newsletter

VOLUME 10

JUL - DEC 2023

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Editorial Board Members

Editor-in-Chief

Dr.M.V.Ramesh

Professor Head of Dept., EEE

Faculty Editors

Mr.Ch.Srinivasulu Reddy, Assoc. Professor

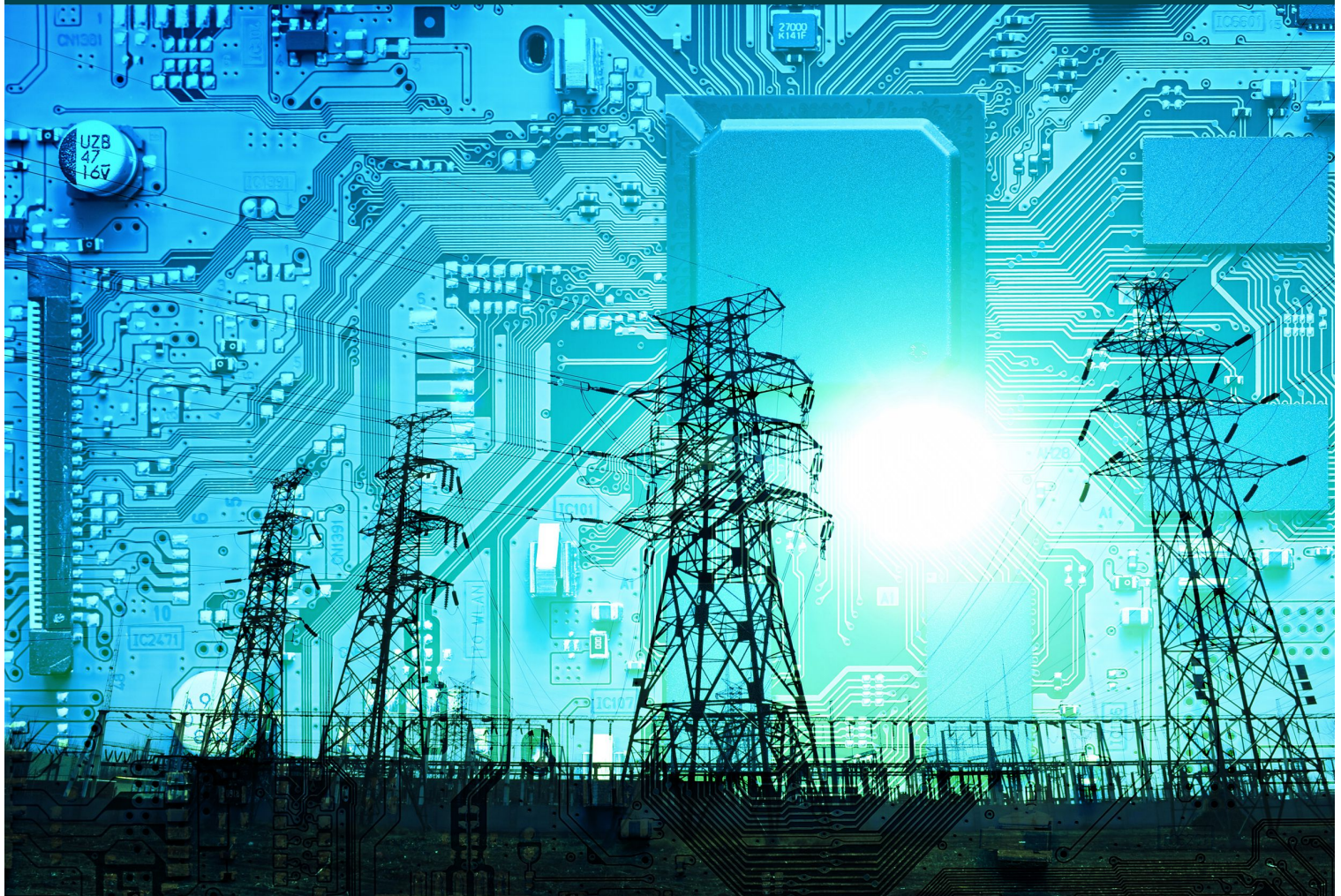
Mr.A.BhakthaVastala, Assoc. Professor

Student Editors

C. AMBEDKAR DEEPAK BABU-21731A0210

B. SARITHA-19731A0204

C. JOHN GAVASKAR-21731A0211



Department of Electrical & Electronics Engineering **ECLECTIC**

NEWSLETTER

JUL - DEC 2023

EDITORIAL BOARD

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INSTITUTE: VISION & MISSION

Vision of the Institute:

To be a premier center of learning in Engineering and Management education that evolves the youth into dynamic professionals with a social commitment

Mission of the Institute:

M1: To provide quality teaching- learning practices in engineering and management education by imparting core instruction and state-of-the-art infrastructure.

