Events & Activities Session 2024-25

July-August-September 2024 Department of Electronics and Communication Engineering

STTP/FDP/other Training Attended by Faculty

- 1. Dr. Mridula Korde completed 5 weeks Advanced Certificate Program on "PYTHON + R + MATLAB-Based Simulation and Design of 5G/ 6G Wireless Technologies" organized by IIT, Kanpur during 1st September 2024 to 4th October 202.
- 2. Dr. Ankita Harkare have attended a STTP from 12-08-2024 to 18-08-2024 organized by RITE Odisha and RSP Science Hub Coimbatore.
- 3. Dr. Ankita Harkare have attended NPTEL Awareness workshop held on 5th July 2024 organized by NPTEL.

Parents Meet

Department of Electronics and Communication Engineering organized a Parent-Teacher Meeting for the session 2024-25 on <u>28th September 2024</u>. Parent-Teacher Meeting coordinator Dr. (Mrs) A.H. Harkare welcomed the parents and emphasized on the need of developing an enhanced communication between parents and faculty to serve as a bridge in fulfilling expectation of parents and students especially during this online mode of teaching. Dr. (Mrs) R.S. Ochawar, HOD EC addressed the gathering conversing about the various curricular and extracurricular activities conducted by the department. She especially addressed the parents about the support mechanisms and activities carried out to fulfill overall development of the students.

A brief review of academic activities, teaching learning process and PO, PSO along with Mission Vision statements were also discussed. Moreover a brief review of the various activities and schemes offering support to students for ensuring student progress in academics, placements formed a segment of this discussion.

Information regarding placement training conducted by the institute was briefed by department placement coordinator Dr. P.P. Deshpande. Parents were also made aware about the academic and exam rules, guidelines and detention rules. T1 performance of students was discussed and special attention needs to be paid on the performance of V semester students was conveyed to parents.







Guest Lectures organized in Department.

The IETE forum of RBU and ECE Department organized guest lecture on "Agile Project Management in the field of Electronics and Communication" on 25th September 2024 for ECE third year students. The guest lecture was conducted by the industry expert Mr. Divyanshu Sinha who is currently working as Senior Consultant (Assistant Manager) at EY, Hyderabad. He is the 2019 batch alumna of the college.





Divyanshu Sinha conducting guest lecture

October-November-December 2024

STTP/FDP/other Training Attended by Faculty

- 1. Dr. S.B. Pokle Participated in one day UGC Western Zone conference for autonomous colleges on 'Implementation of NEP 2020' organized by UGC and IIM Nagpur on 23 October 2024.
- Dr. P. K. Parlewar attended a Short-Term Training Program (STTP) on "AI on Public Cloud Platforms" at Shri Ramdeobaba College of Engineering and Management (RCOEM), Nagpur (MH), India, School of Computer Science and Engineering from 09-Dec-2024 to 13-Dec-2024.
- 3. Dr. P. K. Parlewar has successfully completed the one-week national Short-Term Training Program on "Generative AI Mastery: From Foundations to Applications" organized by the Indian Institute of Information Technology, Nagpur, from 18th to 22nd November 2024.
- 4. Dr. P. R. Selokar has successfully completed one week industry oriented Short-Term Training Program on "Generative AI: Tools, Techniques and Applications" organized by School of Computer Science and Engineering from 02-Dec 2024 to 06-Dec 2024.
- 5. Prof. V. S. Lande has successfully completed one week industry oriented Short-Term Training Program on "Generative AI: Tools, Techniques and Applications" organized by School of Computer Science and Engineering from 02-Dec 2024 to 06-Dec 2024.
- 6. Mr. Nishant M. Borkar attended seminar on "IEEE IISC Microwave, Antennas, Symposium & Propogation Symposium (IIMAPS 2.0)" held on December 16th & 17th December 2024, organised by the IEEE-IISC MTT/AP-S Student Branch in collaboration with the IEEE-IISC VLSI Chapter and Dept. of ECE IISC Banglore.
- 7. Mr. Nishant M. Borkar attended Seminar on "Substrate Integrated Waveguide and Dielectric Image Line Based Circuit Components and Antennas" by Prof. Animesh Biswas IIT Kanpur organized by IEEE IISc MTT/AP-S Student Branch Chapter of IISC Banglore, on Dec 6 2024.
- 8. Ms. Puja S Agrawal attended an STTP "Al on Public Cloud Platforms" at Shri Ramdeobaba College of Engineering and Management (RCOEM), Nagpur (MH), India School of Computer Science and Engineering from 9 13 Dec 2024.
- Dr. Ankita Harkare attended ATAL FDP from 23-28 Dec 2024 on Reconfigurable Intelligent Surfaces for 6G Wireless Communication: Fundamentals to Future Research Directions at National Institute of Technology, Tiruchirappalli.
- 10. Dr. Ankita Harkare attended STTP from 02 06 Dec 2024 on Generative AI: Tools, Techniques and Applications at School of Computer Science and Engineering, RBU, Nagpur

