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ELECTRO-MOTTO

Magazine
of

ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT



**R.V.R. & J.C.COLLEGE OF ENGINEERING
(AUTONOMOUS)**

Chandramoulipuram, Chowdavaram, GUNTUR – 522 019.

From the Principal



It is always a pleasure to be a part of a team which strives to bring out the talents of students and staff. Electrical and Electronics department of RVR&JC College of Engineering has always been striving to keep itself ahead of the competition. The essential purpose of a magazine is to inform, engage, inspire and entertain a diverse readership including alumni, parents, students, faculty, staff and other friends of the college by telling powerful stories that present a compelling, timely and honest portrait of the college and its extended family. This magazine has made an earnest attempt in this direction and brought out certain aspects to the eyes of the public so that they may understand and know the EEE department even better.

Dr.K.Ravindra

From the HOD of EEE



I am happy to note that the magazine brought out in our EEE department is of good quality and taste. Hearty congratulations to the editorial team. It is a matter of great pleasure for me to go through the wonderful contributions made by the students. This magazine is intended to bring out the hidden literary talents in the students and to inculcate leadership skills among them. The outside world will come to know about the caliber of our students through this magazine. I extend my thanks to all the contributors for their articles, poems and drawings.

Dr.K.Chandrasekhar

ABOUT THE DEPARTMENT:

The Department of Electrical and Electronics Engineering has been established during the academic year 1994 - 1995 with an intake of 60 students. The intake has been enhanced to 120 from the academic year 2004 -2005 and 180 from the academic year 2013-2014. The intake from academic year 2021 -2022 is 120. Department was accredited twice by National Board of Accreditation of AICTE first in the year 2002 with A-Grade for five years, in the year 2007 for three years and in 2012 for two years. Accreditation by NBA for 5th time in 2017 and 6th time in 2021. We have over 10 laboratories with advanced equipment and facilities for supporting our teaching and research. It is envisioned to strengthen the quality of its faculty, research and teaching facilities, as well as student's academic performance.

Our vision:

The vision of the department of Electrical & Electronics Engineering is “To impart education leading to highly competent professionals in the field of Engineering who are globally competent and to make the Department a Centre for Excellence”.

Our Mission:

The mission of the department of Electrical & Electronics Engineering is “The Integrated development of professionals with knowledge and skills in the fields of specialization, ethics and values needed to be employable in the fields of Electrical Engineering and contribute to the economic growth of the employing organization and pursue lifelong learning”.

Achievements:

The Department of Electrical & Electronics Engineering standing among all the other branches of our college.

- Accredited "A" grade for two years by NBA, AICTE New Delhi in the year 2012 for two years.

- Accredited "A" grade for three years by NBA, AICTE New Delhi in the year 2007 for three years.
- Accredited "A" grade for five years by NBA, AICTE New Delhi in the year 2002 for five years.
- College Accredited by APSICHE, Hyderabad in academic Audit Grade. It is informed that it is the Second best among the private Engineering Colleges in Andhra Pradesh.
- P.G. Course M.Tech. In Power Systems Engineering was started in 2004 with an intake of 18 students.
- The Students of the department excels in the University Examinations by being University I Rank Every Year.
- The Department is the winner of CZARS Title (Overall Championship) thrice in the years 2008, 2014, 2016 within the college.
- Accreditation by NBA for 5th time in 2017 and 6th time in 2021.

Program Educational Objectives:

- I. To facilitate the students to become Electrical & Electronics Engineers who able to competent, innovative and productive in addressing the broader interests of the organizations & society.
- II. To prepare the students to grow professionally with proficient soft skills.
- III. To make our graduates to engage and excel in activities to enhance knowledge in their professional works with ethical codes of life & profession.

Program Outcomes:

Engineering Graduates will be able to:

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) of EEE Department:

PSO 1: Graduates of the program must demonstrate knowledge and hands on competence in developing, Testing, Operation and Maintenance of Electrical & Electronics systems.

PSO 2: Graduates of the program must demonstrate knowledge and hands on competence in Modern Engineering tools to engage in life-long learning and to successfully adapt in multi disciplinary environments.

PSO 3: Graduates of the program must demonstrate knowledge in Project Management techniques, environmental issues and Green technologies.

