

Report on Robotic Odyssey: Workshop on AI for Robotics

Organized by:

Department of Physics & Electronics, Bhavan's Vivekananda College of Science, Humanities & Commerce, Sainikpuri, Secunderabad, in Collaboration with BEST Society, Hyderabad and TEJIS, A Robotic and AI-based Company in Hyderabad & Bengaluru.

Date: 22nd to 24th January 2025

Faculty Coordinators:

- Mrs. M. Prasanna, HOD, Physics & Electronics
- Mr. TVLNH Prasad
- Mrs. P. Lavanya

Key Highlights of the Workshop:

1. **Building Robots:** Hands-on sessions on constructing and programming robots.
2. **IoT-enabled Robot Control Systems:** Exploring the integration and implementation of IoT in robotics
3. **Art of PCB Design:** Practical insights into designing and fabricating Printed Circuit Boards (PCBs).

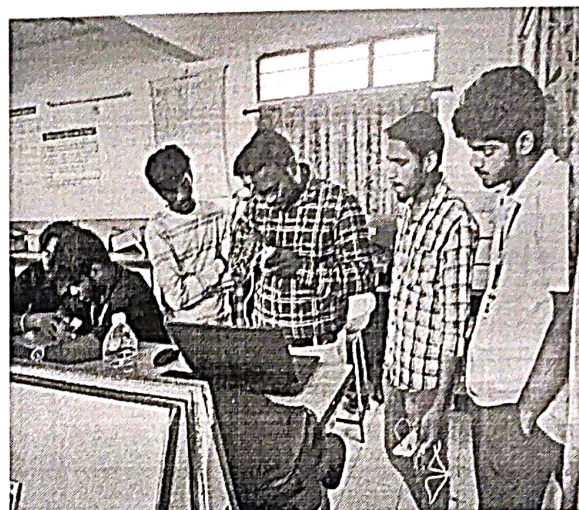
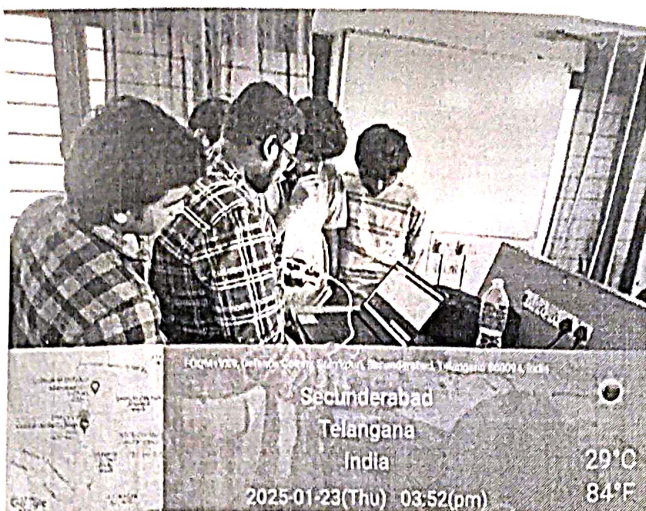
The workshop had a total of 40 participants from Under graduate programs of BSC MECS, MPCS and BSC HDS, ensuring personalized attention and an interactive learning environment. The Workshop was an engaging event, providing participants with valuable insights and hands-on experience in the fields of AI, IoT, and robotics. Mr. T. Sanjay, Secretary of the BEST Society, served as the resource person for the workshop and provided valuable practical insights into the design and fabrication of PCBs. The collaboration with TEJIS technologies brought industry expertise to the workshop, enriching the learning experience. The event promoted innovation and skill development, preparing participants for future advancements in robotics and AI.

Workshop Outcomes:

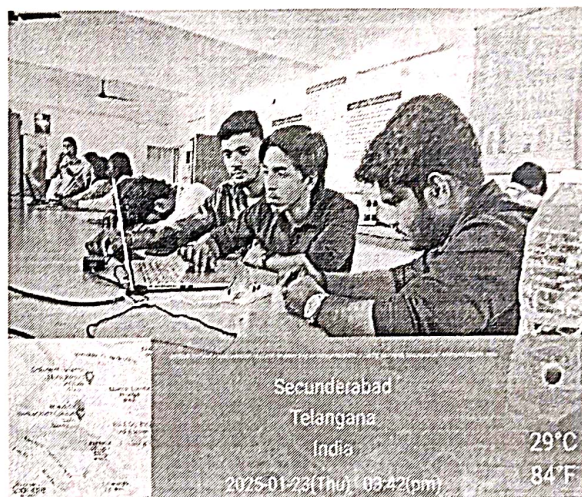
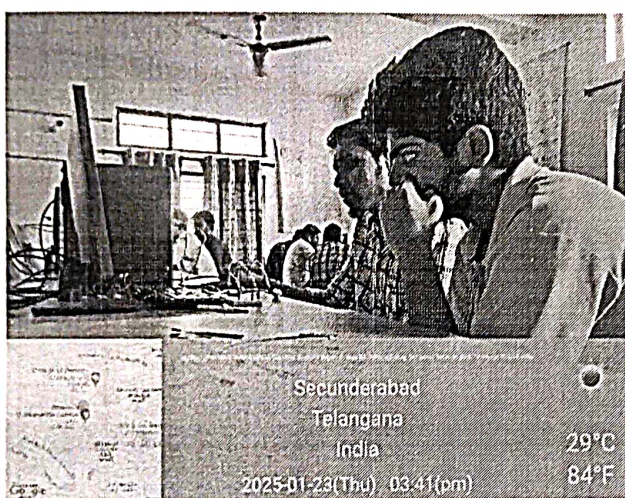
- Participants gained practical skills in building and programming robots.
- Understanding of IoT applications in robotics was enhanced.
- Skills in PCB design and fabrication were developed.


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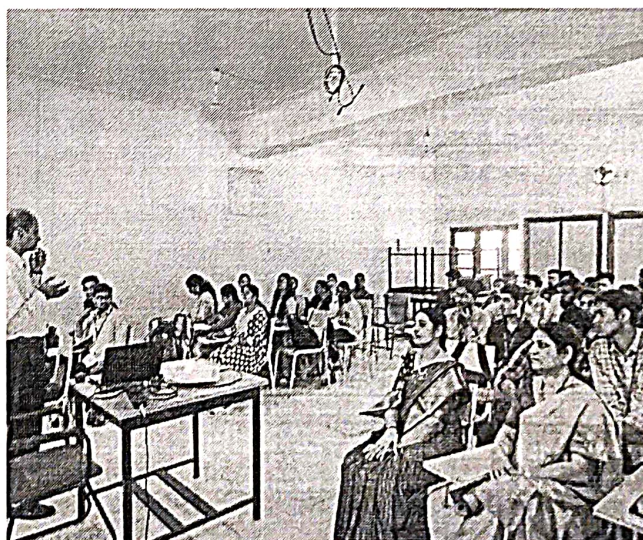
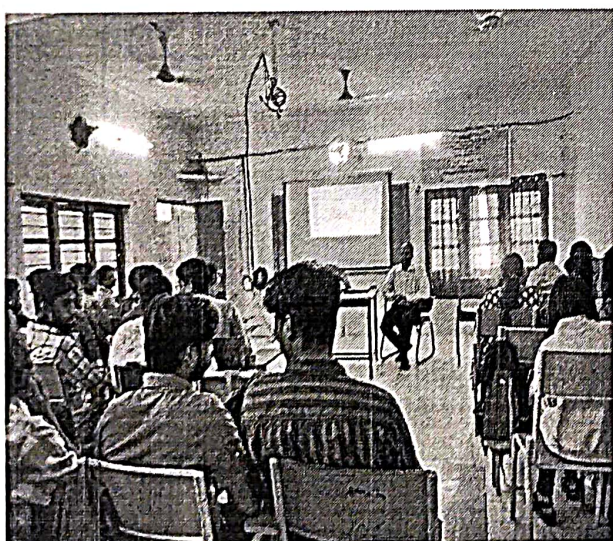
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Bharatiya Vidya Bhavan's Vivekananda College
Sainikpuri, Secunderabad - 500 084.



Mr. Ravi Teja guiding participants through an interactive AI and robotics session at the Workshop.



Hands-on learning in action



Expert guidance by Mr T Sanjay on PCB design and fabrication.

