# **PROPULSION**

No Resistance can drop our Potential Departmental News Letter

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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

## DNR COLLEGE OF ENGINEERING & TECHNOLOGY BALUSUMUDI, BHIMAVARAM-534202, W. G. DIST., ANDHRA PRADESH.

#### VISSION

To be a recognized center for Electrical & Electronics Engineering, building ethical technocrats towards societal needs.

#### **MISSION**

**DM1**: Impart high quality technical education in a dynamic learning environment

**DM2:** Develop Industry collaborations towards holistic development and industry ready.

**DM3**: Motivate to practice latest technologies towards innovation, research& development.

## PO'S

**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.

## PEO's

**PEO1**: Be Successful professionals in multidisciplinary team to solve real life problems with ethical values.

**PEO2**: Demonstrate knowledge, Skills and Competence to identify, comprehend and solve the industrial and societal problems.

**PEO3**: Adapt forever changing needs by collaborating with industries and academia for Professional development, Research and higher studies.

#### PSO's

**PSO1**: Design and provide solutions in Power Electronics and Power Systems.

**PSO2:** Demonstrate renewable energy technologies for the growing energy demand.

#### **ABOUT DEPARTMENT**

Electrical & Electronics Engineering is a subset of general engineering. Engineers use science and mathematical principles to solve technical problems. Since they often create new products to solve these problems, they are in high demand. Engineers are essentially inventors. By dreaming up ideas and turning them into a reality they push technology to its limits.

Electrical engineers are specialized engineers who work with Electrical devices. These may include motors, generators, power generation, transmission and distribution. Electrical Engineers design tools used in other engineering disciplines. As you can imagine, Electrical engineering is one of the broadest engineering specialties.

Electrical and Electronics Engineering is an engineering discipline that involves the application of principles of mechanics for analysis, design, manufacturing, and maintenance of mechanical systems. It requires a solid understanding of key concepts including Electrical Machines, Electrical measurements and Power systems. Electrical engineers use these principles and others in the design and analysis of electric vehicles, manufacturing plants, industrial equipment and machinery, medical devices and more.

## **ADMINISTRATOR MESSAGE**



Sri. G SATYANARAYANA RAJU Hon. Secretary & Correspondent DNR

#### Association

"Education is the most powerful weapon which you can use to change the world." Your power to choose the direction of your life allows you to reinvent yourself, to change your future, and to powerfully influence the rest. Leadership and learning are indispensable to each other. The only person who is educated is, the one who know how to learn and change. You are the "Change" to yourself and your future. You are welcome to DNR College Of Engineering & Technology, one of the most prestigious colleges for engineering and technology, which is affiliated to JNTUK, Kakinada. The institution provides you the space to ignite your imagination and inspire you to love learning.

### PRINCIPAL MESSAGE



Dr. M. Anjan Kumar

M.E., Ph.D., MIGS, MIS, MISTE, MIRC PRINCIPAL

Technological enlargement in a country chiefly depends on how far the Engineers are going to put their knowledge into practice Strong elementary concepts with innovative mindset is the requirement of the present-day Engineers. Our main slogan in educating the budding Engineers is to lay a very strong foundation for the future circumstantial adaptation in the practical field Strengthening the fundamental concepts and exposure to the current development and future trend is our main aim in teaching in the Technological environment as there is a tremendous boom for the practical and research orient education in the future.

#### HOD MESSAGE



#### Dr. K.B.V.S.R. SUBRAHMANYAM,

#### Prof. & Head (EEE) & Dean (Examinations),

The DNR College Of Engineering & Technology is helping students to reshape their future to become a valuable asset for the nation. We are committed to academic excellence in the fields of Electrical and Electronics Engineering, leading to develop students through academia and industry linkages. The students of the Electrical and Electronics Engineering are highly demanded by the recruiters of the top companies to enhance their employability skills through Industry Institute Collaboration. Our department is built on a foundation of knowledge, creativity, and collaboration. As we embark on this academic year, I encourage all of you to embrace the spirit of inquiry and discovery that defines our field. Whether you are a seasoned faculty member, a staff member contributing to the department's success, or a student eager to explore the possibilities within electrical and electronics engineering, know that your unique perspectives and contributions are valued.

As we navigate the challenges and opportunities that lie ahead, let us foster an environment of open communication, mutual respect, and continuous learning. The world of electrical and electronics engineering is rapidly evolving, and our collective efforts will play a crucial role in preparing our students for the future.