Departmental Activities

Industrial Visits

On 17th October, the second-year students of the Electronics and Communication Engineering (ECE) Section B had the privilege of visiting Sensor and System Industrial Solutions in MIDC Butibori, Nagpur. The visit aimed to provide students with hands-on

exposure to industrial applications in the fields of automation, sensor technologies, and industrial systems integration. The company specializes in providing advanced sensor solutions, system integration, and automation services to a wide range of industries. The visit was organized under the guidance of faculty members Dr P.R. Selokar, Dr P. P. Deshpande, Prof. D.D. Shrivastavaand V. S. Lande along with 51 students.



EC students with Faculty at Sensor and System Industrial Solutions



Felicitation of Sensor and System Industrial Solutions staff

STTP and Guest Lectures organized in Department.

Dr. Mridula Korde organized a Career guidance session on "Navigating the Future in Al" by the distinguished alumnus, Mr. Ashish Pande (EN 2004), on 17th December 2024. Mr. Ashish Pande, currently working as Product Manager in UK, shared invaluable insights into artificial intelligence, highlighting emerging trends, potential career paths, industry demands, and strategies for aspiring professionals to excel in this dynamic field.



A Career guidance session on "Navigating the Future in AI" by Mr. Ashish Pande

Jan-Feb-Mar 2025

Training Attended by Faculty

- 1. Dr. Rohini S. Ochawar and Mrs. Apeksha Sonare has completed GIAN course (Global Initiative of Academic Networks) on "Advances in Remote Sensing Imagery Data Processing and Analysis", organized at VNIT Nagpur during 13th 17th Jan 2025.
- 2. Prof. Vipul S. Lande has attended an FDP on "Research Methodology" from January to March 2025, organized by NPTEL-AICTE, IIT Madras.
- 3. Prof. Vipul S. Lande has attended a Webinar on "FPGA-Chiplet Architectures and Circuits for 2.5D/3D 6G Intelligent Radios" on 12th February 2025, organized by IEEE-IISc VLSI Chapter.
- 4. Prof. Vipul S. Lande has attended an FDP on "VLSI System Design using Open Source Tools" from 10th 21st February 2025, organized by Electronics and ICT Academies, MeitY, Government of India.
- 5. Prof. Vipul S. Lande has attended an FDP on "Effective Writing" from January to March 2025, organized by NPTEL-AICTE, IIT Madras.
- 6. Dr. P. R. Selokar has attended FDP on "IoT Applications with Sensors, Embedded Systems and Data Analytics" organized by IIT Roorkee in association with E&ICT Academies MeitY, Govt of India during 17 28 February, 2025.
- Dr. Pradip Selokar has attended an FDP on "VLSI System Design using Open Source Tools" from 10th –21st February 2025, organized by Electronics and ICT Academies, MeitY, Government of India.
- 8. Prof. Nishant Madhukar Borkar has attended a talk on "SRAM-based In-Memory Computing Hardware: Analog vs Digital and Macros to Microprocessors" by Prof. Mingoo Seok organized by IEEE-IISc VLSI Chapter on 27 January, 2025.
- 9. Prof. Nishant Madhukar Borkar, has participated and completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Recent Development in RF and Antenna Design for Various Applications" at Government Engineering College, Rajkot from 27 January 2025 to 1 February 2025.
- 10. Prof. Nishant M. Borkar has attended the IEEE CASS Distinguished Lecture on "Memory Interfaces: Past, Present and Future" by Dr. Timothy Hollis organized by IEEE-IISc VLSI Chapter on 11 April, 2025.
- 11. Prof. Nishant Madhukar Borkar has participated in the IEEE MTT-S Distinguished Microwave Lecture on "Modern Methods for Component Measurements using Vector Network Analyzers for 6G Test" by Joel Dunsmore, Keysight Fellow, Keysight Technologies, organized by the IEEE-IISc MTT/AP-S Student Branch Chapter.