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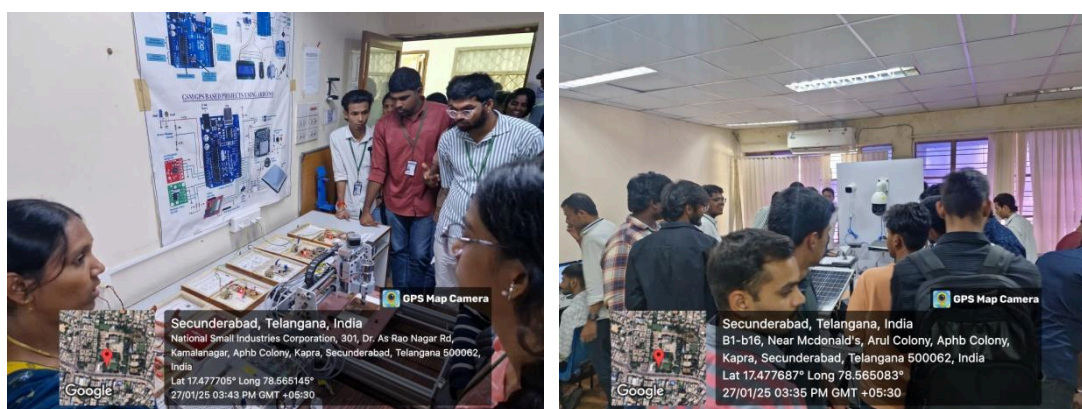
Report on HANDS-ON TRAINING on Circuit Design

Department of Physics and Electronics organized a One-Day Hands on Training Programme on Circuit Design for all BSc MPCs III students at National Small Industries Corporation Ltd (NSIC) - Technical Service Centre, Kushaiguda, ECIL, Hyderabad on 27th January, 2025. The objective of this programme was to provide practical exposure to fundamentals of electronic circuits and components and also to enhance skills in designing and troubleshooting the circuits. A total of 46 BSc MPCs students participated in this programme and were accompanied by faculty Dr V R Manjula and Mrs T Sai Santoshi.

Training programme began with an introduction to NSIC by Mr T Muthukumaran, Dy Manager- Technical. Mr Kumaran briefed the students on NSIC's mission to promote and support small-scale industries by offering various training programmes, as well as providing financial and technical assistance. He also discussed the initiatives undertaken by NSIC to encourage entrepreneurship.

Mr Kumaran and his team explained the fundamentals of electronic circuits and components and their working principles, providing hands-on training to all the students. Students had an opportunity to visit various innovative projects based on IoT and their functioning. Students also visited various labs at NSIC campus.

Overall, the One-Day Training Programme was highly informative and beneficial for the students, offering valuable practical insights into circuit design and electronic systems.



Live demonstration on IoT based projects



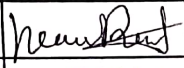

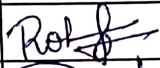


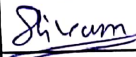
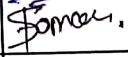
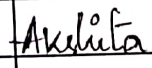
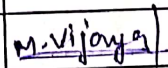
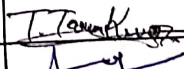
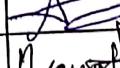






Group photo

Hands on Training at NSIC on 27th Jan, 2025

List of students attended

S.No	Roll Number	Student Name	Signature
1	107221468063	BUDDAMOLLA HEMANTH GOUD	
2	107221468073	M. DEEPIKA	
3	107221468095	VEMURI KAMALA SALESWARI	
4	107222468001	ALLA ROHITH KUMAR	
5	107222468003	BALAJI SHARMA	
6	107222468004	CHINTHA POOJA	
7	107222468005	GANGASANI VENKATA PAVANI	
8	107222468006	GOLIVE SAI CHARAN	
9	107222468007	GOSKONDA AKSHITH REDDY	
10	107222468008	GUDUPU LAKSHMI CHARAN	
11	107222468009	GUNNALA SREE VIDHYA	
12	107222468010	J. AISHWARYA	
13	107222468011	JALIGAPU KEERTHAN KUMAR	
14	107222468012	KASARLA RAMAKRISHNA	
15	107222468013	KATAKAM PAVAN KUMAR	
16	107222468014	KAVALI RAHUL	
17	107222468015	KOTHAPALLY SHASHANK REDDY	
18	107222468016	LAKKARAJU ESHWAR	
19	107222468017	MARRI RAGHU RAM REDDY	
20	107222468018	MEDISETTY MANISH	
21	107222468019	MITTAPALLY INDU	
22	107222468020	MULA SAI PAVAN	
23	107222468021	PAPATHOTI GNANA VINAY KUMAR	
24	107222468022	PYARSANI KIRAN	
25	107222468024	S BHAVAGNYA	
26	107222468025	SAMALA SOWMYA	
27	107222468026	SARAF RAHUL SAI	
28	107222468027	SHAIK JAN BASHA	
29	107222468028	SHYAMALA RANJITH KUMAR	
30	107222468030	VENISHETTY MANIKUMAR	
31	107222468031	VOGGU NARSIMHA	
32	107222468032	YERRA MANOJ KUMAR	
33	107222468033	ABDUL AHMED	
34	107222468034	ADITYA TIWARI	
35	107222468035	ATUL KUMAR SINGH	

