



R. C. PATEL
INSTITUTE OF TECHNOLOGY, SHIRPUR

An Autonomous Institute

RCPIT-ELECTRICAL

NEWSLETTER

June - November 2022



DIRECTOR'S MESSAGE

Dear Students,

As your guide in this educational journey, I encourage you to see beyond exams and grades. Electrical Engineering is a discipline that powers modern civilization, and you're training to be its custodians. Strengthen your grasp of fundamentals—they're not just syllabus topics but tools for innovation. Engage actively with laboratory work, industry visits, and technical projects. Develop patience, persistence, and a questioning mind. The opportunities before you are abundant, but only disciplined, consistent effort will help you realize your full potential and contribute meaningfully to society.



Dr. Jayantrao Patil

HOD'S MESSAGE

Dear Readers,

Welcome to another exciting edition of our departmental newsletter! As you explore these pages, you'll witness the vibrant energy of our Electrical Engineering community—students pushing boundaries, faculty mentoring with dedication, and collaborative projects addressing real-world challenges. Our department's emphasis on quality education, experiential learning, and industry connections prepares our students for tomorrow's opportunities. I appreciate the editorial team's efforts in documenting our journey. Together, let's continue innovating, learning, and shaping the future of electrical engineering.



Dr. Shailaja Patil

EDITORIAL BOARD MESSAGE

Dear Readers,

We proudly present this edition highlighting the accomplishments and activities of our Electrical Engineering Department. This semester witnessed exceptional student engagement in technical competitions, innovation challenges, workshops, and industrial training programs that enhanced both technical competence and professional readiness. Parallely, our faculty demonstrated their commitment to excellence through active participation in Faculty Development Programs, research initiatives, hackathons, and knowledge-sharing sessions. The diverse range of technical, co-curricular, and extracurricular activities featured here underscores our department's holistic approach to education. We believe this edition effectively captures our journey toward sustained excellence and innovation.



Prof. Krunal Gandhi

EDITORIAL BOARD STUDENT MEMBER



Ashwini Marathe



Puja Marathe



Mayuresh Dhangar

VISION & MISSION OF THE DEPARTMENT

VISION

To produce competent Electrical Engineers committed to innovation, sustainability, and service to society.

MISSION

M1: Deliver innovative, interactive learning fostering excellence in Electrical Engineering and emerging technologies.

M2: Cultivate scientific inquiry, ethical responsibility, and interdisciplinary collaboration to address energy, automation, and societal challenges.

M3: Empower diverse students with skills for employment, entrepreneurship, and research, nurturing professionalism and lifelong learning.

ABOUT THE DEPARTMENT

The Department of Electrical Engineering at R. C. Patel Institute of Technology (RCPIT), Shirpur was established in June 2012 under the umbrella of The Shirpur Education Society. In a relatively short span, the department has built a strong reputation for its academic excellence, placement success, and student-centric approach.

With a dedicated and experienced faculty team, the department offers specialized knowledge in areas such as Power Quality, Electrical Machines, Power Electronics, Electrical Drives, and Power Systems. The department follows a project-based learning approach, encouraging students to apply theoretical concepts in practical scenarios, thus ensuring they are well-prepared for industry and research.

Electrical Engineering, being a core branch, plays a vital role in the technological and economic growth of the country. The department's curriculum provides a deep foundation in control systems, power generation, high voltage engineering, electrical machines, and circuit analysis, with a strong emphasis on adaptability to emerging technologies.

DEPARTMENT'S ACTIVITIES



Expert Talk on Basics of Energy conservation and Audit

Electrical Engineering Department, RCPIT, Shirpur organized an Expert talk on "Basics of Energy conservation and Audit" on 03rd November 2022 by Dr. Sanjay Khot. The objective of an expert talk on the basics of energy conservation and audit is to educate the students about the importance of conserving energy and implementing energy audits in various settings. The talk aims to provide a clear understanding of energy conservation principles, techniques, and strategies, while also highlighting the benefits and impact of energy audits. 144 students attended the talk and participated in interaction, with expert.

Alumni Talk on Entrepreneurship Development-Idea generation, planning and company formation in online mode.