M2: To engage the faculty and students in acquiring competency in emerging technologies and research activities through Industry Institute Interaction.

M3: To foster social commitment in learners by incorporating leadership skills and ethical values through value-based education

EEE
PBRVITS

**DEPARTMENT OF ELECTRICAL &
ELECTRONICS ENGINEERING**

DEPARTMENT PROFILE

The Department of Electrical and Electronics Engineering was established in 1998 with the approval of the All-India Council for Technical Education (AICTE). The Department of Electrical and Electronics Engineering (EEE) is one of the oldest department in the institution, spanning 25 years of existence, and offers the undergraduate program B. Tech-EEE (and one post-graduate program, Power Electronics). The department has qualified and experienced faculty and excellent infrastructural facilities. It is well equipped with laboratories, audio-visual facilities, and software tools such as Multisim, MATLAB, and Pspice.

We also take up the social responsibility of inculcating awareness about energy conservation by promoting programmes about the same. Collaboration with industries for timely amendments of curriculum and laboratories is another credential of the department. The long-term goal of the department is to develop a centre for research and development activities in the thrust areas of solar and wind energy. The main objective of the department is to provide a better solution for industrial problems and to carry out academic and sponsored research projects.

The department is committed to providing students with exposure to state-of-the-art technologies by signing a Memorandum of Understanding (MoU) with reputed companies. The students exhibit their co-curricular and extra-curricular skills through the activities of the EEE student association and other student exhibition platforms. The Department of Electrical Engineering is committed to excelling in Electrical and Electronics Engineering through education and research with well-qualified and experienced faculty and technical staff members.

DEPARTMENT: VISION & MISSION

Vision:

“To be recognized for producing meritorious electrical engineers with research proficiency and Social commitment”.

Mission:

M1: Impart quality education with practice-based learning in producing electrical engineers with ethical values.

M2: Encourage the faculty and students to acquire mastery in cutting edge technologies.

M3: Implement research activities with social commitment.

PROGRAM EDUCATIONAL OBJECTIVES

PEO-I : Acquire a profound knowledge for a successful career in electrical engineering and allied fields.

PEO-II : Pursue higher education and involve in research activities of electrical and electronics engineering.

PEO-III: Exhibit intellectual skills ethically and pursue life-long learning with social Commitment.



PROGRAM OUTCOMES (POs)

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. 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.
3. 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.
4. 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.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
6. 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.
7. 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.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. 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.
11. 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.
12. 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)

PSO-1 : Analyze industrial electrical challenges by applying knowledge fundamental electrical circuits, electronics and drives.

PSO-2 : Apply standard practices in electrical power and control systems with safety and societal considerations.