TOP 4 STUDENTS of Y18 Batch upto Semester VIII

Regd No.	Name	CGPA	Rank
Y18EE002	Alapati Akhilesh	9.63	First
Y18EE045	Ila Kalyani	9.59	Second
L19EE192	Ganjerupalli Sai Sumanth	9.40	Third
Y18EE086	Meduri Dhanalakshmi	9.35	Fourth

Endowment awards on Graduation day celebrations in 2022

Regd No.	Name	CGPA	Rank
Y18EE002	Alapati Akhilesh	9.51	First
Y18EE099	Narisetty Prasad	9.35	Second
Y18EE045	Ila Kalyani	9.27	Third
Y18EE020	Chigurupati Asmitha	9.27	Fourth

Generation Scenario in India

India is a country having a population of over 1.38 billion with a population share of over 17.7% of the global population. It is facing a massive challenge in providing consumers with sufficient energy supplies at an affordable cost. In the present scenario the power sector is like a commodity market, electricity must be economical and reliable. Since major part of the generation is from fossil fuels, it emits nitrogen, sulfur and carbon oxides. Due to increased population and limited fossil fuels in India, it becomes essential to adopt renewable energy generation. The contribution of renewable energy generation in 2002 is 0.34 GW, which is 2 % of the total in-stalled capacity of country (17 gigawatts). The contribution of renewable energy generation touched 85.9 gigawatts (23 per cent) of 373.4 gigawatts by 2020. India secured third place in renewable energy generation in world.

Energy has vital importance in development of any country. With an area of 3, 287, 263 sq.km, India is the seventh largest country in the world. It has 28 states and 8 Union territories. It is very important challenge to provide quality supply to all people at opti-mal cost. Due to rapid population growth, energy consumption in India is drastically changed in recent decade. Because of increased urbanization and living standards of Indian people, the energy demand raise expressively. Without proper estimations, severe shortages may occur in future.

In recent years, to reach the growing energy requirement of the society, non-conventional form of energy has been considered. Government of India also en-

courage by giving various schemes & policies to encourage the use of renewable sources such as wind, solar, etc.. India placed in third position in electricity consumption and generation in the world. In 2020, India reached 1,252.61 billion units generation. In utilization of non-conventional energy, India ranked fourth for wind energy, fifth for solar energy with total renewable energy capacity fifth rank.

Power sector of India is most differentiated in the world. India has numerous sources of energy generation like conventional sources such as lignite, hydro, coal, natural gas, nuclear power and non-conventional sources like agricultural waste, wind, solar, etc. India also tries for clean energy and listed as sixth country to make significant investments for clean energy. The focus and future in India is attaining "Power for all". The total installed capacity with respect to various sectors is given in Table 1 and total installed capacity in terms of various types of fuels is given in Table 2.

Table 1. Sector wise Total Installed Capacity

Sector	Mega Watt	Total Percentage
Private Sector	175.486	47.00
State Sector	103.617	27.80
Central Sector	93.927	25.20
Total	3,73.029	

Table 2. Fuel wise Total Installed Capacity

Fuel	Mega Watt	Total Percentage
Total Thermal	2,31,321	62.00%
Coal	1,99,595	53.60%
Lignite	6,260	1.7%
Gas	24,957	6.70%
Diesel	510	0.1%
Hydro (Renewable)	45,699	12.30%
Nuclear	6,780	1.80%
RES* (MNRE)	89,229	23.9%
Total	373,029	

Fun with Electrical

Of course, these jokes might not light up the room, but they're sure to spark a smile!

- Why was the capacitor upset? Because it couldn't find its charge.
- Why did the photon check into a hotel? Because it was traveling and needed rest mass.
- Why do programmers prefer dark mode? Because light attracts charges!
- What did the battery say to the resistor? You complete me.
- Why did the electrician go to art school? To learn how to draw more current.
- Why do electricians make good comedians? They have the best current jokes!

I love nights

Yes the night- No worries only dreams...no one to feel jealous of me at that time

The time when the pure hearts of child disturbs their moms' sleep.

Yes the night - no discrimination even for colours only 2- light and dark one shines us while one hides us.

Yes the night - time when true hearted people cry with loud silence.

Yes the night- which makes impossible things possible by the virtue of dreams

But these nights never let us feel the same ever.

Once we have a nightmare ...once we have a beautiful dream...once we remember a memory.....once we try to wipe our tears.

