;JSPM's

Rajarshi Shahu College of Engineering, Tathawade,Pune

Department of Electronics & Telecommunication

Report

On

‘ElectroVision Quest ‘

(Under INNOVISION-2025 on 4th & 5th Feb. 2025)

Date: 10.2.2025

1.Event Overview

ElectroVision Quest – Innovision 2025 is a series of exciting events focused on electronics and microcontrollers held in Electronics and Telecommunication department of RSCOE. From quizzes, circuit debugging to digital simulations and DIY projects, the journey culminates in the ultimate project showcase, “Techathon.” Emmerse yourself in innovation, creation, and excellence! Participants are encouraged to register for all events, while lateral entries to individual events are available as a secondary option.

2.What is ElectroVision?

ElectroVision is a platform for B.Tech students passionate about electronics. It combines theoretical knowledge and hands-on skills to foster innovation, problemsolving, and collaboration through various sub-events.

3.Sub-Events

ElectroVision Quest - Innovision 2025 is an exciting series of events focused on electronics and microcontrollers. From quizzes and circuit debugging to digital simulations and DIY projects, the journey culminates in the ultimate project showcase, “Techathon”. Dive in to innovate, build, and excel!
Teams registered for overall event have to go through the following:
Event Sequence

1. Watts the Answer
o Start the flow with a knowledge-based quiz to warm up participants and test their understanding of the core concepts.

2. Fault Hunt
o Move into troubleshooting tasks, where participants use analytical skills to identify and resolve issues.

3. Circuitrix
o Follow up with a creative and technical hands-on activity involving circuit design to keep the momentum going.

4. DIY (Do It Yourself)
o Engage participants in crafting and presenting their own projects, showcasing their creativity and technical prowess.

5. Techathon

Conclude with a comprehensive, collaborative event where participants solve broader technical challenges or present innovative solutions.

WATT'S THE ANSWER-2025

- Submitted by: Team Watt's the Answer
- Organised by: Team ElectroVision at Venue: E&TC Department Seminar Hall

Activity Type	Circuit designing based on Basics & Digital Electronics
Activity Title	Watt's the Answer
Date's of Activity	05/02/2025
Duration	11:30AM to 1:00PM
Organizers	**Team ElectroVision:** • Dr. S.C. Wagaj • Dr. C.V. Rane • Mrs. Shilpa S. Godage • Sahil Arankalle • ShounakSanpurkar • Loukik Sancheti **Team Watt's the Answer:** • Prithviraj Sarowar • Gauri Potdar • Ruchi Parekar
Target Audience	Open to all college students
Resource & Management	Watt's the Answerteam and ElectroVision Volunteers

Flyer/Creative :

Brief Description of the activity:

- The Department of Electronics and Telecommunication Engineering successfully organized its annual technical fest, Electrovision, featuring the highly anticipated quiz competition, Watt's The Answer, on 5th February 2025.
- The event was conducted on the Mentimeter platform, challenging participants with 30 multidisciplinary engineering questions, with a strong emphasis on electronics. Each question had a one-minute time limit, testing both technical knowledge and quick decision-making skills.
- The competition saw enthusiastic participation from 48 students, fostering a spirit of technical excellence and competitive engagement. The event was enriched by the guidance and support of esteemed faculty members, Dr. C.V. Rane and Mrs. Shilpa Godage, whose valuable insights motivated participants to push their intellectual boundaries and actively contribute to the event's success.
- This intellectually stimulating competition reaffirmed the department's commitment to fostering innovation, technical expertise, and analytical thinking among students.

Objectives:

- Encourage Technical Excellence: Promote a culture of learning and curiosity by challenging participants with multidisciplinary questions, with a strong focus on electronics and communication engineering.
- Enhance Problem-Solving Skills: Develop quick analytical thinking and decision-making abilities through time-bound questions requiring precise and accurate responses.
- Foster Competitive Spirit: Create a platform for healthy competition among students, motivating them to test their technical knowledge and benchmark their understanding against peers.
- Promote Active Student Engagement: Encourage active participation in departmental activities, fostering a sense of belonging and enthusiasm for technical fests.
- Recognize and Motivate Talent: Identify and appreciate students with strong technical acumen and critical thinking skills, inspiring them to pursue further academic and professional excellence.