Electrical Engineering Department, RCPIT, Shirpur organized an Alumni Talk on "Entrepreneurship Development-Idea generation, planning and company formation in online mode." on 26th November 2022 by Mr. Shubham Sugandhi. The objective of an alumni talk on Entrepreneurship Development with a focus on idea generation, planning, and company formation in an online mode can be to inspire and educate students about the entrepreneurial journey, provide practical insights and guidance, and empower them to pursue their own entrepreneurial ventures.





Alumni Talk on Opportunities of electrical engineering software industry

Electrical Engineering Department, RCPIT, Shirpur organized an Alumni talk on “Opportunities of electrical engineering software industry” on 26th November 2022 by Mr. Tushar Vikas Patil. The objective of an alumni talk on the opportunities of the electrical engineering software industry is to provide current students or recent graduates with insights and information about the potential career paths, growth prospects, and opportunities available in the field. The talk aims to bridge the gap between academia and industry by connecting students with successful alumni who have established themselves in the electrical engineering software industry.

Shirpur Education Society's

R. C. Patel Institute of Technology, Shirpur

Near Nimzari Naka, Shahada Road, Shirpur Dist. Dhule (M.S.)

Maharashtra, India - 425405

Tel - (02563) 259600, 801, 802, Email - director@rcpit.ac.in

www.rcpit.ac.in



R. C. PATEL
INSTITUTE OF TECHNOLOGY, SHIRPUR

An Autonomous Institute

RCPIT-ELECTRICAL

NEWSLETTER

December 2022 – May 2023



DIRECTOR'S MESSAGE

Dear Students,

The technological landscape is transforming faster than ever before, presenting both challenges and extraordinary opportunities for Electrical Engineers. Are you ready to meet them? Excellence demands more than attendance—it requires deep engagement with electrical systems, power technologies, electronics, and innovation. It calls for relentless development of your problem-solving and analytical capabilities. Leverage every facility, mentorship opportunity, and practical exposure our institution offers. Stay disciplined in your approach, maintain your curiosity, and work with purpose. Your future impact on society begins with the choices you make today.



Dr. Jayantrao Patil

HOD'S MESSAGE

Dear Readers,

As I reflect on the accomplishments presented in this newsletter, I am filled with appreciation for our vibrant Electrical Engineering community. The technical activities, student achievements, and faculty innovations showcased here represent countless hours of dedication, creativity, and hard work. Our department's foundation—quality education paired with practical exposure and industry relevance—continues to empower our students and faculty alike. Special recognition goes to our editorial team for their meticulous work. Let us carry this momentum forward, continuing to learn from each other and grow together.



Dr. Shailaja Patil

EDITORIAL BOARD MESSAGE

Dear Readers,

This newsletter is a celebration of our Electrical Engineering community and the incredible journey we've shared recently. Together, we've created an ecosystem where academics meet innovation, theory meets practice, and learning extends far beyond lecture halls. Students have immersed themselves in competitions, innovation projects, workshops, and industry partnerships, while faculty have enriched our intellectual environment through FDPs, research, guest lectures, and collaborative ideation. Every activity documented here—technical, co-curricular, or extracurricular—represents our collective commitment to growth and excellence. We hope this edition inspires you as much as compiling it has inspired us.



Prof. Krunal Gandhi

EDITORIAL BOARD STUDENT MEMBER



Ashwini Marathe



Puja Marathe



Mayuresh Dhangar

VISION & MISSION OF THE DEPARTMENT

VISION

To produce competent Electrical Engineers committed to innovation, sustainability, and service to society.

MISSION

M1: Deliver innovative, interactive learning fostering excellence in Electrical Engineering and emerging technologies.

M2: Cultivate scientific inquiry, ethical responsibility, and interdisciplinary collaboration to address energy, automation, and societal challenges.

M3: Empower diverse students with skills for employment, entrepreneurship, and research, nurturing professionalism and lifelong learning.

ABOUT THE DEPARTMENT

The Department of Electrical Engineering at R. C. Patel Institute of Technology (RCPIT), Shirpur was established in June 2012 under the umbrella of The Shirpur Education Society. In a relatively short span, the department has built a strong reputation for its academic excellence, placement success, and student-centric approach.

