



‘ येथे बहुतांचे हित ’

MARATHWADA MITRA MANDAL'S
COLLEGE OF ENGINEERING

**DEPARTMENT OF ELECTRONICS AND
TELECOMMUNICATION ENGINEERING**

IMPULSE

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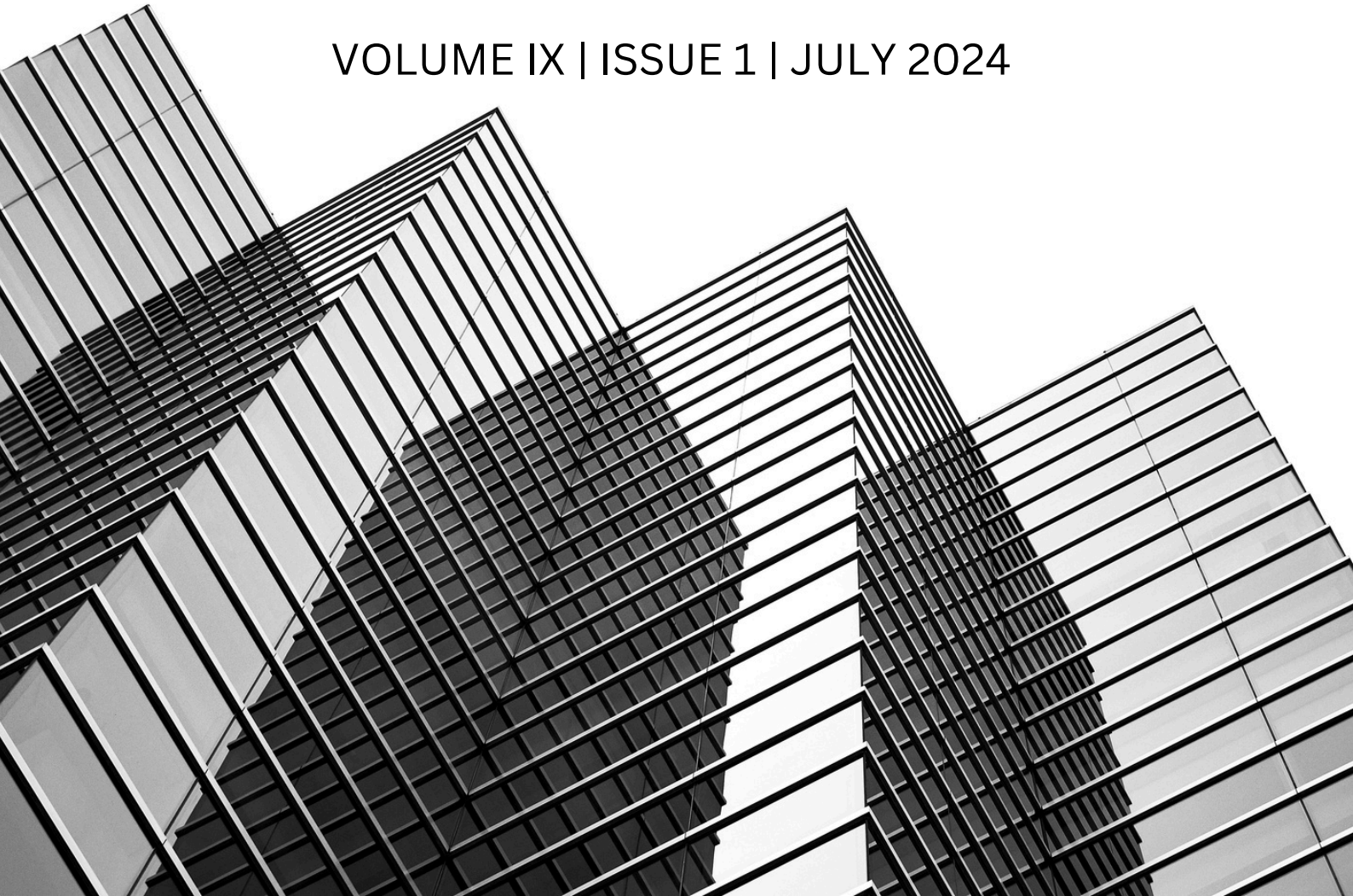


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MESSAGE FROM HOD



DR. G. S. GAWANDE
HEAD OF DEPARTMENT
ELECTRONICS AND TELECOMMUNICATION
ENGINEERING

Dear Friends,

It's a matter of great pride and satisfaction for MMCOE to bring out the issue of Newsletter released from Department of Electronics & Telecommunication Engineering. A lot of efforts taken by the faculty and students to showcase their talent can be seen in it. The continuous sequel of this Newsletter every semester covering the achievements and activities done in the department is really appreciable. India has made remarkable progress in engineering and technical education in past few years.