Resource Person's and Management: Watt's the Answer Team and ElectroVision Volunteers

PSO's Mapped:

PSO1	PSO2	PSO3
1	1	-

Pos Mapped:

PO1	PO5	PO7	PO8	PO9
3	3	-	3	3

Outcomes:

- Improved Technical Knowledge: Participants gained deeper insights into core electronics and multidisciplinary engineering concepts through challenging and diverse questions.
- Enhanced Problem-Solving Abilities: The time-bound format encouraged students to think critically and make accurate decisions under pressure.
- Increased Student Participation: The event fostered active engagement and enthusiasm, with 48 participants contributing to the competitive and collaborative environment.
- Strengthened Faculty-Student Interaction: Valuable guidance and encouragement from faculty members, including Dr. C.V. Rane and Mrs. Shilpa Godage, created a positive and inspiring learning atmosphere.
- Recognition of Talent: The competition successfully identified and motivated students with exceptional technical and analytical skills, fostering confidence and further academic interest.

Photos/Video:

- Instagram Post :- https://www.instagram.com/reel/DFK3eTmqkUt/?igsh=MWpmcWM1OXl5N3QxZg==


GPS Map Camera
Dattwadi, Maharashtra, India
JSPM Rajarshi Shahu College Of Engineering , Tathawade, JSPM Rajarshi shahu college of engineering , Tathawade, Service Rd, Ashok Nagar, Tathawade, Pimpri-Chinchwad, Maharashtra 411033
Lat 18.61995° Long 73.747317°
05/02/25 01:07 PM GMT +05:30
Google

Supporting Document:

- **WhatsApp Message :**

ELECTROVISION by the ENTC Department
Watt’s the Answer? – Electrify Your Knowledge!
Get ready for an electrifying experience with Watt’s the Answer, the ultimate quiz competition brought to you by the ENTC Department, JSPM's Rajarshi Shahu College of Engineering, Tathawade
Event Details:
Date: 5th February
Test your knowledge, compete with the best, and be a part of this electrifying challenges

REPORT

FAULT HUNT-2025

- Submitted by: Team Fault Hunt
- Organised by: Team ElectroVision at Venue: E&TC Department , EDST Lab

Activity Type	Annual Tech & Cultural College Event
Activity Title	Fault Hunt
Date's of Activity	05/02/2025
Duration	1:00 PM to 5:00PM (4 hrs)
Organizers	**Team ElectroVision:** ▪ Dr. S.C. Wagaj ▪ Dr. C.V. Rane ▪ Dr. Swati Kale ▪ Sahil Arankalle ▪ Shounak Sanpurkar ▪ Loukik Sancheti ▪ Sayali Gujale ▪ Revati Katkar ▪ Rutuja Dharpawar ▪ Vedanti Lichade ▪ Manswi Bendke
Target Audience	Open to all college students
Resource& Management	Fault hunt team and ElectroVision Volunteers

Brief Description of the activity:

- The Electronics and Telecommunication (ENTC) Department of JSPM's Rajarshi Shahu College of Engineering (RSCOE) hosted the Fault Hunt event as part of the annual technical fest, Electrovision, under the grand technology and innovation festival, Innovision 2k25.
- The event officially commenced on February 5, 2025, with a ribbon-cutting ceremony conducted by the guest of honor, Dr. S.C. Wagaj, Head of the ENTC Department, along with Faulty Coordinator Dr. Swati Kale, and student coordinators. The inauguration took place in the EDST Lab.
- Participants, forming teams of 1 to 4 members, were eligible to register for the event, including lateral entries. The competition involved identifying and fixing faults in pre-designed electronic circuits using the Proteus simulation platform. These faults included missing connections and design traps.
- To facilitate troubleshooting and circuit simulations, the Proteus Design Suite was installed on the systems. Each team was provided with two faulty circuits and given 30 minutes to identify and rectify the errors. The event was centrally timed, and judging was based on the number of faults identified and corrected. Participants were required to adhere strictly to the allotted time for each stage

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Objectives:

- Promote technical excellence by challenging participants with real-world circuit faults.
- Enhance problem-solving and circuit analysis skills through hands-on troubleshooting.
- Develop the ability to diagnose and repair electronic circuits under time constraints.
- Strengthen critical thinking by exposing participants to diverse circuit faults.
- Encourage teamwork and effective communication for efficient troubleshooting.
- Provide hands-on experience with industry-standard tools like the Proteus Design Suite.
- Emphasize critical thinking, practical skills, and collaboration to solve real-world engineering challenges.