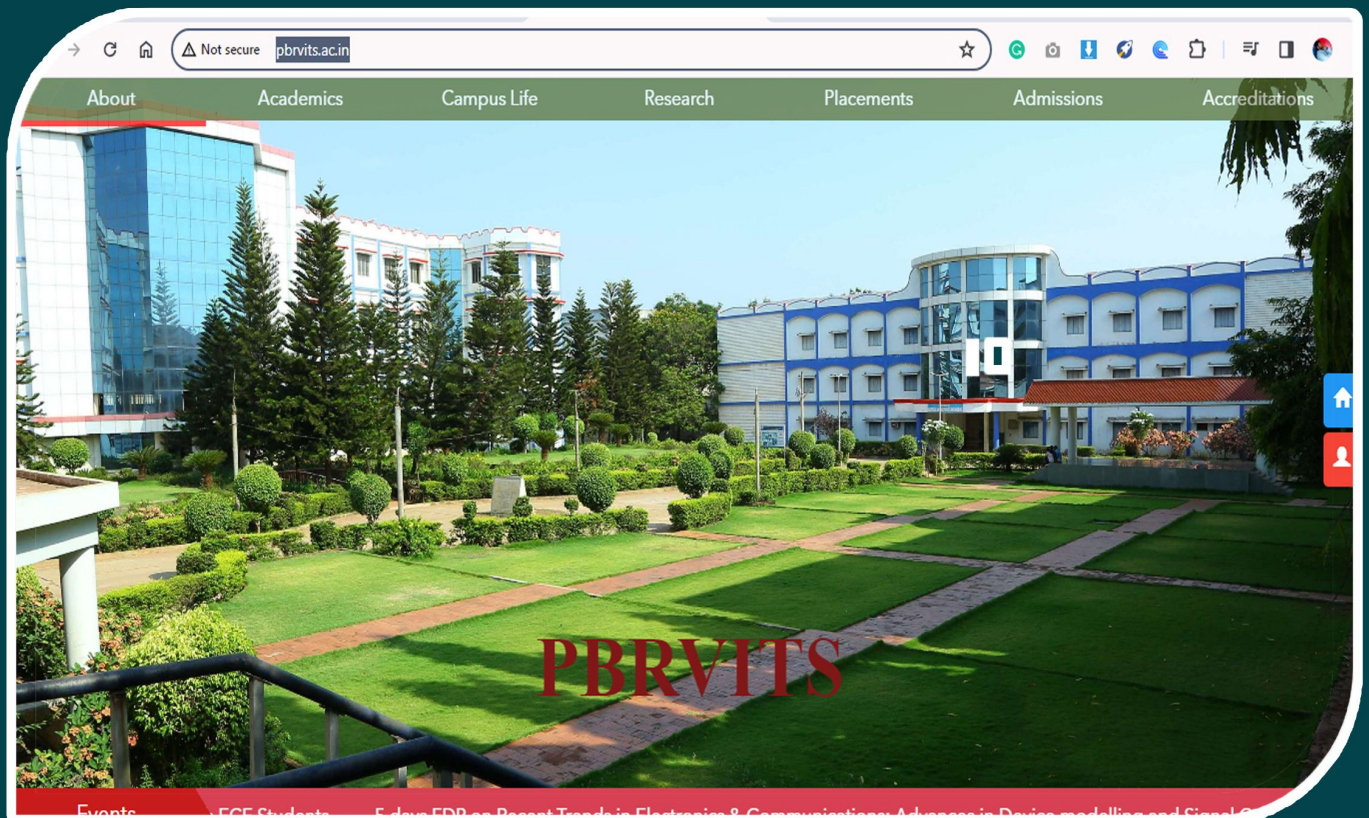
P.B.R. VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE



EEE

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

College Website: www.pbrvits.ac.in



PROFESSOR DESK



Welcome to the Department of Electrical and Electronics Engineering, PBR VITS, Kavali, Andhra Pradesh. As a well-known fact, we cannot imagine the world without electricity. The Department of Electrical and Electronics Engineering is a center of preeminence where we nurture young talents by imparting technical training to them so that they can take up the challenges of real world. The Department of Electrical and Electronics Engineering was established in the year 1998 with an objective to develop professionals through quality education with an intake of 60 students.

The B. Tech and M. Tech programs are designed to achieve a balance between depth of knowledge acquired through specialization and breadth of knowledge gained through exploration. The courses offered by the department provide a comprehensive foundation in the core topics of EEE coupled with an area of specialization relevant to emerging engineering challenges.

The faculty in the department is a rich blend of personnel with industrial and professional experience. The dedicated staff members have sound knowledge in emerging areas like power systems, power electronics, and control engineering, etc. The breadth and depth of the research interests of the academic staff ensures a high standard of lecture courses and provides excellent opportunities for challenging and stimulating final year projects. All faculties supplement their delivery using videos, animations overhead projectors. The faculty keeps up with the latest technologies by publishing in reputed journals and presenting at various national and international conferences.

The department is active in organizing the various workshops and seminars for the growth and development of faculty and students' research knowledge further. Our department students are also highly encouraged to implement their innovative research ideas with the help of the expert faculty members and the available standard lab facilities in the department.

“Education can be a powerful weapon to change the world”

Dr.M.V.Ramesh
Professor & HOD, EEE.