We, at Electronics and Telecommunication department of Marathwada Mitramandal's College of Engineering, Pune, believes in imparting the education which empowers our students for welfare of masses. Department is committed to the holistic development of the students.

Department provides a strong industry institute interface for keeping pace with the market requirements. Our Center of Excellence is well aligned with the National Mission of developed India 2047. We create an environment where the students identify and nurture their inherent potential. We know that we have the responsibility to shape-up the future of budding technocrats and to make them thorough professionals.

It gives me a great pleasure to share with you the progress being made by the department through this newsletter.

Marathwada Mitra Mandal's **COLLEGE OF ENGINEERING** Karvenagar, Pune-52

Department of Electronics & Telecommunication Engineering

Vision: To achieve excellence in Electronics and Telecommunication Engineering by creating competent and skilled graduates for the welfare of society.

Mission:

- Facilitate students with necessary academic preparations in Electronics and Telecommunication Engineering for higher pursuits
- Inculcate team spirit through technical & extension activities
- Promote creativity, innovation and research culture in faculty & students for meeting global challenges
- Create Ethical and Social Professionals in the field of Electronics and Telecommunication Engineering

Program Specific Outcomes (PSOs):

Graduates of the program will be able to,

- PSO1: Design and develop Embedded systems to provide solutions in the field of Electronics and Telecommunication Engineering.
- PSO2: Apply and analyse Communication Engineering fundamentals in the field of wired and wireless communications and networking.
- PSO3: Apply cutting-edge technology in Robotics and Internet of Things.

WORKSHOPS ORGANISED BY DEPARTMENT

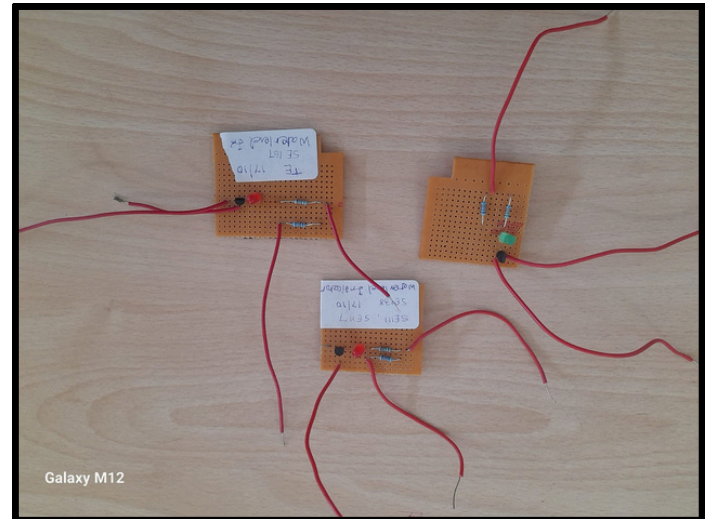


Workshop on VLSI design using Cadence Tools for faculty members arranged by Entuple Technologies Pvt. Ltd. from 3rd January to 5th January 2024

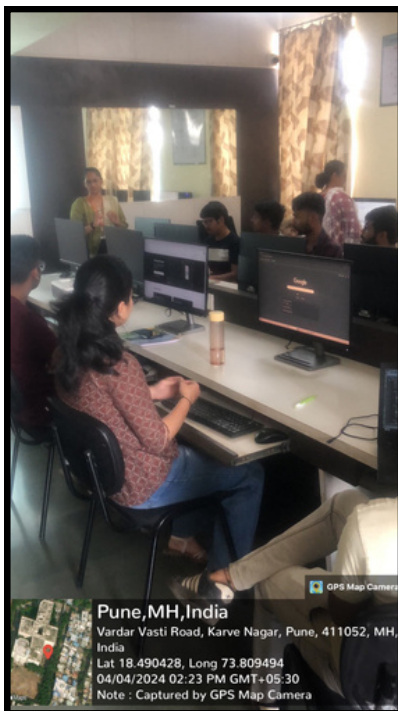


2 days MDP on Effective Financial Management by the faculty members on 29th and 30th January 2024

WORKSHOPS ORGANISED BY DEPARTMENT



Skill Development Program under 'Capability Enhancement Program in Electronics' for SE students from 3rd October 2023 to 13th April 2024



Android Development Workshop by Ms. Kartiki Jambhulkar, SISL Infotech, Pune for BE students organised on 4th, 5th and 8th April 2024

GUEST LECTURES

- Expert Lecture by Mr. Vivek Pawar, CEO, VidyaLeap Pune & Founder Sankalp Semiconductor, on “Job Opportunities in Embedded & VLSI Design” on 5th April 2024 for all EnTC students.
- Expert lecture by Mr. Vedhas Deshpande, Senior Software Engineer, Rohde & Schwarz, Portland, USA on “5G and emerging technologies” on 28th February, 2024 for TE and BE students.
- Expert lecture by Mr. Mrudang Shukla, CEO, PCCOE, Center of Innovation, Incubation, Linkages(CIIL), Pune on “Secrets of becoming an Entrepreneur” on 12th February 2024 for BE students.