Resource Person's and Management : Fault Team and ElectroVision Volunteers

Outcomes:

- Enhanced Problem-Solving Abilities – The time-bound format encouraged students to think critically and make logical decisions under pressure.
- Practical Knowledge – Participants strengthened their troubleshooting and circuit analysis skills while gaining hands-on experience in real-world fault identification using the Proteus Design Suite.
- Promotion of Creativity and Engagement – The event fostered interaction between students and faculty coordinators, facilitating technical knowledge sharing. It also provided students with an opportunity to showcase their talent, encouraging creativity and active involvement.

- Student Participation and Leadership – Through active participation and event organization, students demonstrated leadership and teamwork, significantly contributing to the event's success.
- Recognition of Talent – Students were honoured with certificates for their contributions, making them feel valued and appreciated for their hard work.

Photos/Video:


Department of Electronics & Telecommunication
ELECTROVISION
TECHATHON


Department of Electronics & Telecommunication
ELECTROVISION
TECHATHON

Supporting Document:

- **Whatsapp Message :**

  Electrovision by the ENTC Department

  Fault Hunt - "Unravel, Analyze, Resolve – The Ultimate Fault Hunt Challenge" !!

  Get ready for "The *Fault Hunt* event at Innovision 2k25 provided an exhilarating platform for budding electronics enthusiasts..." brought to you by the ENTC Department , JSPM'S Rajarshi Shahu College of Engineering , Tathawade.

- **Instagram posts**

REPORT

CIRCUITRIX-2025

- Submitted by: Team Circuitrix
- Organised by: Team ElectroVision at Venue: E&TC Department , EDST Lab

Activity Type	Circuit designing based on Basics & Digital Electronics
Activity Title	Circuitrix
Date's of Activity	05/02/2025
Duration	11:30AM to 5:00PM (4 hrs)
Organizers	**Team ElectroVision:** ▪ Sahil Arankalle ▪ Shounak Sanpurkar ▪ Loukik Sancheti **Team Circuitrix:** ▪ Jadhav Nikhil ▪ Dakare Vanshika ▪ Patil Manisha ▪ Podhar Prachi
Target Audience	Open to all college students
Resource& Management	Circuitrix team and ElectroVision Volunteers

Brief Description of the activity:

- The **Circuitry Event in Digital Questions using DelDSim** is a challenging and engaging competition designed to assess participants' expertise in **digital circuit design, analysis, and troubleshooting**.
- The event canters around **DelDSim**, a simulation tool that enables participants to **create, analyze, and debug digital logic circuits** in a virtual environment. It is structured to evaluate **theoretical understanding**, **practical application**, **problem-solving abilities**, and **efficiency in circuit simulation**.
- Participants begin by designing **fundamental logic circuits** using essential components such as **logic gates** (AND, OR, NOT, XOR, etc.). They are required to construct functional circuits based on given problems or specifications, ensuring that the logical operations are correctly implemented.
- The circuits are then tested using **DelDSim** to verify their outputs and functionality. The **event leaders and coordinators** evaluate the solutions and award points based on accuracy and performance.

Objectives: **Strengthening Digital Electronics Knowledge** – Enhance participants' understanding of **logic gates, combinational and sequential circuits**, and other fundamental digital concepts.