12. Prof. Nitin Chakole, has participated and completed the GIAN (Global Initiative of Academic Networks). It is an initiative by the Ministry of Education, Government of India, Program on Silicon Integrated Photonics Circuits for Quantum Computing and Secure Communications at Visvesvaraya National Institute of Technology (VNIT), Nagpurt from April 07-11, 2025.

Departmental Activities

Industrial Visits

On March 28th, 2025, the second-year students of the Electronics and Communication Engineering (ECE) Section A of Shri Ramdeobaba College of Engineering and Management had the privilege of visiting Sensors and Systems Industrial Solutions Pvt Ltd, located in MIDC Butibori, Nagpur.

The visit aimed to provide students with practical exposure to the latest advancements in industrial automation and sensor technologies. The company is known for its expertise in automation solutions, sensor technologies, and system integration, offering services to various industries.

Faculty members Dr. B. A Neole, Prof. A. P. Nilawar and V. S. Lande accompanied 39 students on this educational visit.



EC students with Faculty at Sensor and System Industrial Solutions



Introductory session by Design & Project engineer



Felicitation of Sensor and System Industrial Solutions staff

Other projects undertaken

The Institution of Electronics and Telecommunication Engineers (IETE), in collaboration with the Communique Students' Society, under the leadership of Dr Ankita Harkare, Prof. Prasheel Thakre, Pankaj Kumar (President, IETE), and Himanshu Bodhankar (President, Communique Students' Society) organised "SENTIENT CIRCUITS - A Robotic Workshop" on 11th and 18th January 2025.



A snapshot of workshop on Robotics

a. 11th Jan 2025 - Ottobot Tutorial Session:

Participants were introduced to the fascinating world of bot-making, with a special focus on Otto Bot and Emo Bot. It was a hands-on learning experience, sparking curiosity and creativity in budding tech enthusiasts. After the session, participants were asked to prepare documentation over the topics taught in the tutorial and submit it on or before 16th Jan 2025.

Teams showcased their technical prowess by submitting detailed reports on their bot designs, applications, and innovative features. This round highlighted the depth of their knowledge and their vision for future technology.



Ottobot Tutorial Session

b. 18th Jan 2025 - Finale Round

After rigorous evaluation of submitted reports, five exceptional teams were shortlisted for the finale. Each team was provided with a bot-making kit sponsored by IETE and given a fixed time to assemble, program, and demonstrate their Otto Bots.

- **Short listing the Best:** The selected teams exhibited strong technical skills, problem-solving abilities, and creative enhancements in their submitted work.
- **Final Demonstration:** Each team had to successfully implement and showcase at least two key functionalities, demonstrating innovation in movement control, sensor integration, and Bluetooth interaction.
- Emphasis on Innovation and Teamwork: Teams had to collaborate efficiently under a time constraint, testing their skills in debugging and optimizing their robots for smooth functioning.