GUEST LECTURES

- Expert lecture by Mr. Sidheshwar Bagdande, Networks Operations Engineer Mathercard, Pune, on “Recent Trends and opportunities in Network Security” on 18th January 2024 for TE students.
- Expert lecture by Dr. Saugandh Deshmukh, Department coordinator, Jnana Prabodhini, Pune on “Samarth Yuva Saksham Samarthypurna Samarpit” for all MMCOE students on 12th January 2024.



BETA ACTIVITIES

Event: Women's Safety in Current Scenario

Event Date: 11th March 2024

The ICC and Student Association BETA of Electronics and telecommunication Engineering Department had organized a guest lecture on "Women's Safety In Current Scenario". This lecture was conducted by Adv. Leena Pathak, Additional Government Pleader, District Court, Pune on 11 march 2024 on the occasion of International Women's day.

The objective of the lecture is to spread awareness regarding women's safety in today's world. This session was coordinated by Mrs. Harshada Burande and Mrs. Sampada Tavse, ICC Incharge- Dr. A. S Bhatlawande, under the guidance of Dr. G. S. Gawande, HoD- E&TC and Hon. Principal Dr. V. N. Gohokar.



PARENT-TEACHER MEET

Department of E&TC conducted Parent-Teacher meeting on 10th Feb , 2024 at 11:00 a.m. for the Sem II (AY 2023-24). Students were felicitated for their academic achievements in AY 2023-24 Sem I, University Examination and Extracurricular and Co-curricular achievement.

Head of department, Dr. G.S.Gawande gave a presentation on various activities conducted in the department in AY 2023-24 Sem 2. The parents interacted with the head of department, class-teachers, subject-teachers, teacher guardians and discussed the progress of their ward.

HOD (E&TC) and Ms. S. N. Deshmukh, Dean Admissions, had a discussion session with the parents in which the queries raised by the parents were resolved regarding SPPU Exam, Practicals, Internships, Academics etc.

The PTM was coordinated by Ms H.N.Burande and Ms. S.S.Tavse under the guidance of Dr. G.S.Gawande, HoD E&TC.

More than 40 parents have attended the PTM .



STUDENT ACHIEVEMENT

Name of the Student	Event	Level	Details
Soham Karkhanis	Transmission Line Modeling of Satellite Harness to Predict Crosstalk	National	Internship in Systems Integration Group at Indian Space Research Organisation
Mayuri Deochake, Alisha Nagarkar, Prathmesh Patil	Festx3.0, PCCOE	National	3rd rank
Chinmayee Deshmukh Sahana Deshpande Siddhant Deshmukh	Yukti-Techtonic held at Smt. Kashibai Navale College of Engineering, Vadgaon	National	2nd Rank
G.R. Bhat , R.A. Panchal , Y.S. Shirke , N.R. Angane	Paper name: Autonomous drones and their influence on standardization of rules and regulations for operating–A brief overview	International	Paper published in Science Direct
Vishal Survase Varad Wavare Vaishnavi Bansode	Bhau Innovation Competition Organized at COEP dated 6th April 2024	National	2nd Rank
Team Rudra, Sahil Gupte, Pushkar Ubhe,Jidnyesh Jagtap,Aditya Jadhav,Sai Pawar,Diya Bajaj,Shreyash Malode,Soham Chiplunkar,Sushrut Satbhai	Robot Presentation Competition at PCCOE		1st Prize with 14000 cash prize

INDUSTRIAL VISITS

Cyronics Measurement and Test Lab, MIDC Bhosari, Pune

Date: 20th February 2024

Class: SE

Purpose: To give an exposure to measuring and displaying instruments used in the industries. To make the students aware of the current trends in the communication domain.



INDUSTRIAL VISITS

SA Electronics, MIDC Bhosari, Pune

Date: 20th February 2024

Class: SE

Purpose: This visit was a content beyond for the topic of Sensors and transducers from which the original information is collected in an electronic system. The visit was to give awareness to the students regarding the sensors, flowmeters used in different industries like oil, gas, mining etc.



INDUSTRY SPONSORED PROJECTS

Total 34 final year projects were sponsored from industries.