FACULTY DETAILS

S.No.	Name	Designation	Qualification
1	DR.MV RAMESH	Professor	ME/M. Tech and PhD
2	Dr C. RAJASELVAM	Professor	ME/M. Tech and PhD
3	CH SRINIVASULU REDDY	Assistant Professor	M.E/M.Tech
4	A BHAKTHAVACHALA	Assistant Professor	M.E/M.Tech
5	M SREENU	Assistant Professor	M.E/M.Tech
6	Y DAVIDU	Assistant Professor	M.E/M.Tech
7	T HARI BABU	Assistant Professor	M.E/M.Tech
8	P RAJYALAKSHMI	Assistant Professor	M.E/M.Tech
9	V MASTHANIAH	Assistant Professor	M.E/M.Tech
10	S MUNIRAJA	Assistant Professor	M.E/M.Tech
11	G VENGALARAO	Assistant Professor	M.E/M.Tech
12	G SUMAN	Assistant Professor	M.E/M.Tech
13	M GIRIBABU	Assistant Professor	M.E/M.Tech
14	CH SWAPNA	Assistant Professor	M.E/M.Tech
15	G HARIBABU	Assistant Professor	M.E/M.Tech
16	Y SIVA PRASAD	Assistant Professor	M.E/M.Tech
17	Y RAMAIAH	Assistant Professor	Assistant Professor
18	CH.RAJESH KUMAR	Assistant Professor	Assistant Professor
19	N AMARALINGESHWARA RAO	Assistant Professor	Assistant Professor
20	MALLIKHARJUNA S	Assistant Professor	Assistant Professor

FACULTY ACHIEVEMENTS NPTEL CERTIFICATES SUMMARY

NPTEL CERTIFICATES SUMMARY

S.No	Faculty Name	NPTEL Course Completed	Number of Weeks	Year & Month
1	Atmakuru Bhakthavachala	Machine Learning & Deep Learning – Fundamentals & Applications	12	Jul-Oct 2023
2	Thiriveedhi Haribabu	Fundamentals of Electrical Engineering	12	Jul-Oct 2023
3	Ch. Srinivasulu Reddy	Cyber Security	12	Jul-Oct 2023
4	S. Mallikarjuna	Cloud Computing	12	Jul-Oct 2023
5	Y. Siva Prasad	Cloud Computing	12	Jul-Oct 2023

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
ATMAKURU BHAKTHAVACHALA
for successfully completing the course
Machine Learning and Deep Learning - Fundamentals and Applications
with a consolidated score of **57** %

Online Assignments	19.69/25	Proctored Exam	37.12/75
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Total number of candidates certified in this course: 893

Jul-Oct 2023
(12 week course)

Prof. T. V. Bharat
Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati

Indian Institute of Technology Guwahati

Roll No: NPTEL23EE879843601258 To verify the certificate No. of credits recommended: 3 or 4

Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
CHITTIMURU S REDDY
for successfully completing the course
Cyber Security and Privacy
with a consolidated score of **63** %

Online Assignments	21.69/25	Proctored Exam	40.88/75
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Total number of candidates certified in this course: 6011

Jul-Oct 2023
(12 week course)

Prof. Divendra Jalihal
Chairperson
Centre for Outreach and Digital Education, IITM

Indian Institute of Technology Madras

Roll No: NPTEL23CS1275543900178 To verify the certificate No. of credits recommended: 3 or 4

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
MALLIKHARJUNA S
for successfully completing the course
Cloud Computing
with a consolidated score of **50** %

Online Assignments	20.1/25	Proctored Exam	30.21/75
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Total number of candidates certified in this course: 16686

Jul-Oct 2023
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL23CS895543600312 To verify the certificate No. of credits recommended: 3 or 4

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
THIRIVEEDHI HARIBABU
for successfully completing the course
Fundamentals of Electrical Engineering
with a consolidated score of **49** %

Online Assignments	19.06/25	Proctored Exam	30/75
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Total number of candidates certified in this course: 162

Jul-Oct 2023
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL23EE1168643601825 To verify the certificate No. of credits recommended: 3 or 4

Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
YEKALA SIVA PRASAD
for successfully completing the course
Cloud Computing
with a consolidated score of **60** %

Online Assignments	24.38/25	Proctored Exam	36.11/75
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Total number of candidates certified in this course: 16686

Jul-Oct 2023
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL23EE1168643601825 To verify the certificate No. of credits recommended: 3 or 4

ACADEMIC TOPPERS

Heartiest Congratulations to the Toppers the Management, Principal, Faculty & Students of EEE Dept., are happy to congratulate the students for proving their excellence in the Examinations for the A.Y. 2022-2023, conducted by P.B.R. VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE (AUTONOMOUS).

