



NEWS LETTER

2023 ISSUE 2

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VISION

To develop professionally competent electrical and electronic engineers having innovative skills and capabilities to work ethically in consonance with technological demands and developments of industry and society



MISSION

As one of the first few departments to be set up in the year 1958, the Electrical and Electronics Engineering Department offers a diploma certificate for students who complete the course. The three years' course is designed to provide a broad foundation in electrical and electronics engineering and its different applications such as the generation, storage and distribution of electricity, semiconductor technology, biomedical applications, industrial automation... digital media, and computer aided drafting.

- To provide state-of-art resources that contributes to achieve excellence in teaching, learning and development.
- To mould Electrical Engineering professionals in synchronization with the dynamic industry requirement.
- To inculcate ethical education capable of fostering societal responsibilities.
- To enhance creative abilities, leadership skills and entrepreneurial spirit by facilitating interaction with industry

The students are encouraged to become practically skilled through hands-on training in the laboratories designed for the purpose. The courses are also designed to enhance practical experience by collaborating with leading industries. The laboratories designed for the purpose of training students are state of the art and facilities are upgraded frequently so that they provide the right ambience for the students to move in tandem with the latest technologies.



ELECTRICAL AND ELECTRONICS ENGINEERING STUDENTS' ASSOCIATION
CENTRAL POLYTECHNIC COLLEGE, VATTIYOORKAVU



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EV LEADING
PRODUCERS

- JAPAN
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“Together for a Greener Future”

The success of EVs relies on unified efforts. Governments, businesses, and individuals opting for EVs collectively drive us towards a sustainable, cleaner future. Join the movement, contribute to a greener tomorrow.

ELECTRIFYING ROADS: A JOURNEY INTO THE FUTURE OF MOBILITY

GOING GREEN A FUTURE FRIENDLY INNOVATION



Electric vehicles (EVs) are transforming the automotive landscape with sustainable innovation. Powered by rechargeable batteries, EVs emit fewer pollutants and contribute to combating climate change. Advancements in technology continue to enhance their range, affordability, and charging infrastructure, fostering a cleaner and more energy-efficient future for transportation.

QUIET POWER, CLEANER AIR: THE EV RIDE

Embracing electric vehicles (EVs) heralds a breath of fresh air. With zero tailpipe emissions, EVs significantly contribute to cleaner air, reducing pollutants that harm human health and the environment. The silent revolution of EVs marks a crucial step toward sustainable transportation, fostering a healthier and greener world.



Tesla's Electric Vehicle

INDIA'S MOVE TOWARDS ELECTRIC MOBILITY

India's shift towards electric mobility reflects a commitment to a cleaner, sustainable future. Government initiatives, subsidies, and growing awareness are driving the adoption of electric vehicles (EVs). With a focus on reducing emissions and dependence on fossil fuels, India is navigating a transformative journey towards greener and more energy-efficient transportation.



CHARGING UP: MAKING EV CONVENIENT

Streamlining electric vehicle (EV) charging is pivotal for widespread adoption. Advances in fast-charging technology and expanding charging infrastructure enhance convenience. From home charging solutions to public networks, these developments alleviate range anxiety, making EV ownership seamless and accessible. The evolving landscape accelerates the transition to a more sustainable and convenient transportation future.



Hero VIDA Electric Scooter

MEET THE SCIENTIST

GEORG SIMON OHM

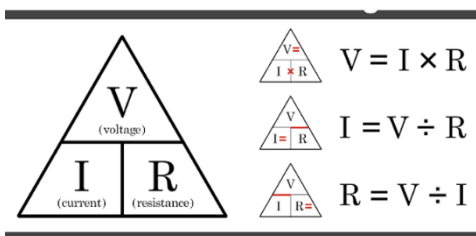


Georg Simon Ohm

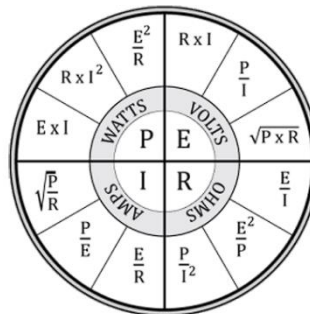
Georg Simon Ohm (1789–1854) was a German physicist and mathematician, renowned for Ohm's Law, a fundamental principle in electrical circuits. Published in 1827, the law states that the current passing through a conductor is directly proportional to the voltage across it, providing a cornerstone for the understanding of electrical systems.