	PROJECT TITLE	DOMAIN	NAME OF INDUSTRY
1	Sentiment analysis using large language model	ML	Data Smith AI Solutions Pvt Ltd.
2	GSM based smart Switch	Embedded and Core Electronics	Technoweate
3	Predictive maintenace system using firebase cloud platform for CNC machines	Embedded and Core Electronics	Digitech
4	Smart Desk	Embedded and Core Electronics	Cyronics Innovations Lab
5	Smart Auotomotive vehicle control for comfort and convenience	Automation	Vishwas Vidhya Consultancy & services
6	USB interface for Drip Feed DNC	Embedded	Digitech
7	Effect of Music on Brain Waves	Biomedical	Krupa Hospitals sinhgad
8	Self Navigating AI ROBOT	ROBOTICS	Binix Electrosystems Pvt. Ltd
9	Design, Build and Test of fire fighting Robot	ROBOTICS	GBS
10	Smart Lock with Face Recognition system using Rasp-pi	ML	SAMVINSAN Engineering Pvt.Ltd.

INDUSTRY SPONSORED PROJECTS

	PROJECT TITLE	DOMAIN	NAME OF INDUSTRY
11	IoT Based Automatic Medicine dispenser using ESP 32	IoT	SAMVINSAN Engineering Pvt.Ltd.
12	Agribot	IOT	Source code Technologies Pvt.Ltd.
13	Arduino Testing RIG	Embedded and Core Electronics	Padmapani technologies Pvt. Ltd.
14	Automatic Test Jig for assembly tool monitoring Device	IoT	S2R2 pvt. Ltd
15	BMS Tester for Lithium Ion Batteries within the range of 1S to 4s	EV	Nilkey Enterprises, Pune
16	AI Augmented Vibration Analysis for fault Detection in Bearing	AI	Tech city Consultants
17	Solar cleaning system	IOT	Protech solutions
18	Automated Test Zig for PCB	Embedded system	S2R2
19	IoT Based Parameter monitoring for industrial applications	IOT	Sun shine Powertronics
20	Machine Tool Monitoring Using Electric Current Analysis of the spindle motor in CNC Machine	ML	S2R2

INDUSTRY SPONSORED PROJECTS

	PROJECT TITLE	DOMAIN	NAME OF INDUSTRY
21	Machine Monitoring	Electronics	Digitech
22	Design of Antenna	Antenna	DIAT
23	Muslen strength analysis using EMG	Biomedical	Krupa Hospitals sinhgad
24	Mini UPS for wifi routers	Power elctronics	Vadanvat
25	Integrated Adaptive Driver alert System using lot	Embedded ML	Rapitage
26	Heart Failure Prediction Using Embedded ML	Embedded ML	BizWity
27	Pregnancy Progress Monitoring	Biomedical	Anand Medical Foundation Nursing Institute Kuruli Pune
28	canteen managemaint system.	Embedded system	Awesome technologies
29	Gimbal based payload central stabilizer	Communication	DRDO
30	IoT Based Health care Monitoring System	IOT	Kidney stone cure Clinic

INDUSTRY SPONSORED PROJECTS

	PROJECT TITLE	DOMAIN	NAME OF INDUSTRY
31	IoT Based Automatic Medicine dispenser using ESP 32 with alert system	IoT	SAMVINSAN Engineering Pvt.Ltd.
32	AI for life Prediction of CNC Machine Tools	ML	S2R2
33	Precision farming with machine learning	AL/ML	Ashman Technicals Pvt. Ltd.
34	Military Spying Robot	IOT	Bitmap

LIST OF PATENTS

Sr. No.	A.Y.	Name of Faculty	Patent Title	Status
1	2023-24	Dr. A. B. Kanwade	Method and system of chronic obstructive pulmonary disease grade determination using surface electromyography	Granted
2		Ms. Pallavi Dnyaneshwar Wadkar	Smart plastic waste management device	Granted
3		Dr. H. M. Jadhav	ADVANCE TAXONOMY FOR MICRO FACIAL EXPRESSION AND FORGERY DISCRIMINATION	Published
4	2023-2024	Dr. Jitendra Madanlal Bakliwal, Dr. Gopal Sukdeo Gawande, Swati Naresh Deshmukh	LED Driving Topology for Solid State Luminaires	Filed

PLACEMENT ACTIVITY (AY 2023-24)

- Preplacement talk by KPIT Technologies, Pune for BE students was conducted on 26th July, 2023
- Aptitude training sessions for BE students were organized from 14th-18th September, 2023.

Students were placed in the following compaies in the first semester itself of the academic year 2023-24



EDITORIAL COMMITTEE

Staff Members:- Ms. Harshada N. Burande Ms. Sampada S. Tavse

Student Members:-Ms. Shravani Abhyankar Ms. Riya Patwardhan