(I B. TECH, II-SEM, 2022 BATCH)

S. No	Roll Number	Percentage	Rank
1	22731A02004	86.33%	I
2	22731A02032	84.33%	II
3.	22731A02009	82.44%	III

(II B. TECH, II-SEM, 2021 BATCH)

S. No	Roll Number	Percentage	Rank
1	21731A0239	88%	I
2	21731A0207	87.1%	II
3.	21731A0247	87.1%	III

Heartiest Congratulations to the Toppers the Management, Principal, Faculty & Students of EEE Dept., are happy to congratulate the students for proving their excellence in the Examinations for the A.Y. 2022-2023, conducted by JNTUA, Ananthapur.

(III B. TECH, I-SEM, 2020 BATCH)

III B. Tech, II-Sem				
S. No	Roll Number	Name	Percentage	Rank
1	21735A0204	K.VINEELA	88.4%	I
2	20731A0208	D. LAKSHMI PRIYANKA	87.1%	II
3.	21735A0222	K.AKHIL	87.1%	III

(IV B. TECH, II-SEM, 2019 BATCH)

IV B. Tech, II-Sem				
S. No	Roll Number	Name	Percentage	Rank
1	19731A0212	DEVARAPALLI ABHINAYA	96.44%	I
2	19731A0223	MEDAM PRASD REDDY	95.33%	II
3.	19731A0247	KOKKILIGADDA ANUSHA	94.22%	III

Academic Year	Date of Visit	Class	Name & Address Of Industry	No. of students	Relevance PO's & PSO's
2022-23	23/04/2023	III B.Tech., II sem	SRISAILAM	33	PO1,PO2,PO3, PO5,PSO1,PS O2
	05/12/2022	II B.Tech., I sem	Manubolu Power Grid ,Gudur	55	PO1,PO2, PO3 PO5,PSO1
	18/11/2022	IV B.Tech., I sem	N.T.T.P, Vijyawada	51	PO1,PO2,PO3, PO5,PO7,PSO1, PS O2

ACADEMIC YEAR: 2022-2023

EVENT REPORT NAME OF THE EVENT: Industrial Visit at “Srisailam Right Bank Power House-APGENCO Plant”

DATE OF EVENT: 23-04-2023

TIME: 11:30 PM

VENUE: PBR VITS College

PARTICIPANTS: 33 (III EEE) EVENTS

CO-ORDINATOR: Y.David and G.Suman, Asst. Prof in EEE

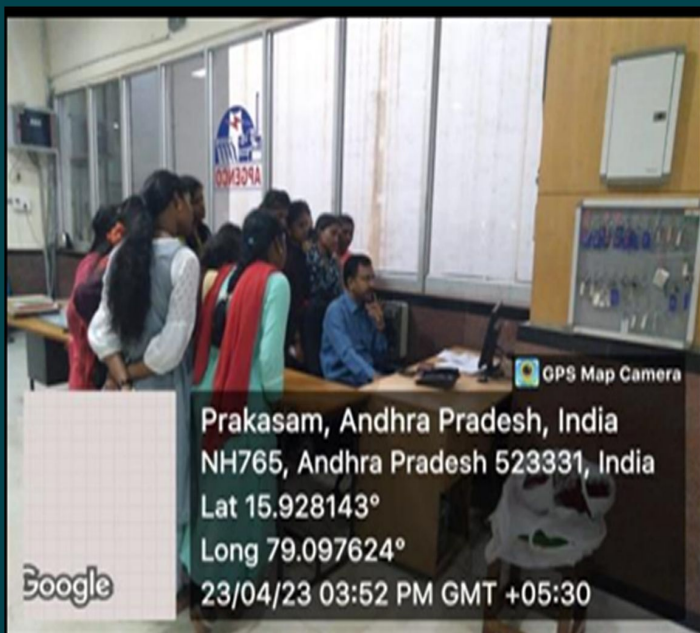
RESOURCE PERSON: P.Seshu, AE, APGENCO, Srisailam. **REPORT:** Department of Electrical Engineering PBR VITS has organized a Industrial Visit at Srisailam Right Bank Power House-APGENCO Plant” on 23-04-2023. The resource person from APGENCO, has been working in the Srisailam over 15 years of experience as a Divisional Engineer in various power domains. He shared his industry experience and explained in detailed about the Hydal Power plant and its working and functioning of each generator units in the plant to the students and explained the how much power flows in this plant daily nature in all conditions and he motivated the students to do the Internship certificate course also. Along with he also spoke on career perspective domains in electrical industries for the students. HOD of EEE Dr. V. Madhusudhan Reddy was encouraged to organize the Industrial visit with the faculties of G. Suman and Y. David with 33 Electrical students.

OUTCOMES: 1. Students know the how to generate Electrical Energy in Hydal Power Plant.

