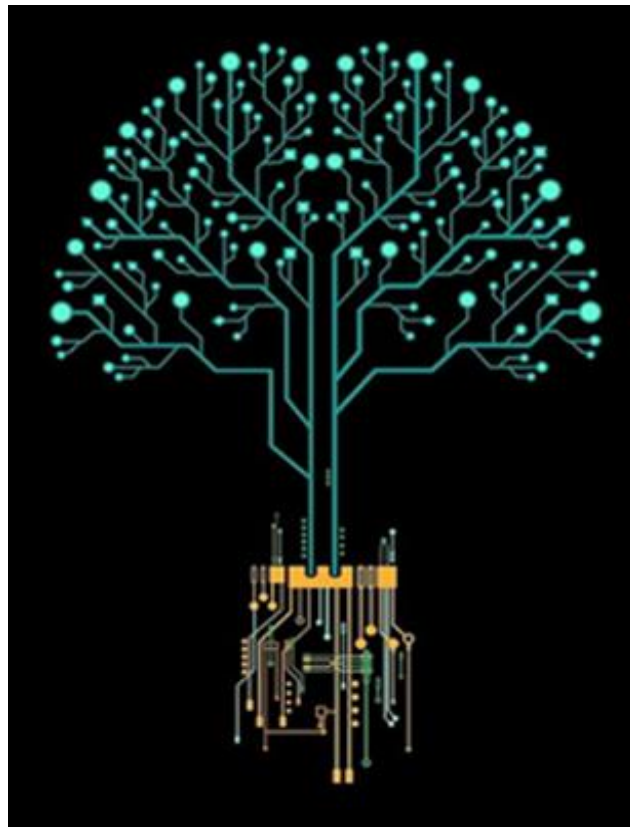


Report on Tesla Club Department of Electronics, Yeshwant Mahavidyalaya, Nanded.



“No Resistance Can Drop Our Potential”

2024-25

Introduction

"Electronics, a cutting-edge branch of science, permeates every facet of human existence. It has seamlessly woven itself into our daily lives, becoming an indispensable part of our routines. From waking up to the gentle chime of an alarm to winding down with the soft glow of a bedside lamp, electronics accompanies us throughout the day. As the renowned scientist John Ford aptly put it, 'Electronics emerges as the unequivocal victor.' Beyond mere convenience, the demand and production of electronic devices serve as barometers for a nation's economy. Moreover, electronics plays a pivotal role in national development.

And yet, amidst this dynamic landscape, one truth remains unwavering: 'Change is the only constant.' Our collective mindset embraces this perpetual transformation, and it stands as our enduring legacy. Over the past century, progress has surged at an unprecedented pace, dwarfing the entire expanse of human history. Moore's Law, defying time, continues to hold sway. We find ourselves in an era where our passions and abilities serve as our tools—our metaphorical hammer and sickle. In this fiercely competitive landscape, across all domains, we must continually equip ourselves, nurturing our interests and fostering growth." Keeping this vision department of electronics had established the **TESLA CLUB** Under the guidance of **Dr. Ganeshchandra N. Shinde Principal**, and the senior faculty of electronics department. The name is inspired from the great scientist nickola tesla. He is One of the greatest geniuses in history. His discoveries and inventions have change the world. He is best known for his contributions to the design of the modern alternating current (AC) electricity supply system.

Preamble

Tesla Electronics club is the student run organization that strives to impart enthusiasm and passion for electronics and allied fields among students of Departments of Electronics, Yeshwant Mahavidyalaya, Nanded. The club aims to cater to the various needs that are primal to be addressed to keep in pace with the ever evolving field of electronics. The club aims to uncover those key topics that are not part of the curriculum or just grazed upon by the syllabus. The functions of the electronics club are to deal from basics of electronics to the peak of it. This club, for sure, will help the students not only in their studies but also in their career.

The Electronics Club is a hobby group that aims to teach and help students understand the seemingly incomprehensible electronic gadgets in the world today, and also assists students in developing their

own devices. To this end, various lectures, workshops, projects as well as competitions throughout the year concerning both analog as well as digital electronics keep the calendar busy and the participants, learning.

In this rapidly moving world, where everyday a new technology comes into existence, it is extremely hard to keep abreast with all the technical know-how, but if our basic concepts are intact then we can aim for the top.

Objectives of Tesla Electronics Club

- The chief aim of the club is to bring the students out of their rooms and to expose them to the challenges awaiting them in the field of circuit design and hardware analysis.
- To explain the concepts of electronics in a practical way and help them to gain knowledge but also help them to use the basic concepts to come up with something constructive and useful for the society.
- To provide a platform for the students to give a shape to their innovative ideas.
- To expose the students to the latest technological advancements in the field of electronics.
- To form a discussion boards on latest trends of electronics which indeed improve their communication skills.
- To provide a hands-on training for students.
- To provide a virtual bridge between the present global industries and the department.
- Aim at bringing out the "Technological Best" in students.
- To conduct lecture series, workshops and also assign projects to students.

Motto

INNOVATION, IMAGINATION & APPLICATION

Activities

- Workshops
- DIY: project making for the purpose of Avishkar , Anvention etc
- Query session
- Activities like farewell , alumni meet , fresher's party
- Talks: discover the unknown

- Implementation of inventions in campus
- Forming an active google group
- Competitions for the student of year
- Embedded system design challenge
- Electromania (circuit design)
- Design challenge for freshers
- Lecture series
- Scientific Movie and documentary session on every Saturday at 04.30 to 05.30 pm.