S.No	Roll Number	Student Name	Signature
36	107222468036	D SOHAIL SAHEB	
37	107222468037	DEEPAK BISWAS	
38	107222468038	KASHA PRANAI RAJ	
39	107222468039	PURALI HARSHAVARDHAN REDDY	
40	107222468040	R PARTHIVAN	
41	107222468041	RAJDEEP BASU	
42	107222468042	ROHIT KUMAR	
43	107222468043	RUPESH YADAV	
44	107222468044	SALONI DWIVEDI	
45	107222468045	SHIVAM TIWARI	
46	107222468046	SHIVANI TOMAR	
47	107222468047	SOURAV SINGH	
48	107222468048	THAKUR AKSHITA	
49	107222468049	VISHAL DEEP	
50	107222468050	DODDI MANOJKUMAR	
51	107222468052	MAMIDALA VIJAYA LAKSHMI	
52	107222468053	NELAPOGULA SANDEEP	
53	107222468054	PALEPU SPARJAN PAUL	
54	107222468055	TUNIKI TARUN KUMAR	
55	107222468056	AYUSH SHUKLA	
56	107222468057	K NAVANEETHA SHANMARGINI	
57	107222468058	MOSES ANDREW	
58	107222468059	NB ARJUN	
59	107222468060	R S SRUCHIKA	



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Reaccredited with 'A' grade by NAAC

Report on
National Science Day Celebrations 2025

The **National Science Day** celebrations, marking the discovery of the **Raman Effect**, were jointly organized by the **Faculty of Physical Sciences and Life Sciences** on **28th February 2025**. **Dr. S. Rajendra Prasad**, Member Secretary of the **Telangana Council of Science & Technology**, was the **Chief Guest** and **keynote speaker** for the event.

As part of the **National Science Day** celebrations, the **Department of Physics and Electronics** organized two events:

1. **Project Presentation Competition**
2. **Poster Presentation Competition**

on **Recent Innovations in Science and Technology for Viksit Bharat**.

Mr. Rajneesh Donti, Scientist-E at the **Tata Institute of Fundamental Research (TIFR)**, **Hyderabad**, served as the **judge** for both competitions.

A total of **32 students** from **B.Sc. Physical Sciences (III year)** participated in the **Project Presentation Competition**, showcasing their projects on the latest developments in science and technology. The winners were:

First Prize: *Mr. K. Chandi Prasad, Mr. M. Bharath, Mr. Kunal Mishra, and Mr. M. Balaji* (B.Sc. MECs) for their project on **Data Integration**.

Second Prize: *Mr. M. Manoj Kumar and Mr. P. Harsha Vardhan* (B.Sc. MPCs) for their project on **Agricultural Rental Management**.

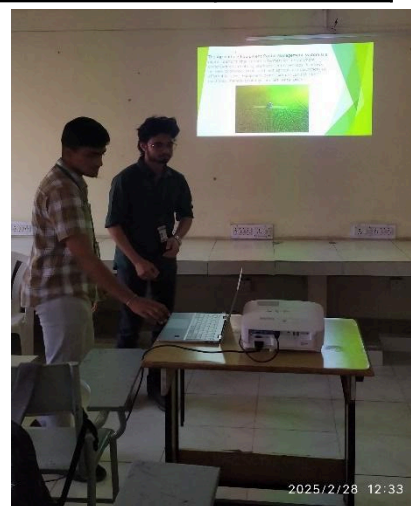
In the **Poster Presentation Competition**, **13 teams** (26 students) from **B.Sc. MPCs and MECs (I & II years)** participated. The winners were:

First Prize: *Mr. B. Raju and Mr. G. Hemanth* (B.Sc. MECs, II year).

Second Prize: *Ms. G. Eshika and Ms. S. Lakshmi Priya* (B.Sc. MPCs, I year).