ELECTRICITY'S MISTRIES AND OHM'S BIG IDEA

Despite money problems, Ohm dug into electricity, finding out how voltage, current, and resistance connect in simple ways, changing how we see electricity. Electricity has long been a subject of fascination and mystery, captivating human curiosity with its invisible force that powers our modern world. One of the fundamental concepts in understanding and harnessing electricity is Ohm's Law, formulated by German physicist Georg Simon Ohm in the early 19th century. Ohm's Law, expressed as $V=IR$, relates voltage (V), current (I), and resistance (R) in an electrical circuit. It serves as a cornerstone for electrical engineering and is crucial for designing efficient and safe systems. However, the mystery lies in the profound implications of these seemingly simple relationships. Electricity, in its enigmatic nature, often defies our intuition. The flow of electrons, imperceptible to the naked eye, propels our technological advancements. Yet, the intricacies of electrical phenomena extend beyond the visible spectrum. Quantum mechanics delves into the behavior of electrons, revealing a realm of uncertainty and probability that adds another layer to the mystique of electricity. Moreover, the history of electrical discoveries is riddled with tales of pioneers who delved into the unknown. From Benjamin Franklin's kite experiment to Nikola Tesla's revolutionary contributions, the journey to understand and control electricity has been marked by daring experimentation and breakthroughs.



Ohm's law triangle



Ohm's law wheel

Here are five interesting facts about Ohm's Law:

Universal Principle: Ohm's Law ($V = I * R$) applies universally to all circuits and conductors, regardless of their type or complexity.

Simple Formula, Wide Use: Despite its simplicity, Ohm's Law serves as the basis for complex electrical calculations in engineering.

Relationships Defined: It demonstrates direct proportionality between voltage and current, and an inverse relationship between resistance and current or voltage.

Versatile Application: It's not limited to circuits but extends to various electrical systems, aiding in design, analysis, and safety considerations.

Critical Safety Tool: Understanding Ohm's Law is vital for preventing overloads and ensuring safe electrical operation in systems and devices.

ACHIEVEMENTS

PROFICIENCY IN ACADEMICS



ADARSH NAIR AS
(2020 -2023)



ABHINAV A
(2021 – 2023)



SUBIN S S
(2022 – 2024)

MAJOR EVENTS



Electrical Safety class

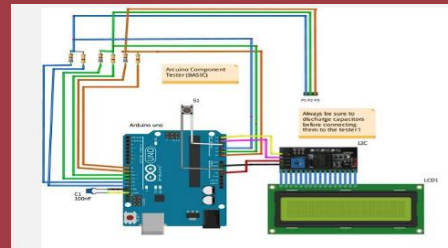


Cricket tournament Champions



CREATIVE SPARK

ELECTRONIC COMPONENT TESTER



CHANDU C (S5)

An Arduino-based capacitor-transistor-resistor component tester revolutionizes electronic diagnostics. Combining Arduino's versatility with component testing capabilities, this device efficiently identifies faulty components, aiding hobbyists and professionals alike. Through programmed algorithms and sensor integration, it assesses capacitance, resistance, and transistor parameters with precision. Its user-friendly interface simplifies operation, displaying results promptly for swift troubleshooting. This tester enhances productivity, reducing time spent on manual testing and guesswork. Its affordability and accessibility make it indispensable for electronics enthusiasts, enabling seamless experimentation and repairs. As a versatile tool in the electronics arsenal, the Arduino-based tester empowers users to unleash their creativity and tackle complex projects with confidence.