

SHRI G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE,

Indore, Madhya Pradesh

GOVT. AIDED AUTONOMOUS INSTITUTE ESTD. IN 1952

DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION

NEWS LETTER

(1 ST JULY - 31 ST DEC 2023)



VISION:

The department is committed to providing a holistic education that transform the students into responsible engineers and facilitate them to build successful careers and excel in the field of electronics and instrumentation with social and ethical standards.

MISSION:

To prepare emerging electronics and instrumentation engineers to possess good communication skills with the ability to work in multi-disciplinary groups, lead teams, and understand their professional and ethical responsibilities for serving the needs of society.

Editors: Dr. P.P. Bansod (Prof.), Dr. Rajesh Khatri (Asso. Prof. & Head), Ms. Kirti Bhargava (Asst. Prof.),
Student Editors: Avneesh Vijay (IV-Year), Ms. Sanika Borgaonkar & Neetesh Patel (III-year), Madhur Jain (II-year)



Dr. P. P. Bansod handing over the charge to Dr. Rajesh Khatri

Dr. Rajesh Khatri, Associate Professor of the Department, awarded Ph. D under the guidance of Dr. D. K. Mishra. He took the charge of Head of the Department from Dr. P. P. Bansod (Professor and former head) along with all department faculty members welcomes him. Being one of the experienced faculty member of the department he has always been working towards improving the academics and sharing his experience with others. Under his headship the department will surely achieve new heights in academics and research.



Dr. Rajesh Khatri (Asso. Prof. & Head) with other faculty members of the department.

INDUCTION PROGRAM (FIRST YEAR)



Department Faculty members along with I-Year admitted Students (2023 - 24)

The Department wholeheartedly welcome first year students of 2023-24 batch to the department of Electronics and Instrumentation. One day departmental induction program for nearly 90+ students was conducted with high enthusiasm.

Mr. Ayush Gorkha one of our alumni addressed the students and shared his experience about various areas in which they can be benefited after graduating with Electronics & Instrumentation Engineering.

Students were given a brief introduction about various research projects completed, research activities going on in the department, various laboratories, support of mentors etc.



Dr. R. C. Gurjar briefing students during Induction program.

The faculty members interacted with students to make them familiar with the type of subjects and the domains in which they will be working throughout their academic journey. Students developed an insight of the work culture of the department.

ALUMNI SUPPORT

The Department is thankful to our Alumni Association and Alumni of Electronics & Instrumentation Department who have supported the lab equipments worth 2 lacs to the department.

The equipments/ instruments include trainer boards, modern measurement tools, devices etc. used to enhance the practical exposure of the students.

EDC lab, Digital Lab, FOM lab, Sensors& Transducer Lab, Electronic Workshop are some of the labs that are benefited by this Alumni efforts.



Director SGSITS, Indore, Head, EI Department along with other staff members and Alumni of SGSITS.

INDUSTRIAL VISIT- KAILTECH TEST AND RESEARCH CENTER PVT. LTD, INDORE



Industrial Visit - KAILTECH TEST AND RESEARCH CENTER PVT. LTD,



Industrial visit- Faculty, students and CEO, Director of Kailtech TEST AND RESEARCH CENTER PVT. LTD,

Innovation cell of the department has organized industrial visit for B.E. third year students to Kailtech Test and Research Center Pvt. Ltd. Its one of the biggest Test and Calibration lab accredited by NABL and recognized by BIS. It provide services in various domains such as Civil, Mechanical, Electrical, Electronics, Chemical etc.

As a part of third year curriculum students focused on various Electronics testing and calibration facilities available at Kailtech.

Students learned the procedures used for testing like Cold and Dry testing, Vibration and Shock testing, Salt Spray testing etc. Calibration process for Ammeter, Voltmeter, RTD etc were also demonstrated. The visit provide an extremely valuable insight on the internal working of Test and Calibration Industry.