How to meet the objectives

- We show them the Skill based content which help in better understanding.
- We will ask them about their area of interest and help them to develop their ideas.
- We update them with each and every technical advancement happening around the world.
- We will take up mini projects and make them to work on it.
- Through our contacts we will invite the officials from electronic industries to have seminars and interaction with students .

Functioning of Tesla Club

The functions of the Tesla Club is to deal from basics of electronics to the peak of it. The domains of the club are designed in such a way that it provides all-round development of a student in all aspects. Teaching the students about the various components required to build both basic and complex circuits, helping them design and built complex circuits, giving them hints and tricks to make a circuit work, detecting bugs present in a built circuit are some of the key functions of this club.

The Club provided a platform for young talent to bloom. Many found their hidden gifts and others faced and overcame their fears. While events like Poster Presentation, Power point Presentation, Singing, had prelims on Science week. Coding showed us where we stood in the IT world; others had another tale to tell. The events touched on every aspect, be it mental, physical or emotional.

On the occasion of Science day Students of Tesla Club, who went all out to show their expertise and abilities to change the world, on that day every student was presenting their best project and own the hearts of all the spectators and dignitaries. Poster like Azadika Amrut Mohatsaw ,had gain the special attention in the exhibition.

We all changed! Being a part of the Club was truly a remarkable experience, one to be cherished and never forgotten.

Tesla Club Members have Actively Participated in following events 2024-25

1) Avishkar Participation :

As part of its annual tradition, Tesla Club members actively participated in the prestigious 'Avishkar' Festival for the academic year 2024 – 25. This year, the District-Level Avishkar event was proudly hosted by Yashwant Mahavidyalaya itself, making it a moment of pride and responsibility for the college community.

Tesla Club students enthusiastically took part in various categories of the competition, showcasing their innovative ideas and research-based projects. The event proved to be a valuable learning experience,

Sr	Tesla Club Member	Class	Mentor	Model	Award
1	Dhanesh Rathod	B.Sc II nd year	Mr. S.S. Rathod	Smart Water Cooler	Participate
2	Ruturaj Donglikar	B.Sc Ist year	Dr. Y. T. Nakate	Wireless water Craft	Participate
3	Chakradhar Kadam	B.Sc Ist year	Dr. Y. T. Nakate	IOT smart door Lock	Participate



Avishkar Model Presentation

2) Workshop:

Tesla Club Workshop Participation Report

Throughout the year, Tesla Club members actively participated in various workshops, gaining valuable exposure and practical experience.

The first workshop was held at Venture Center, Pune, and focused on "How to Start a Startup". Five Tesla Club members attended this insightful session, where they explored the fundamentals of startups and innovation. In addition to the seminar, the members also had hands-on sessions with advanced equipment such as 3D printers and laser cutting machines. This experience provided them with a deep understanding of prototyping tools and startup culture, making it an incredibly enriching experience for all participants.

The college hosted a two-day National Workshop on Innovation and Entrepreneurship, which brought together industry experts, entrepreneurs, and guest speakers to inspire and guide students on various aspects of innovation, business development, and startup culture.

Tesla Club members played a key role in the success of this event. Several members actively participated in the workshop sessions, gaining insights from seasoned professionals. In addition to being attendees, many of them took on important volunteer responsibilities, including managing:

- Hospitality
- Stage coordination
- Food and refreshments

The entire event's coordination and execution in these areas were efficiently handled by the Tesla Club students, showcasing their leadership, teamwork, and event management skills. Their involvement not only enhanced the overall workshop experience but also provided them with valuable organizational and interpersonal exposure.



3) National Competition :

In a moment of great pride, Yashwant Mahavidyalaya successfully hosted a National Innovation Competition, sponsored under the PM-USHA (Pradhan Mantri Uchchatar Shiksha Abhiyan) scheme. The college received dedicated funding through PM-USHA, and this support enabled the organization of a prestigious national-level competition focused on innovative ideas and solutions.



Welcome Robot Design By Tesla Club

4) Science Week Model Exhibition

Science Week, conducted every year in the month of February, marks the final major academic event for students in the academic calendar. This week-long celebration of science and innovation includes a variety of engaging activities, with poster presentations and model demonstrations being the key highlights.

During Science Week 2025, Tesla Club members actively participated in both the model presentation and poster presentation events. They showcased a range of innovative ideas and working models, reflecting their creativity, scientific understanding, and technical skills.

Their efforts were highly appreciated, and several members were awarded prizes for their outstanding models.

Sr	Tesla Club Member	Class	Model/Poster	Award	Mentor
1	RATHOD DHANESH VITTHAL	B.Sc II nd year (Electronics)	Water Saving Smart IOT controlled cooler	Second Runner up	Mr. S.S. Rathod
2	Aishwarya Vikram Hamand	B.Sc I st year (Electronics)	3D printed Solar Tracker System	Third Runner up	Dr. Y. T. Nakate
3	JADHAV SUJAL DNYANOBA	B.Sc I st year (Electronics)	IoT based surveillance for SHOP and Homes	Participate	Dr. Y. T. Nakate
4	ATHAWALE KARTIK RASHTRAPAL	B.Sc I st year (Electronics)	IOT based smart traffic light	Participate	Dr. Y. T. Nakate