Demonstration of Otto Bots



Group photograph of participants

Parents Meet

Department of Electronics and Communication Engineering organized a Parent-Teacher Meeting for the session 2024-25 on <u>15th March 2025</u>. Parent-Teacher Meeting coordinator Dr. (Mrs) A.H. Harkare welcomed the parents and emphasized on the need of developing an enhanced communication between parents and faculty to serve as a bridge in fulfilling expectation of parents and students especially during this online mode of teaching.

Dr. (Mrs) R.S. Ochawar, HOD EC addressed the gathering conversing about the various curricular and extracurricular activities conducted by the department. She especially addressed the parents about the support mechanisms and activities carried out to fulfil overall development of the students.

A brief review of academic activities, teaching learning process and PO, PSO along with proposed Mission Vision statements were discussed. Moreover a brief review of the various activities and schemes offering support to students for ensuring student progress in academics, placements formed a segment of this discussion.







Parent – Teacher meeting photographs

April - May- June 2025

Departmental Highlights:

Academic Achievements

New courses launched -

An open elective course "**DevOps for Cloud Infrastructure**" is launched for B. Tech 2024-25 admitted batch by Industry experts from **Irdeto B.V.**, a Noida based industry. These courses are designed to be industry-relevant, and are offered as 2-credit course with a minimum of 25 lecture hours per course by **Irdeto B. V. The industry resource persons are-**

i) Mr. Shubham Deshpande

Technical Team Lead - SOC, Irdeto (Noida) - An alumni from EC, RCOEM, Nagpur

ii) Mr. Akshit Gupta

DevOps Engineer, Irdeto (Noida)

Seminars Organised

EXPERT LECTURE BY IEEE FELLOW

The Electronics and Communication Engineering organized a guest lecture on 3rd May 2025 by **Prof. Georges ZISSIS**, *FIEEE*, *Vice-Dean*, *University of Toulouse*, *France*. Held in Lecture Hall DT109, the event saw participation from School of Electrical and Electronics Engineering faculty, PhD scholars, and students.

Dr. Mrudula S. Korde introduced the guest, and Dr. Rajesh S. Pande, VC, RBU felicitated him. Prof. Zissis spoke on *Smart Lighting for Sustainable and Affordable Urban Development*. Topics included solid-state lighting, standardization, energy efficiency, and health impacts. He stressed the importance of smart, ecofriendly lighting systems in modern cities. An engaging Q&A session followed with active faculty and scholar involvement. Dr. Rohini S. Ochawar closed the event with a warm vote of thanks.



Dr Zissis Felicitation by Dr. Rajesh S. Pande, VC, RBU, Nagpur

STTP/FDP/MDP/Workshop/Seminar etc attended by faculty

- 1. Nishant M. Borkar successfully participated in the Faculty Development Program (FDP) on "Research Advances in Design and Implementation of Antennas for Next-Gen Technologies (RADIANT-2025)" organized by the Department of Electronics and Communication Engineering, SR University, held from 21st to 25th April 2025.
- Nishant M. Borkar attended a National Level Seminar on "Modern Methods for Component Measurements using Vector Network Analyzers for 6G Test", organized by the IEEE MTT/AP-S Student Branch Chapter, IISc Bangalore, held online on 17th April 2025.
- 3. Nishant M. Borkar attended a National Level Seminar on "Memory Interfaces: Past, Present and Future", organized by the IEEE-IISc VLSI Chapter, IISc Bangalore, conducted online on 11th April 2025.
- 4. Prof. Nitin Chakole successfully participated in the GIAN Program titled "Silicon Integrated Photonics Circuits for Quantum Computing and Secure Communications", organized by Visvesvaraya National Institute of Technology (VNIT), Nagpur, held at the National level from 7th to 11th April 2025 at VNIT Nagpur.
- 5. Prof. Nitin Chakole successfully completed a National Level Faculty Development Program (FDP) on "AI and IoT for Advanced Biomedical Signal Processing: Challenges, Solutions and Future Prospects", organized by the E&ICT Academy, NIT Warangal, conducted online from 15th to 24th April 2025.