#### **ACHIEVEMENTS – STUDENTS**

- N. Pavan Kumar participated on Technical Seminar got Second Prize award on 25<sup>th</sup> April 2021.
- 2. M. Tarun Kumar Certificate of excellence in project expo participated in Sri Vasavi College of engineering Tadepalligudem on 22<sup>th</sup> Jan 2021.
- 3. P. Tejo Murthy Participation Certificate on Seminar in SITE engineering college, Narsapuram, on 24<sup>th</sup> Feb 2021.

### **ACHIEVEMENTS – FACULTY**

 Dr. K.B.V.S.R.Subrahmanyam Research paper publication on mentoring approaches for various leaning behaviors of the future engineers in professional education competency and commitment development name of the journal in journals of engineering education transformation, ISBN/ISSN No 2394 – 1707, Vol 34,08<sup>th</sup> Jan 2021.

### **EVENTS ORGANIZED – FACULTY**

- One day program organized on Webinar Design & Opportunities in Electric Vehicle Industries on 28<sup>th</sup> Jan 2021.
- 2. One day program on Training leadership qualities program Organized on 04<sup>th</sup> Jan 2021.



- One day Seminar Organized on Electric Vehicles Opportunities and Challenges on 08<sup>th</sup> Feb 2021
- 4. One day Training emotional intelligences program organized on 15<sup>th</sup> Feb 2021.
- One day program organized on Training communication skills program skills on 03<sup>th</sup> Feb 2021.
- 6. One day Organized on Webinar Fly back Converter on  $16^{\text{th}}$  Feb 2021.
- Two days Organized on faculty development program Control Systems on 11<sup>th</sup> April 2021 to 12<sup>th</sup> April 2021.

# **EVENTS ORGANIZED - STUDENTS**

 One day industrial visit on Vijeswaram Gas Power Plant organized by M. Chitti Babu General Manager Vijeswaram on 22<sup>th</sup> Jan 2021.



 One day industrial visit on 220KV/132KV/33KV Undi substation, Organized by M. Pradeep Kumar AEE Undi on 27<sup>th</sup> Feb 2021



- One day guest lecture on Software Tools used in electrical engineering's applications lecture organized by Dr. M. Siva Kumar EEE Gudlavalleru, Gudlavalleru, on date 30<sup>th</sup> April 2021.
- One day guest lecture on Latest trends on operation power plants lecture on organized by Mr. G. Vijaykumar EE Apgenco ibrahimpatnam, Vijayawada, on date 25<sup>th</sup> July 2021.

# **EVENTS ATTENDED – STUDENTS**

 M Trun Kumar participated on Technical Seminar on Ehvac systems in Sri Vasavi College of Engineering T.P Gudem on 22/01/21.

- P. Tejamurthy participated on Technical Seminar on Electrical vehicles in Griet College of Engineering Hyderabad on 22<sup>th</sup> Feb 2021.
- G. Srinu participated on Technical Seminar on Ehvac systems Sri vasavi College of Engineering Tadepalligudem on 22<sup>nd</sup> Jan 2021.
- K Banga Raju participated on poster presentation on Electrical vehicles on Bite engineering college pennada on 26<sup>th</sup> Feb 2021.
- A. Johanthomas participated on poster presentation on Maximum power point tracking on solar PV systems on Srinivasa Engineering College Amalapuram on 07<sup>th</sup> Mar 2021.
- V. Venkanna babu participated on poster presentation on floating solar plant on SWRN college of Engineering Nasarapuram on 12<sup>th</sup> April 2021.
- N. Pavan Kumar participated on poster presentation on smart electrical grid on RVC & JC Engineering College Guntur on 25<sup>th</sup> April 2021.

# **EVENTS ATTENDED – FACULTY**

- Mrs. N. Hymavathi Asst. professor Attended on Advancements in smart Grid for Sustainable and Green Technology (ASGSGT) 2021 Visvesvaraya National Institute of Technology Nagpur 15<sup>th</sup> Feb 2021 to 20<sup>th</sup> Feb 2021.
- Mr.K. Lakshmi Asst. Professor attended on Advancements in smart Grid for Sustainable and Green Technology (ASGSGT) 2021 Visvesvaraya National Institute of Technology Nagpur 15<sup>th</sup> Feb 2021 to 20<sup>th</sup> Feb 2021.
- Mr. T. Venkateswara Rao Asst. Professor Attended Outcome Based Education and NBA Accreditation for Tier – II Colleges S.R.K.R. Engineering College Bhimavaram 29<sup>th</sup> Mar 2021 to 03<sup>rd</sup> April 2021.
- Mr.M. Srinu Asst. Professor Sustainable Technologies for Electric Transportation Systems Gokaraju Ranga Raju Institute of Engineering and Technology Hyderabad 14<sup>th</sup> June 2021 to 26<sup>th</sup> June 2021.