MASTERCLASS BY ASIAN PAINTS



EI students addressed by Asian Paints

Asian Paints and the Training and Placement Cell hosted a special session led by Supply Chain Expert Mr. Sachin Bhatnagar. Focused on Supply Chain Management, the masterclass explored trends, Industry 4.0, and Asian Paints' manufacturing. It highlighted future opportunities for engineering students, concluding with details on the tailored Graduate Engineer Trainee role for Electronics and Instrumentation Engineering students.

TEACHERS' DAY CELEBRATION



Faculty of EI department along with students of II, III and Final year.

In a heartwarming tribute, students of Electronics and Instrumentation Department celebrated Teachers' Day, honoring the unwavering dedication of our educators. It was a small gesture compared to our mentors' tireless efforts in motivating and helping us build a future. A nod to their commitment towards a love for learning and ensuring a bright academic journey for all of us.

Students' active participation in this celebration showed how grateful they are for their teachers' constant support and encouragement.

MOTIVATIONAL SESSION BY PROF. P. W. DANDEKAR



Audience in session by Prof. P. W. Dandekar



Dr. P. P. Bansod welcoming Prof. P. W. Dandekar

A successful Innovator, CTO and Co Founder, WINGS EV Prof. P. W. Dandekar shared his views and stories on Innovation with the students. His experience and thoughtfulness give a huge insight for doing research and innovative things.

In a short span of time he discussed with students how to think differently and how one can use his engineering skills and out of box thinking to do innovations.

EXPERT LECTURE BY DR. DASANAYAKE

The department had the privilege of hosting Dr. Isuru Dasanayake, a senior lecturer from the Department of Electrical and Electronics Engineering at the University of Peradeniya.

The expert lecture, titled "Optimal Control of Spiking Neuron Oscillators," took place in Spandan Hall, ATC building. The event drew a diverse audience from our college community, and attendees undoubtedly gained valuable insights from Dr. Dasanayake's expertise. The discourse on optimal control of spiking neuron oscillators is sure to have a lasting impact, contributing to the intellectual growth and academic enrichment of all who participated.



Dr. P. P. Bansod welcoming Dr. Isuru Dasanayake

DAS GUPTA AWARD

Dr. Ramchandra Gurjar (Associate Professor) working since 2007 in EI department is honored with prestigious Dasgupta Gold medal-2023 with a cash award of Rs. 25000/-. His hard work and dedication has always supported the department, faculty members and students. The department congratulate him for the award.



Dr. R. C. Gurjar awarded with the Das Gupta Award on 22 Dec 23

ACHIEVEMENTS

ACADEMIC EXCELLENCE



Ayush Porwal (Final Year)

- Ayush Porwal (Final Year) presented a research paper on “Comparative Analysis of Filter Noise from Voice Signal by Different Decomposition Methods”, in International Conference on Evolutionary Algorithms and Soft Computing Techniques organized by RV institute of Technology and Management, Bangalore, Karnataka.
- Ayush Porwal (Final Year) selected for M.Tech programme at IIT Gandhinagar in the department of Electrical Engineering Department.

BEST IN INNOVATION



Team Yan



Team Yan representing SGSITS at Chennai

- Students of SGSITS, Indore - Team Yan, comprising of nine members participated in DDC-2023 (Drone Development Challenge) which is conducted by SAE INDIA and held at Rajalakshmi Institute of Technology, Chennai. Neetesh Patel, student of EI III year was one of the team member who secured first position in BEST IN INNOVATION Category.
- Neetesh Patel (Student III year) as the vice-president of team Yan with his teammates Sidra Riyaz (Student II year) and Vinayak Raj Sharma (Student II year), presented an innovation on Nation Innovation Day, conducted by Institution Innovation Council SGSITS and became the best student innovator of the Institute.
- Aagam Jain (III year) represented the college at Phase 3 physical round of mBAJA of BAJA SAEINDIA 2023, Pithampur, M.P.