Faculty Highlights

Faculty invited for - Keynote speeches/Guest lecturers/ STTP/ FDP/Others

Dr. S. B. Pokle reviewed articles for International Journal "Automatika: Journal for Control, Measurement, Electronics, Computing and Communications" and "AEUE-International Journal of Electronics and Communication", Both indexed in SCI.

Sir also invited for BoS meeting in department of ETC, Sipna College of Engineering and Technology, Amravati, on 19-06-2025.

Student Achievements

> Awards in competitions or conferences

A team of Mr. Shantanu Sarode, Sneha Mummaneni, Kaivalya Pardeshi (Team Leader), Vedant Dehankar and Akansha Warkad of ECE department, RCOEM, Nagpur, made it to the Top 15 winners across India out of 4500+ teams in the College Youth Ideathon 2025 organized by IIT Delhi, with their startup idea EquiLearn – an affordable skill-building platform with smart certification and QR-based tracking.

They received a ₹20,000 cash prize at the Grand Finale held on 6th April 2025 at IIT Delhi, after progressing through multiple screening rounds including Top 1000 idea shortlisting, Top 100 pitch video selection, and the final jury presentation.



Students from the 4th semester of Ramdeobaba College of Engineering and Management (RCOEM), Nagpur, received a cash prize of of ₹20,000 in the College Youth Ideathon (2025) organized by IIT Delhi.

Students of Second Year Ramdeobaba University **Team Encoder** (**Nikhil Mehtapsingh Damahe, Mushrat khan, Rameshwari Radke**) grabbed **1st position** (Winner) won **10,000 Rs.** Cash Prize for "**Flight Insurance dApp**" in the event Hack on a National level Technical Symposium organized by Government College of Engineering Nagpur held on 20-22 Feb, 2025. It's an 8-hour hackathon organized by the GDG team of Government College of Engineering, Nagpur! Amidst tough competition They emerged victorious a national level Technical Symposium organized by Government College of Engineering Nagpur.

Introduction of Project: "Flight Insurance dApp" it is a decentralized, smart contract-powered insurance solution for travelers, key Features are Buy Insurance – Travelers can purchase coverage for 0.01 ETH (for the time being) by specifying their flight number and departure time. Automated Payouts – If a flight is delayed, the insured user automatically receives 0.02 ETH—no middlemen required (a work in progress). Smart Contracts – Ensuring tamper-proof, secure, and low-cost

transactions. Web3 Integration – MetaMask-powered, seamless user experience. Security Features are it Prevents duplicate purchases Verifies claim eligibility automatically Emits transaction logs for full transparency. Their commitment to excellence and relentless effort were way to success and a proud moment for all of us.



Nikhil Mehtapsingh Damahe, Mushrat khan, Rameshwari Radke received 1st position and won 10,000 Rs. Cash Prize

Students of Second Year Ramdeobaba University Nakul Mundhada, Nirzara Tijare, Sadichchha Nikhare, Tisha Parmar and Udit Tinwar grabbed 1st position and won 5000 Rs. Cash Prize in the event Hackathon Avishkar 3.0, for Smart city an Inter-Collegiate event organized by Cummins College of Engineering for Women, Nagpur held on 21-22 Feb, 2025.

About the project: They solved real life problems to make public transport efficient and sustainable. Problem solution was based on QR + Tracker system which will show the accurate result all over in the city areas.



Students of Second Year Ramdeobaba University received 1st position and won 5000 Rs. Cash Prize in the event Hackathon Avishkar 3.0.

> Students of First Year Ramdeobaba University grabbed 1st position in the Group Dance Category in Laasya- National Intercollegiate-Dance Competition organized by Sadabai Raisoni Womens College, Nagpur held on 7th Feb 2025.



Students of First Year of Ramdeobaba University received 1st position.

> Students of Ramdeobaba College of Engineering and Management (RCOEM), Nagpur Ansh Shahu and team "Jaggu Dominators" grabbed 2nd position of Offline round of the AI Hackathon organized by the Visvesvaraya National Institute of Technology (VNIT), Nagpur.