With a dedicated and experienced faculty team, the department offers specialized knowledge in areas such as Power Quality, Electrical Machines, Power Electronics, Electrical Drives, and Power Systems. The department follows a project-based learning approach, encouraging students to apply theoretical concepts in practical scenarios, thus ensuring they are well-prepared for industry and research.

Electrical Engineering, being a core branch, plays a vital role in the technological and economic growth of the country. The department's curriculum provides a deep foundation in control systems, power generation, high voltage engineering, electrical machines, and circuit analysis, with a strong emphasis on adaptability to emerging technologies.

DEPARTMENT'S ACTIVITIES



Alumni Talk on Importance of Curricular and Extracurricular" Activities in Students' growth

Electrical Engineering Department, RCPIT, Shirpur organized an Alumni Talk on "Importance of Curricular and Extracurricular" Activities in Students' growth." on 16th February 2023 by Mr. Darshan Borse. The objective of an alumni talk on the importance of curricular and extracurricular activities in students' growth is to highlight the significant role these activities play in shaping a well-rounded education and personal development. The talk aims to emphasize the benefits of both curricular and extracurricular activities and how they contribute to the holistic growth of students. 55 students attended the talk and participated in interaction, with expert.

Alumni Talk on Current market scenario and requirements of DevOps engineer

Electrical Engineering Department, RCPIT, Shirpur organized an Alumni Talk on "Current market scenario and requirements of DevOps engineer" on 18th March 2023 by Mr. Shivkumar Chaudhari. The objective of an alumni talk on the current market scenario and requirements of a DevOps engineer would typically be to provide valuable insights and guidance to current students or aspiring professionals who are interested in pursuing a career in DevOps. The talk aims to inform and educate the audience about the current state of the job market for DevOps engineers and the skills and qualifications that are in demand. 60 students attended the talk and participated in interaction, with expert.





Converges'23

RCPIT had arranged converges'23 on 25th February 2023. In which Electrical Department, Students arranged an activity, "IDEATHON," in which participants presented a poster on different innovative ideas. Many Participants from different institutes participated in IDEATHON. Prof. Nilesh Mahajan was the coordinator of IDEATHON. Kalyani Chaudhari, Salunkhe Shweta from Third year electrical engineering actively coordinated with first year electrical engineering students to make this event successful.

The objectives of an IDEATHON poster presentation -

- Showcase Innovative Ideas
- Engage and Inform the Audience

Vihangam

RCPIT has a club named "Samarpan." This club organizes different activities in the Institute. Samarpan club initiated an activity called "Vihangam - ek kadam pakshiyo ki aur" to feed water to the birds on 25th April 2023. Chaudhari Sejal and Chaudhari Dimpal, from third-year electrical engineering, are members of this team.



Maharashtra Din

Maharashtra Din, also known as Maharashtra Day, is celebrated on May 1st every year. It is a significant day for the state of Maharashtra. Maharashtra Day commemorates the formation of the state of Maharashtra, which occurred on May 1, 1960.

RCPIT had arranged Maharashtra Din as Traditional Day. Staff and Students Electrical Department actively celebrated Maharashtra Din.

Farewell

As we bid adieu to our remarkable students, we celebrate their achievements, their growth, and the indelible mark they have left on our institution. The legacy they leave behind is one of inspiration, determination, and the unwavering belief in the power of education. As they set sail towards new horizons, we wish them success, fulfillment, and an unwavering passion to make a difference in the world.



STAFF ACHIEVEMENT

Mr. Bhushan Prataprao Patil

Paper Title - Machine Learning-Based Model to Enhance Smart Grid Reliability
Journal - International Journal of Science & Engineering Development Research.