Neetesh Patel (EI III Year)

PLACEMENTS

For final year students, the start of this academic year brings new hope and opened new avenues of success. More than 60% of the students were placed in various core industries and IT domain and still many are in pipeline. This year we hope to have a good placement score of our department. The department wish luck and success to all our students. Few top placed students are mentioned in the list:

- Soumya Sahu placed in Goldman Sachs with 24 LPA.
- Prateek Kumar Sahu , Shubham Pathak Placed in Asian Paints with 10.55 LPA.
- Vidushi Bamnotey, Abhishek Tomar, Rishi Raj Khanna placed in Genpact Ltd at 8 LPA.
- Ansh Gupta Placed in GreyB Research Pvt Ltd, 7LPA.
- Poorvanshi Sharma- NOMURA (INTERN: Stipend -75k CTC -13LPA) and Deloitte(CTC-7.6LPA).
- Yash Singh Bhadoria at Accenture at 4.5LPA.
- Vanshika Goyal Placed in GreyB - 7LPA.



Somya Sahu
(24LPA)



Prateek Sahu
(10.55 LPA)



Shubham Pathak
(10.55 LPA)



Vidushi Bamnotey
8PLA



Vanshika Goyal
7 PLA



Prince Chouhan
6.57 LPA

- Shrey Pathak placed in Genpact at 8LPA.
- Nitesh Prajapati , Shivanshu Mishra, Prince Chouhan, Aniket Fagnia, Ayush Porwal Placed in Larsen & Toubro (L&T) CTC 6.57 LPA.

WORKSHOPS/COURSES

- Priyansh Bharani (II year) attended workshop on Cyber Security at IET DAVV.
- Nimish Kala (II year), Dipesh Prajapat (II year) participated in Tech Panchnama conducted by Google Developer Students Club SGSITS.
- Jayesh Kumar Sharma(III year) and Dushyant Raghuwanshi (III year) showed outstanding performance in Introduction to IoT conducted as a part of eYantra MOOC(Sponsored by MHRD)
- Dushyant Raghuwanshi (III year) attended workshop on MATLAB & its Applications organized by IEEE Student Chapter SGSITS.
- Sanyam Parmar (II year) actively participated in Circuit Simulation with TinkerCad aorganized by IDEA lab SGSITS Indore.
- Ashwin Rai (II year), Arya Pandey (II year) completed course in Digital Marketing for Bigineers conducted by IBM Skills Build.
- Dushyant Raghuwanshi (III year), Sanika Borgaonkar (III year), Nitesh Prajapati (II Year), Rahul Baghel (II Year) completed SmartLab course in Python, VLSI and Embedded conducted by National Institute of Electronics and Information Technology, Calicut, Kerala.
- Aastha Gupta (II year) attended C Boot Camp organized by Computer Club of SGSITS, Indore.
- Meet Kasediya (II year) participated in Tech Panchnama conducted by Google Developer Students Club SGSITS.
- Garv Shah (II year) actively participated in Circuit Simulation with TinkerCad organized by IDEA lab SGSITS Indore.

INTERNSHIP

As a part of curriculum of the department the students of III year has done Internship in various Industries.

- Bhakti Rohira (III year) completed her internship on project “ Machine learning approaches for Cyber Security in Electric Vehical Charging Stations” from IIT Roorkee.
- Dev Shah (III Year) completed project assistanceship on - “Reaserch on Contactless Energy Transfer Syastem and RoDip” fro VE Commercial Vehicals.
- Aagam Jain (III Year) and Chaitanya Buwade (III Ywear) - Internship on Optics and Peltier Module & Research on Hyper Spectral Camera From Light Guide Optics Pvt. Ltd.
- Dev Shah (III Year) completed project assistanceship on - “Reaserch on Contactless Energy Transfer Syastem and RoDip” fro VE Commercial Vehicals.
- Shuchi Peeyush Upadhyay completed her Industrial training from Contrive Technologies in Arduino Programming and Interfacing.



Bhakti Rohira



Dev Shah

NPTEL

- Samruddhi Shahapurkar (III Ywear) has completed NPTEL Online Certification Course on Introduction to Robotics.