LOVE THE NIGHT!! IT IS NOT DARK IT HAS MANY INVISIBLE COLOURS

Chigurupati Asmitha

Y18EE020

Electric Bike

A team of 8 students from RVR&JC College of Engineering participated in Electric Bike Design Challenge organized at Sri Rama Krishna Institute of Technology, Coimbatore in association with MECHATRON MOTORS during 26th to 29th of September 2022.

The team won the following:

1. Overall Static Winner with a cash prize of 10,000 rupees.
2. Best Innovation
3. Fair play award

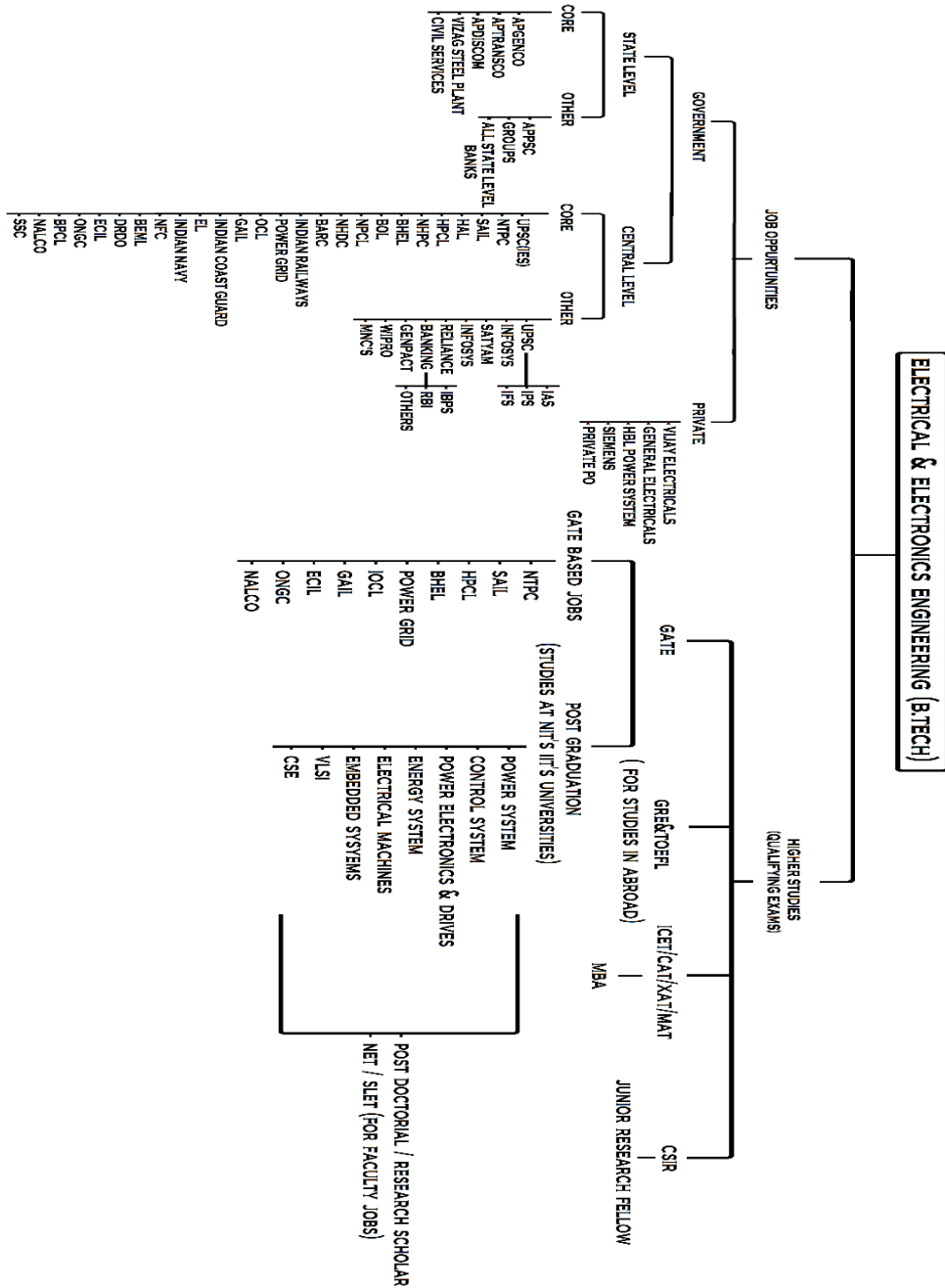


A team of 30 students participated in E-Baja 2022 at Pithampur, Maharashtra during 1st - 5th June 2022.