> Internships or placements secured

In 2024-25 session 99 students Placed in campus placement drive out of 137, highest package offered was 12 LPA. Full Semester Industry Internship count in 8th semester was 52)

> Notable student projects or start-ups

RGSTC-MSME Internship 2024-25 secured by Final year Electronics and Communication students--

Internship project titled "Voice Controlled Movement of Electric Wheelchair for Differently Abled Needy System" for Saksham Artificial Limb Center by Altior Health Care Pvt. Ltd. Nagpur was developed by Mr.Sanchit Vinay Tondre and Mr. Shivam Kanhaiyalal Pawar, Mentored by Prof. Vipul S. Lande under RGSTC-MSME Internship scheme 2024-25, Government of Maharashtra. The project was funded with Rs. 2,95,000/- for a duration of 6 months and completed in May 2025.



Mr.Sanchit Vinay Tondre and Mentor Prof. Vipul S. Lande with project

National & International Collaborations & MoUs

> New industry or academic partnerships

A Memorandum of Understanding (MoU) was signed between Ramdeobaba University, Nagpur and the Maharashtra Remote Sensing Application Centre (MRSAC), VNIT Campus, Nagpur on 26th April 2025 for the mutual benefit of students and staff of both institutions. Dr. R.S. Ochawar, Associate Professor, Electronics and Communication Engg. Dept. and Mr. Sanjay Balamwar, Scientist, MRSAC were the coordinators for MoU.

International collaborations or exchange

Ms. Aditi Godbole, a third-year ECE student, successfully completed the Transdisciplinary Immersion Programme at Hiroshima University, Japan from January 30 to February 10, 2025. She is benefitted under the MoU between RCOEM/RBU Nagpur and Hiroshima University as part of the credit transfer scheme.

Alumni Achievements

Ms. Siddhi Dubey Student of Ramdeobaba College of Engineering and Management (RCOEM), Nagpur has become the Second helicopter pilot of the Indian Navy recently. Sub Lt. Siddhi was awarded her wings on 9th June at INS Rajali, she is the second woman helicopter pilot in the Indian Navy. She got her wings after completing 22 weeks of rigorous training at Indian Naval air squadron 561 along with 17 others officers.

Siddhi Dubey underwent intensive flying and ground training, honing skills crucial for front line Naval operations. Her perseverance was rewarded with the ceremonial "Golden Wings" and it also considered being a symbol of operational readiness and the Navy's trust.



Sub Lt. Siddhi Dubey received Golden wings by Vice Admiral Rajesh Pendharkar during passing out parade.

Alumni Contributions to the University

> Participation in advisory boards or committees

i) The syllabus framing of DevOps as an open elective by Mr. Shubham Deshpande (Technical Team Lead – SOC, Irdeto) and Mr. Akshit Gupta (DevOps Engineer, Irdeto), bringing real-world industry insights and practical applications.

Community & Social Impact

> Field Project

A group of seven students from the Department of Electronics and Communication Engineering, RCOEM, Nagpur, successfully completed a community project at Jeevodaya Special School, Sadar, Nagpur, from 24th January to 31st March 2025.

As part of the Co-curricular Activities/Community/Field Project initiative under NEP Scheme, the students visited the school once a week and actively engaged with children with special needs through classroom assistance, interactive activities, and creative sessions.



Participating students interacting with school students
Participating students were Akul Kute, Ashutosh Keshpage, Arpita Singh, Aryan Kothari, Rishabh Raj, Samiksha Deshmukh, and Riya Thakur, guided by Prof. Puja S. Agrawal.



The Participating students interacting with school students



The students developed a chatbot

During the project, the students developed a chatbot to help children practice language through repetition. In addition to their voluntary work, they also enhanced their own learning by gaining exposure to AI and 3D printing.



Jeevodaya Special School, Sadar, Nagpur

This initiative not only benefitted the children at Jeevodaya Special School but also enriched the students with valuable experience in teamwork, empathy, and the application of technology for social good.