SPORTS

- Nishit Jain winner of Inter branch Table tennis at SGSITS Indore.
- Aastha Gupta (II year) runner up in Inter branch Cricket at SGSITS, Indore.
- Shivam Sharma (II year) participated in college nodals for Football and Handball.
- Ajeet Sahni (II Year) participated in Hurdle Race- NAVYANTRAM 5.0 organized by Shri Vaishnav Vidhyapeeth, Indore
- Priyansh Bharani (II year) secured second position in Rubik's Cube Challenge at IET DAVV.



Football Team

EXTRA CURRICULAR

- Vanshita Potdar (III Year) enrolled as NCC Cadet in 2021-22 is going to represent MP & CG Directorate at National Level 'Air Force' Attachment Camp 2024 at AFA Hakimpet.
- Kartikey Dwivedi (II Year) represented EI in the Inter-branch Basketball competition and secured 1st rank as well as got best player award in the same. Also he represented SGSITS in IIT-BHU 'SPARDHA' Basketball competition(13-15th October 2023).
- Dhruv Joshi, Deepesh Prajapat, Shreya Soni, Sidra Riyaz , Amogh Parmar (II year) and Neetesh Patel (III year) participated in smart-India hackathon.



Vanshita Potdar EI III year

ACTIVE PARTICIPATION

- Madhur Jain (II Year) sang garba at Navrang, event under Club Kshitij at SGSITS, Indore.
- Sumit Khandegar (II Year) volunteer for InDhan PayGate.
- Astitva Bhate (II year), Chinmay Kunhare (II year), Vaishnavi Rajput (II year) coordinated Navrang, event under Club Kshitij at SGSITS, Indore.
- Shreya Malviya (II Year) performed classical dance at inauguration of Induction Program 2023.



Madhur Jain at Navrang

UPCOMING EVENTS

- Educational Trip to CSIR -Central Scientific Instruments Organization, Chandigarh and SCL Mohali.
- Alumni Lecture Series



Shreya Malviya(II Year) performing during Induction Program 2023



SCL Mohali

KNOW E & I DEPARTMENT

The department under the guidance of Dr. P. P. Bansod, Dr. Rajesh Khatri and Dr. R.C. Gurjar is working on project “Design and fabrication of Pacemaker Chip” under Chip to Startup (C2S) funded by MeitY Government of India. The department has signed MOU with IIT Indore, IIT Jammu, IET-DAVV Indore, IIIT Gwalior. The PG & US Students along with trained Project Associates of the project under the guidance of faculties of the department are working to make it a huge success. A lab of 30 computers with all high end designing tools like Cadence, Xilings etc is already functional in the department.



Advance VLSI Lab

GLIMPSE

#SGSITS

ड्रोन डेवलपमेंट चैलेंज में छाए एसजीएसआईटीएस के विद्यार्थी

‘यान’ के प्लेन ने भरी उड़ान, दिलाया बेस्ट इन इनोवेशन का खिताब

इंदौर @ पत्रिका. श्री गोविंद राम सेकसरिया इंस्टीट्यूट ऑफ टेक्नोलॉजी एंड साइंस के विद्यार्थियों ने ड्रोन डेवलपमेंट चैलेंज में बेस्ट इन इनोवेशन का खिताब जीता है। चेन्नई के राजलक्ष्मी इंस्टीट्यूट ऑफ टेक्नोलॉजी में हुए इस कॉम्पटीशन में देशभर से आई 70 टीमों ने भाग लिया था। छात्रों की टीम ‘यान’ ने एक रिमोट कंट्रोल प्लेन तैयार किया है। टीम कैप्टन



निखार गुप्ता बताते हैं कि इस चैलेंज के कई स्टेप्स होती हैं। वर्कशॉप और वीडियो प्रेजेंटेशन तो कॉलेज से होता है, लेकिन फाइनल राउंड से



पहले टेक्निकल प्रेजेंटेशन और टेक्निकल इंस्पेक्शन ग्राउंड पर ही होता है। इसके बाद फ्लाइंट राउंड होता है।

टीम ने किया तैयार

इस रिमोट कंट्रोल प्लेन को 10 लोगों की टीम ने तैयार किया है। इस तरह के तीन प्लेन बनाने में एक महीने का समय लगा है। इसका स्केलेटन बलसा लकड़ी से बनाया गया है, जो यूएस से इंपोर्ट हुई है। स्ट्रेंथ देने के लिए एल्यूमिनियम की रॉड्स का इस्तेमाल किया और मोनोकोट से स्मूथ फिनिशिंग की।