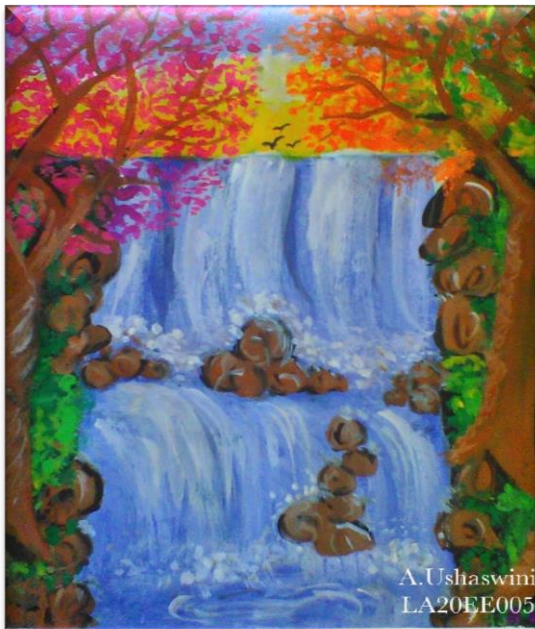


EEE Opportunities

Here are some of the job roles that a Electrical and electronics engineering can get:



SOME OF THE ARTS BY Students





R.V.R. & J.C. COLLEGE OF ENGINEERING
NAAC A⁺ grade
(Autonomous)
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING
BATCH : 2018-22 SECTION-A



- STAFF SITTING**
(LEFT TO RIGHT)
STANDING 1st Row
STANDING 2nd Row
STANDING 3rd Row
- : DR. G.VIPRAANJALINETHOLI, DR. P.PRIPURA, SMT VSAANTY, MS. TR.CHANDRI, DR. N.CHAITANYA, DR. KAJALOHA BANI, DR. K. SWARNIA SREE, DR. K.RAVINDRA JYOTSNALI,
DR. K.CHANDRASEKHAR (HOD), DR. G.SAIBABUVAAO, DR. N.C.KOTAJALI, MR. CH.RANGA BAO, MR. K.V.GOPALA CHAU, DR. Y.RAVINDRANATH TADDER, MR. B.VASANTHA BAO,
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- : G. Mohana Sai, Birudu Happy, G. Venkata Sai Vijayalakshmi Priyanka, B. Manjerna,G. Suvarna, Ila Kalyani,G. Komala Siva Naga Lakshmi Ashika,
Abhuti Hemalatha,Chaitanm Parithra,Jasli Ashika, Darapaneni Eshwaraopaa, Jogi Deva Divya,Bethala Keerthana, Buddi Ramyastri, Gabili Grace Jashmine,
A.Alekhyia, A. Victoria Ranu,D. Bindu,CN. Sahithi, Chagarthi Vasanthi, C.Amudya, Ganjineni Uma, Ch.K.Venkata Naga Sai Meghana Muvvada, G. Rashitha,
Annekuri Tarun Siva Kumar, Bethula Karthika, Akkaboathula Prjwal Kiran, Gorjenupu Sai Sumanth, Alapali Abhishek, Goda Birudu Madhavi,
Dhruvam Hemant, Ganiganti Venkata Hema Chandu, Chaganti Anuritha Reddy, Genla Pavan Kalyan, Evari Bhavash Reddy, Gopalan Karthek,
Chikali Nithin, Bhanuvarapu Sai Kumar, Chabrothu Purneswara Kumar, Chinumalla Venasi Krishna, Gade Siva Venkatesh
: B. Kumar Swaroop, Itha Sandeep, Chinakurthi Ajiy Datta, Gorre Monish, Gaddala Brahmanth, Jaladi Bala Ramu Krishna, Balijepalli Mohan Pavan,
Jakkam, Rajesh, Chaganti Pranav Sreehas, Dola Rajesh, Gunnamati Sai Subash, Jalagam Ajiy Kumar, Borupothu Pavan, A. Srinemazayana Reddy,
. Chakka Jayaram, Chouturi Praneeth Babu, Gadeb Manjith, Boddada Udaya Bhaskar.