- **Developing Practical Simulation Skills** – Provide hands-on experience with **DelDSim**, enabling participants to **design, analyze, and troubleshoot digital circuits** effectively.
- **Enhancing Problem-Solving and Debugging Abilities** – Train participants in **identifying, analyzing, and correcting errors** in circuit designs, improving their troubleshooting skills.
- **Encouraging Circuit Optimization** – Promote **efficient circuit design** by minimizing component usage, reducing power consumption, and enhancing overall performance.
- **Improving Critical Thinking and Time Management** – Challenge participants with **time-bound tasks**, enhancing their ability to **think logically and make quick decisions under pressure**.
- **Fostering Teamwork and Collaboration (if team-based)** – Develop **teamwork and communication skills** through collaborative circuit design and problem-solving tasks.

Resource Person's and Management : Circuitrix Team and ElectroVision Volunteers

Outcomes:

- Hands-on Experience with Simulation Tools – The use of DelDSim enables participants to gain practical experience in designing, analyzing, and troubleshooting digital circuits in a simulated environment, preparing them for real-world applications.
- Improved Problem-Solving and Debugging Skills – Competitors develop the ability to identify and fix errors in circuit designs efficiently, enhancing their troubleshooting skills for complex digital systems.
- Time Management and Critical Thinking – The time-constrained competition environment sharpens participants' ability to think critically and make quick, accurate decisions under pressure.
- Teamwork and Collaboration (if team-based) – In team-based challenges, participants improve collaborative problem-solving, effective communication, and task division to design and test circuits within a given timeframe.
- Increased Confidence and Innovation – Successfully completing challenges boosts participants' confidence in their technical abilities and fosters innovative thinking in circuit design.

Photos/Video:

Supporting Document:

- 1.Question Papers
- 2.Attendance Sheet

REPORT

DO IT YOURSELF-2025

- Submitted by: Team Do it Yourself
- Organised by: Team ElectroVision at Venue: E&TC Department Seminar Hall

Activity Type	Hands on Microcontroller coding.
Activity Title	Do it Yourself
Date's of Activity	05/02/2025
Duration	11:30AM to 1:00PM
Organizers	**Team ElectroVision:** • Dr. S.C. Wagaj • Dr. C.V. Rane • Sahil Arankalle • ShounakSanpurkar • Loukik Sancheti **Team Do it Yourself:** • Avadhut Nimbalkar • Shreyash ghodake • Paritosh Raut • Rani Patile • Om Parwe •
Target Audience	Open to all college students
Resource & Management	Do it Yourselfteam and ElectroVision Volunteers

Brief Description of the activity:

- The **DIY (Do It Yourself) Event** is an engaging, hands-on competition designed to test participants' skills in **embedded systems development, coding, and hardware integration**.
- Participants select a **problem statement** and develop a complete **working solution** using the **Arduino IDE**. They can program either an **Arduino** or **ESP microcontroller** and interface it with the provided **sensors and components**.
- The event challenges participants to not only write **efficient and functional code** but also **assemble and integrate hardware** to achieve a working solution. The designed system must successfully execute the intended task, demonstrating **real-world problem-solving skills**.
- Once the project is implemented, participants will **test and validate** their hardware. Event coordinators and judges will evaluate submissions based on **code efficiency, hardware functionality, innovation, and problem-solving approach**.

- This event fosters **creativity, technical expertise, and practical application** of embedded systems, empowering participants to turn ideas into functional prototypes.

Objectives:

- Strengthening Embedded Systems Knowledge: Enhance participants' understanding of **microcontrollers (Arduino/ESP)**, sensor integration, and real-world hardware applications.
- Developing Practical Coding Skills: Provide hands-on experience with **Arduino IDE**, enabling participants to write, test, and debug **embedded C/C++ programs** for microcontrollers.
- Enhancing Hardware Implementation Abilities: Train participants in **assembling and interfacing electronic components**, ensuring proper sensor connections and circuit functionality.
- Encouraging Innovation and Problem-Solving: Challenge participants to **identify real-world problems**, develop **efficient solutions**, and implement them using **embedded systems**.
- Improving Debugging and Optimization Skills: Teach participants to **analyze hardware and software issues**, optimize **code execution**, and ensure **system reliability**.
- Boosting Critical Thinking and Time Management: Challenge participants with **time-constrained tasks**, helping them **think critically** and work efficiently under **pressure**.
- Fostering Teamwork and Collaboration (if team-based): Develop **communication and teamwork skills** through **collaborative circuit design and embedded system development**.