Name of the Student	Class	Phone Number	Project Title	
Kulakarni Chandi Prasad	BSc MECs IIIyr	9441529622	Data Integration	First Prize
Mummadi Bharath		9966322665		
Kunal Mishra		9493833442		
M Balaji		7989440261		
Y Manoj Kumar	BSc MPCs IIIyr	9381472305	Agricultural Rental Management	Second Prize
P Harsha Vardhan		7093528160		



Name of the Student	Class	Phone Number	Poster title	
B Raju	BSc MECs Ilyr	7416906188	Smart Agriculture	First Prize
G Hemanth		6281163573		
S Lakshmi Priya	BSc MPCs Iyr	9177055239	Empowering Science, ensuring Sustainability	Second Prize
G Eshika		8331006555		



Report on

Career Opportunities with MSc Physics Programme

The Department of Physics and Electronics organized a guest lecture on “Career Opportunities with MSc Physics Programme” for students of BSc MPCs IIIyrs in collaboration with GITAM (Deemed to be University), Hyderabad on 10th April, 2025.

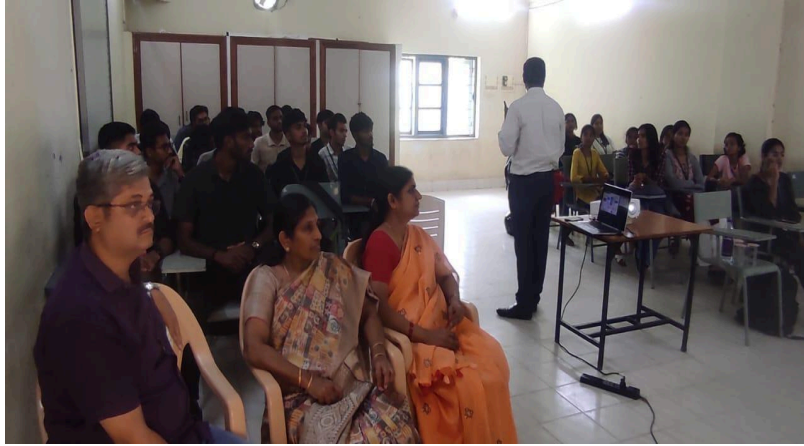
The resource person, Prof. T Vishwam, Head, Department of Physics, School of Science, GITAM addressed the students on various career opportunities available with MSc Physics programme. Sir began his talk with a brief introduction about the university, various postgraduate courses offered at their university.

Prof. T Vishwam presented an overview of the MSc Physics programme, including details about the curriculum, research opportunities and faculty expertise. He also shared information about the different facilities available at the university, such as laboratories, library, travelling facilities and hostel facilities. Sir highlighted that GITAM University has collaborations with top institutions like IITs and the University of Hyderabad, which provide students with exposure to high quality education and research. Students were also informed about various career opportunities open to MSc Physics graduates.

The resource person actively interacted with the students, addressing their questions and clarifying their doubts about the programme and career prospects.

Overall, it was an informative and motivating session that offered valuable insights into the MSc Physics programme at GITAM University and its potential career opportunities.







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Report

SPARK-Igniting Young Minds

The Department of Physics & Electronics of Bhavan's Vivekananda College of Science, Humanities and Commerce organised SPARK-Igniting Young Minds”, a 3-Day workshop in collaboration with Indian Association of Physics Teachers (IAPT RC-22) from 21st – 23rd April, 2025.

The workshop was attended by 45 Senior secondary students from 4 colleges and BSc MPCs/MECs first year students. The event was conducted to give hands-on training on various experiments to bridge the gap between theory and Practice.

On **Day 1**, the events began with lectures on *Magnetic Focusing* by **Dr. GSVRK Choudary**, Principal, BVC; *21st Century Physics: Breakthroughs and Frontiers* by **Dr. V. R. Manjula**, Assistant Professor, Department of Physics & Electronics, BVC; and *Dark Energy and Dark Matter* by **Ms. Kamala Sai Eshwari**, a student of B.Sc. MPCs III Year. These were followed by hands-on sessions.

On **Day 2**, students participated in hands-on sessions on various experiments, followed by student presentations.

On **Day 3**, **Prof. G. Manoj Kumar** from the University of Hyderabad (UoH) delivered a motivational talk and conducted hands-on training using **ExpEYES** kits.

Mrs. M. Prasanna, Head of the Department, served as the coordinator of the workshop, ably assisted by **Mr. T. Prasad**, **Ms. P. Lavanya**, **Ms. T. Sai Santoshi**, and a team of student volunteers.

Overall, the workshop achieved its goal of **igniting young minds** through a blend of academic rigor and practical insight, leaving a lasting impact on all participants.