Patent Title - Transformer Theft Detection System
Application Number - 375642-001

Patent Title - Wind Vibrating Generator
Application Number - 374610-001

Mr. Yogesh Kalidas Kirange

Paper Title - An Overview of Matlab/Simulink Dynamic Model of an Electric Vehicle's Performance

Journal - International Journal of Engineering Research & Technology

Paper Title - A Comprehensive Approach to Electricity Billing Management Using Java Swing and SQL

Journal - International Journal of Science & Engineering Development Research

Paper Title - Performance and Analysis of Smart Irrigation System Using Internet of Things

Journal - International Journal of Science & Engineering Development Research

Paper Title - Evaluation of Induction Motor Drives Efficiency using ARM-7 based VSI

Conference - 5th IEEE International Conference on "Emerging Smart Computing & Informatics" (IEEE ESCI-2023)

Paper Title - A Survey on Improving Power System Dynamic Stability with a Single Machine Infinite Bus

Conference - 2nd IEEE International Conference for Advancement in Technology

Patent Title - Transformer Design

Application Number - 202241071991 A

Patent Title - An Intelligent Real-Time Monitoring System And Control Method For Grid Attribute Access Control Method Based On Bloom Filter

Application Number - 202241071991 A

Mr. Amit Rajendra Mahire

Paper Title - Development of a Hybrid System Combining Solar and Vertical Axis Power

Journal - International Journal of Scientific Development and Research

Mr. Nadeem Akhtar

Paper Title - DenseResSegnet: A Dense Residual Segnet for Road Detection Using Remote Sensing Images

Conference - International Conference on Machine Intelligence for GeoAnalytics and Remote Sensing, MIGARS 2023

Patent Title - Divyang Digital Helper

Application Number - 374439-001

Patent Title - Fatigue Testing Machine

Application Number - 368173-001

Patent Title - Wind Vibrating Generator

Application Number - 374610-001

Mr. Rupesh Shantaram Patil

Paper Title - Prototype Electric Vehicle Charging Station

Journal - International Journal of Science & Engineering Development Research

Paper Title - Evaluation of Induction Motor Drives Efficiency using ARM-7 based VSI.

Conference - 5th IEEE International Conference on "Emerging Smart Computing & Informatics" (IEEE ESCI-2023)

Patent Title - Transformer Theft Detection System

Application Number - 375642-001

Patent Title - Transformer Design

Application Number - 202241071991 A

Mr. Sachin Yashawant Sayais

Patent Title - Fatigue Testing Machine

Application Number - 368173-001

Mr. Krunalkumar Gandhi

Paper Title – Smart Energy Meter Using Lora Protocols and IOT Applications

Journal – International Journal of Science & Engineering Development Research

Paper Title – Evaluation of Induction Motor Drives Efficiency using ARM-7 based VSI.

Conference – 5th IEEE International Conference on “Emerging Smart Computing & Informatics” (IEEE ESCI-2023)

Patent Title – Method for supporting anonymity of data in an advanced metering infrastructure and security method for smart grid system using block chain

Application Number – 202241066039

Mr. Nilesh Suresh Mahajan

Paper Title – Advance Man less E-Vehicle Charging Station

Journal – International Journal of Engineering Research & Technology

Paper Title – Evaluation of Induction Motor Drives Efficiency using ARM-7 based VSI.

Conference – 5th IEEE International Conference on “Emerging Smart Computing & Informatics” (IEEE ESCI-2023)

Patent Title – IOT & AI BASED SHIP HULL DATA COLLECTION SYSTEM EMPLOYING TEMPERATURE AND PRESSURE SENSORS

Application Number – 202221067726 A

STUDENT ACHIEVEMENT



E-BAJA SAEINDIA 2023

Amol Pawar, Vaibhav Varade, Yogesh Mali, Siddhesh Bhavsar, Sanket Suryawanshi, and Ganesh Ishi from the electrical engineering department are members of the Invictus team(E-BAJA). This team participated in a national-level event called E-BAJA SAEINDIA 2023, held at Chitkara University-Baddi (Himachal Pradesh) from 5th to 8th April 2023. The team cleared all the preliminary interviews and entered the physical round (phase 3). Amol Pawar, who leads our electrical department, was the main driver of the ATV Buggy.

Shirpur Education Society's

R. C. Patel Institute of Technology, Shirpur

Near Nimzari Naka, Shahada Road, Shirpur Dist. Dhule (M.S.)

Maharashtra, India - 425405

Tel - (02563) 259600, 801, 802, Email - director@rcpit.ac.in

www.rcpit.ac.in