Resource Person's and Management: Do it Yourself Team and ElectroVision Volunteers

Outcomes:

- Hands-on Experience with Embedded Systems: Participants gain **practical experience** in programming **microcontrollers (Arduino/ESP)**, interfacing sensors, and developing functional **hardware projects**.
- Improved Problem-Solving and Debugging Skills: Competitors enhance their ability to **identify and troubleshoot errors** in both code and hardware, improving their **debugging efficiency**.
- Enhanced Time Management and Critical Thinking: The **time-constrained environment** pushes participants to **think critically**, make **quick decisions**, and efficiently manage their tasks to achieve a **working output**.
- Teamwork and Collaboration (if team-based): In team-based challenges, participants learn to **communicate effectively**, **divide tasks efficiently**, and collaborate to **build and test** their projects.
- Boosted Confidence and Innovation: Successfully implementing a **functional project** strengthens confidence in **technical skills** and encourages **creativity** in embedded system design.

Photos/Video:

Supporting Document:

1.Problem Statements

2.Attendance Sheet

REPORT

TECHATHON-2025

- Submitted by: Team Techathon

- Organised by: Team ElectroVision at Venue: E&TC Department

Brief Description of the activity:

Activity Type	Circuit designing based on Basics & Digital Electronics
Activity Title	Techathon
Date's of Activity	06/02/2025
Duration	11:30AM to 1:00PM
Organizers	**Team ElectroVision:** • Sahil Arankalle • Loukik Sancheti • ShounakSanpurkar **Team Techathon:** • Hrushikesh Borgave • Naval m • Omkar m • Pravin j
Target Audience	Open to all college students
Resource & Management	Techathonteam and ElectroVision Volunteers

- Techathon 2025 is a hardware-based project demonstration event where participants, in teams of four, present innovative and sustainable project ideas using any microcontroller or processor they have learned throughout their engineering journey. The competition aims to foster creativity, problem-solving, and technical expertise, aligning with advancements in IoT, AI, and Embedded Systems.
- Participants must develop a working prototype and showcase their project's practical application, sustainability, and societal impact. Judges will evaluate projects based on innovation, feasibility, technical implementation, and presentation skills.
- The event consists of:
    - Project Demonstration Round – Teams present their projects, explaining working principles, hardware and software integration, and real-world applications.
    - Q&A Session – Judges and audience engage with teams, discussing technical feasibility, scalability, and sustainability aspects of their projects.

Objectives:

- Encouraging Innovation – Inspiring students to think creatively and develop technological solutions that address real-world challenges.
- Enhancing Technical Skills – Strengthening participants' knowledge of microcontrollers, sensors, AI integration, and circuit design.
- Developing Problem-Solving Abilities – Training participants to analyze challenges, debug issues, and optimize designs for efficiency and functionality.
- Promoting Sustainable Solutions – Encouraging projects that are energy-efficient, eco-friendly, and beneficial to society.
- Building Presentation & Communication Skills – Helping participants effectively pitch their ideas and explain technical details to an audience.
- Encouraging Team Collaboration – Enhancing teamwork, communication, and efficient task distribution for a successful project demonstration.
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Resource Person's and Management: Techathon Team and ElectroVision Volunteers

Outcomes:

- Hands-on Experience with Simulation Tools – Participants gained practical experience in designing, analyzing, and troubleshooting digital circuits using DelDSim, preparing them for real-world applications.
- Improved Problem-Solving and Debugging Skills – Competitors enhanced their ability to identify and resolve errors in circuit designs, improving their troubleshooting skills for complex digital systems.
- Time Management and Critical Thinking – The time-constrained competition challenged participants to think critically, make quick decisions, and efficiently manage their tasks under pressure.
- Teamwork and Collaboration – In team-based challenges, participants developed collaboration, communication, and task distribution skills, ensuring efficient circuit design and testing.
- Increased Confidence and Innovation – Successfully completing challenges boosted participants' confidence in their technical abilities and encouraged creative thinking in digital circuit design.

Photos/Video:

Dr.C.V.Rane
Innovision Coordinator

Dr. S.C.Wagaj
HOD E&TC