2. Students felt that, the role of each and every person had a responsibility to conserve the electrical energy for future generation.

3. Faculty are organized smoothly nature.

PHOTOGRAPHS Industrial visit at “Srisailam Right Bank Power House-APGENCO Plant” By, P.Seshu, AE, APGENCO, Srisailam on 23/04/2023



Industrial visit to “400 KV substation, manubolu”

On 05/12/2022

Objective of the Event: 05/12/2022, an industrial visit of “400 KV substaion, manubolu” was organized as a part of student’s curriculum for “Power System Practice and Design” electrical engineering department. This visit was carried out under the major activity head of “Technical / Research Skill” and subactivity head of “Industrial/Exhibition visit with report”. Total 55 participated in this visit. This industrial visit for students was guided. The main focus of this industrial visit is to fill the bridge between technical concepts taught in curriculum and industry applied concepts. Various technical concepts were discussed with the students which are applied in the field of electrical engineering.

Outcome of the Event : All students reached 400 KV substaion, manubolu by 11:00 AM on 05/12/2023 along with faculty coordinators. The students were guided to the basic knowledge of high voltage transmission substations and its difference from other transmission and distribution substations. They also bestowed students with details of transmission and distribution real time data. All students were divided into small batches of 30. Training supervisor from 400 KV substaion, manubolu accompanied students group and showed them control room and Switchyard. Depending on the data and details given from 400 KV substaion, manubolu supervisors, students were instructed to prepare brief report of industrial visit and A4 size sheet of substation layout, as a part of their submission work for Power System Practice and Design



Certificate Course on “Smart Electric Grid”

EVENT REPORT NAME OF THE EVENT: Certificate Course on “Smart Electric Grid”

DATE OF EVENT: 27-02-2023 To 03-03-2023

TIME: 10:30 PM

VENUE: A-211, MRR Block, PBR VITS

PARTICIPANTS: 40 (II EEE) EVENTS

CO-ORDINATOR: G.Suman, Asst.. Professor,

EEE RESOURCE PERSON: Dr. P.Gopi Professor, AIST,Rajam Peta.

REPORT:

Department of Electrical Engineering PBR VITS has organized a Certificate Course on “Smart Electric Grid” on 27-02-2023 To 03-03-2023. The resource person from AIST,Rajam Peta. He shared his Knowledge on Smart Electric Grid and explained in detail what are the latest Technologies “Smart Electric Grid”. Along with he also spoke on career perspective domains in electrical industries for the students. HOD of EEE Dr. V.Madhusudhan Reddy introduced the speaker and Mr. V. Masthanaiah, proposed the vote of thanks for the session. In all, 40 students and faculty of electrical attended the guest lecture.

OUTCOMES:

1. Students gained the knowledge regarding “Smart Electric Grid”
2. Students felt that, the role of each and every person had a responsibility to know the awareness on Smart Electric Grid.
3. Faculty improved their teaching skills.

PHOTO GRAPHS A Certificate Course delivered on “Smart Electric Grid” by Dr. P.Gopi, Professor, AIST, Rajam Peta.Dt on 27-02-2023 To 03-03-2023



Certificate Course on “Introduction to MATLAB & SimuLink”

EVENT REPORT NAME OF THE EVENT: Certificate Course on “Introduction to MATLAB & SimuLink”

DATE OF EVENT: 08-08-2022 To 12-08-2022

TIME: 10:30 PM

VENUE: A-211, MRR Block, PBR VITS

PARTICIPANTS: 47 (III & IV EEE) EVENT

CO-ORDINATOR: G.Suman, Asst.. Professor,

EEE RESOURCE PERSON: Mr. A.Sampath ADE,BSNL Pondichery

REPORT:

Department of Electrical Engineering PBR VITS has organized a Certificate Course on “Introduction to MATLAB & SimuLink” on 08-08-2022 To 12-08-2022. The resource person from ADE,BSNL,Pondichery. He shared his Knowledge on Introduction to MATLAB & SimuLink and explained in detail what are the latest Technologies in “MATLAB & SimuLink”. Along with he also spoke on career perspective domains in electrical industries for the students. HOD of EEE Dr. V.Madhusudhan Reddy introduced the speaker and Mr. S. Muni Raja, proposed the vote of thanks for the session. In all, 47 students and faculty of electrical attended the guest lecture.

OUTCOMES:

1. Students gained the knowledge regarding “MATLAB & SimuLink”
2. Faculty improved their knowledge in MATLAB software





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