10 किलो उठाया वजन

कॉम्पटीशन में पार्टीसिपेंट्स को अपने प्लेन के फूटबॉल ग्राउंड के तीन से चार चक्कर लगाने होते हैं। टीम यान ने अपने चार किलो के प्लेन में 10 किलो का वजन रखकर 100-150 फीट की ऊंचाई पर उड़ाया। कम समय में ज्यादा राउंड लगाने पर टीम बेस्ट इन इनोवेशन के लिए चुनी गई।

Paper cutting - Daink Bhasker

NPTEL Online Certification
(funded by the MoE, Gov. of India)

This certificate is awarded to **SAMRUDDHI SHARAPURKAR** for successfully completing the course **Introduction to Robotics**

with a consolidated score of **48 %**

| | | | |
|--------------------|----------|----------------|----------|
| Online Assignments | 15.03/25 | Proctored Exam | 32.63/75 |
|--------------------|----------|----------------|----------|

Total number of candidates certified in this course: **48**

Jul-Oct 2023
(12 week course)

Prof. Anandha Jadhav
Question

Prof. Anandha Thangaraj
WFL, Question

Indian Institute of Technology Madras

No: NPTEL23DE1250737601179 To verify the certificate

NATIONAL INSTITUTE OF ELECTRONICS AND INFORMATION TECHNOLOGY, CALCUTTA
(An Autonomous Scientific Society of Ministry of Electronics and Information Technology, Government of India)
NIT Campus P.O., Calcutta, Kerala - 673801

सहभागिता का प्रमाणपत्र

Certificate of Participation

यह प्रमाणपत्र निम्नलिखित को प्रमाणित करता है कि: This is to certify that **DUSHYANT RAGHUWANSHI** has participated in the below mentioned course organized by NIELIT Calcutta.

Embedded for Beginners

10* to 14* August 2023 (5 Days / 5 Hours)

डायरेक्टर, राष्ट्रीय सूचना विज्ञान संस्थान, कोलकाता

Dr. Anandha Thangaraj
Date: 20/08/2023
ज्येष्ठ अधिकारी
Training Officer

भारतीय प्रौद्योगिकी संस्थान रुड़की
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

Letter of Completion of Internship
To: **WORKSHEET R.MAY.GANESH**

This is to certify that Ms. Bhabti Rorika, a 3rd-year student from Bachelor of Technology in Electronics and Instrumentation, Shri GS Institute of Technology and Science Indore (SGSITS) has successfully completed a summer internship under my supervision. She completed this internship on the project titled "Machine learning approaches for cyber security in Electric Vehicle Charging stations" from 10th June 2023 to 10th September 2023. The nature of the project involved a comprehensive literature review and gathering-based simulation.

Her performance is found satisfactory during the internship period and she is expected to complete a journal paper subsequently on the said topic.

Dr. Thirun Kumar Reddy
JAMRL Professor
OENL, IIT Roorkie

Dr. Thirun Kumar Reddy
Assistant Professor
Department of E&CE
IIT Roorkie
Roorkie - 247607

Students participation Certificates



Alumni Visit



Alumni Visit 1996 Batch

eyantra

Certificate of Participation

This certificate is awarded to **Dr. Anandha Thangaraj**, from Shri GS Institute of Technology and Science Indore (SGSITS) for participating in the Internship in Instrumentation of Energy (IIE) conducted as a part of MOU through the eYantra MOU.

Course covered the following subject:

1. Understanding "Theory" and "Practical" of IIE
2. Understanding basic IIE technology
3. Comparison of various IIE technology and IIE system
4. Embedded C programming
5. Familiarity with IIE IOP Framework
6. Challenge activity on building an IIE system

Dr. Ravi Kishore
Principal Investigator - IIE
Professor
Department of Computer Science and Engineering
Indian Institute of Technology Roorkie