B.SAI-9546402387



R.V.R. & J.C. COLLEGE OF ENGINEERING
NAAC A grade
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING
(Autonomous)

BATCH : 2018-22 SECTION - B



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Dr. V.Sunilbabu, Mr. M.Sudhakar Reddy, Mr. M.Siva Kumar, Mr. R.M.Ven Prasad

STANDING 1st Row

: Rajajayanti Sankhya, Sagarathi Madhu Pujitha, Perikala Deepika, Triloka Babu Venkata Anushta, Pendent Aparna, Shaik Muskan, Shaik Asiya,
Vanakylapathi Sandhya Rani, Shaik Sadika Perveen, Sadiyath Tanneem, Shaik Shaheeda Begum, Ramasubhona Dharani, Sangee Sriya, Peeta Samblitha Guna,
Perugonda Sakshi, Vicharaju Praveetha, Padhyala Sivarachala Devi, Vatikonda Jyothsna, Sri Harshini Venula, Volei Meghana, Veeramasu Mounika,
Vatikonda Jyothsna, Passupati Divyasa, Thummalu Cheruru Hema Bindu Gayathri, T.Niharika, P.Rohitha, P.Gaethanjali, P.Priyan Durga Praveetha,
STANDING 2nd Row : Shaik Mohamud Luhtman, Thoda Pravin Kumar, Vullagunta Dheeraj, Shaik Riyaz Ahamed, Sunteela Rajkavendra, Shaik Jaan Saide,
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Sri Ramula Harish, Rudravarth Narendra Srinivas Naik, Ravuri Venu Babu, Surendra Babu Padabandi

STANDING 3rd Row

: Shaik Saadika Mohammad, Sambana Reddi, Reddy Sai Kiran, Venkatesh Narayana, Venkatesh Padrani, Prinsaji Ravi Teja, Yarra Anilkumar Reddy,
Yusuf Mahammed, Ramireddy Srinivasa Rao, Pandita Aaron, Veeranki Praveen, Shaik Mujib Karimulla, Chaitala Sai Teja, Yeduru Nandi Varadhan Reddy,

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R.V.R. & J.C. COLLEGE OF ENGINEERING
NAACA grade
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING
(Autonomous)
BATCH : 2018-22 SECTION-C



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Dr. Y.Sunilbabu, Mr. M.Sudhakar Reddy, Mr. M.Siva Kumar, Mr. R.M.Vera Prasad

STANDING 1st Row

: Rajalekshmi Sandhya Rani, Shaik Sadiqa Parveen, Sadiyah Tauseem, Shaik Shaheda Begum, Ramasubba Dharani, Sanga Sreya, Peeka Sambhita Guna,
Venkatesh Babitha, Vicharanji Praveethika, Penugala Sureshchala Devi, Vathikonda Jyothsna, Sri Harshini Venula, Vojeli Meghana, Veeramou Mounika,
Vathikonda Jyothsna, Pasupathi Divyasaal, Thimmasa Cheruru Hema Bindu Gayathri, T.Niharika, P.Rohitha, P.Geehanjana, P.Pravan Durga Praveethika.

STANDING 2nd Row

: Shaik Mohammed Lukhman, Thoda Pravan Kumar, Vullengala Dhireej, Shaik Riyaz Akramed, Sunthasula Rajghavendra, Shaik Jaan Saada,
Ramineni Vamsi Krishna, Varava Rasool Babu, Vinakota Harinadh Babu, Rayasakula Sai Pravan Kumar, Vaddamudi Alay Kumar, Thuripati Vamsi Krishna,
Sri Ramula Harish, Rajarath Narendra Srinivas Naik, Ravuri Venu Babu, Surendra Babu Parthanda

STANDING 3rd Row

: Shaik Sadiq Mohammed, Sambasa Rohit, Reddy Sai Kiran, Venkatesh Padmani, Venkatesh Padmani, Pinugati Rani Teja, Vera Anilkumar Reddy,
Yusuf Mohammed, Raminedy Srinivasa Rao, Pandula Aaron, Veeranki Praveen, Shaik Mulla Karimulla, Chaitala Sai Teja, Yeduru Nandi Varadhan Reddy,

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- 10.**Y.Varun, III/IV B.TECH EEE**

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