



Marathwada Mitra Mandal's College of Engineering

Karvenagar, Pune 52

Recipient of "Best College Award 2019" by SPPU

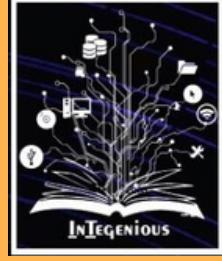
An Autonomous Institute



Department of Information Technology

InTegenious

Volume X | Issue 2 | DECEMBER 2024 – MAY 2025



Highlighting Events

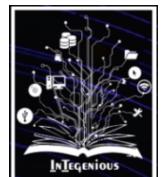
- Skill Development Program on “Blockchain Technology”
- Skill Development Program on “Hadoop, Spark and Data Visualization”
- IITB Spoken Tutorial
- Technosocial Activity
- Several informative expert sessions

Student Chapters/ Associations



MoU's with Industries





InTegenious

A biannual newsletter from the Department of Information Technology, MMCOE

Volume X | Issue 2 | DECEMBER 2024-MAY 2025

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Vision of Department:

To emerge as a Centre of Excellence in education, research and innovation in Information Technology for enrichment of Society.

Mission of Department:

- To cater IT Industry with Engineers having theoretical & practical background and competent IT skills.
- To pursue advanced knowledge in the field of Information Technology.
- To inculcate budding IT Engineers with professional and interpersonal skills.

1. Message from HOD

Dear Esteemed Readers and Supporters,
 Greetings from the Department of Information Technology, MMCOE! As we navigate through the ever-evolving landscape of engineering, innovation, and education, we're thrilled to bring you another edition of our newsletter.

Here's what's in store for you:

1. Student Chapters/Clubs Events
2. Student Achievements
3. Industry Interaction
4. Centre of Excellence
5. Faculty Highlights
6. Community Engagement
7. Featured Article and many more

Thank you for your continued support and dedication to advancing engineering excellence. Together, let's inspire innovation, foster collaboration, and make a lasting impact on the world through the power of engineering. I appreciate the efforts taken by InTegenious Team of Faculty and Students and wish them all the best for the upcoming issue.



Programme Educational Outcomes (PEO's):

PEO 01: Adequate knowledge and skills in Information Technology for implementation of complex problems with innovative approaches.

PEO 02: Inclination and technical competency towards professional growth in the field of Information Technology.

PEO 03: Ethics and value based interpersonal skills to facilitate lifelong learning and societal contributions.

Team InTegenious :

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Our Mentor : Dr. Swapnaja Ubale, Professor, HOD IT

Faculty Editor : Ms. Punam V. Chavan, Assistant Professor, Dept. of IT.

Student Editor : Ms. Shravani Jadhav(TE IT)

MMCOE, Karve Nagar, Pune 52

DEC 2024- MAY 2025

2. Student Placements

Sr. No.	Name of Student	Company Name	Package in Lacks/Year
1	GARULE DNYANESHWARI	HSBC	9
2	CHAVAN ANUSHKA RAVINDRA	Ness Digital	5
3	ARUNDHATI MANOJ WANI	Ness Digital	5
4	KUCHANKAR ARYAN BABARAO	Ness Digital	5
5	KHARADE SANIKA SACHIN	Ness Digital	5
6	FARGADE ROHAN DILIP	Jade Global	4.07
7	KULKARNI SHIVANI GIRISH	Jade Global	4.07
8	DHOBALE SHUBHAM SANTOSH	Jade Global	4.07
9	ANANTHAN NAIR	Tech Mahindra	3.25
10	DIXIT PUNEET SATEESH	Tech Mahindra	3.25
11	DONGARE VAIBHAVI SHANTARAM	Tech Mahindra	3.25
12	MARATHE HITESHBHAI PRADIPBHAI	Tech Mahindra	3.25
13	PATIL DHANASHRI SUNIL	Tech Mahindra	3.25
14	PATIL KHUSHAL ARUN	Tech Mahindra	3.25
15	PHADKE ATHARVA SAMEER	Cognizant	4
16	KUDAPANE AISHWARYA BHARAT	Cognizant	4
17	DALAL VEDANT PRASANNA	Cognizant	4
18	SHINDE UMAKANT MAROTI	Ness Digital	5
19	MOHAADKAR SOAHAM SUJEET	LTI Mindtree	4.05

3. Student Achievements

Students Online Certifications

Sr. No.	Name of Student	Certification Body (NPTEL/Coursera/Udemy)	Name of certification course completed
1	Pratham Samir Kokardekar	Coursera	Ai Essentials
2	Sandip Awale	Udemy	Docker
3	Tanishq Jaitapurkar	GDG	Dsa Busted 2.0
4	Kunal Baghele	Cisco	Python Essential 1
5	Omkar Mahajan	Cisco	Python Essential 1
6	Nikita Bhise	Infosys Springboard	Basics Of Python
7	Ruchika Amrutkar	Aictc	Android Developer Virtual Intenship
8	Pavan Damdhar	Aictc-Eduskills	Aws Ai-Ml Virtual Internship
9	Devika Deshpande	Aictc-Eduskills	Ai-Ml Virtual Internship
10	Atharva Khambete	Mbtb	Java Programming With Jdbc
11	Atharva Waghchoure	Aictc-Eduskills	Android Developer Virtual Intenship
12	Atharva Khambete	Coursera	Supervised Machine Learning
13	Khushal Arun Patil	Cisco	Cisco- Endpoint Security
14	Harshvardhan Grandhi	AWS	Aws Technical Essentials
15	Dhanashri Patil	Prepinsta	Python
16	Rajvardhan Jagtap	Internshala Trainings	Ethical Hacking
17	Parth Kolekar	Udemy	Python For Data Science And Machine Learning Bootcamp
18	Aditi Amrute	Skillup	Java Script For Beginners
19	Harsh Sanchaniya	Udemy	Web Development
20	Shantanu Ghule	Tcs Ion	Tcs Ion Career Edge
21	Dhruv Sinha	Udemy	Web Development

22	Devanshu Ukey	Cisco	Data Analytics
23	Sourabh M. Phadtare	Unstop	Aptitude
24	Kunal Pawar	Unstop	Coding
25	Mali Pavan	Irso	Ai/ML Model For Specific Crop Acreage Mapping
26	Anushka Adak	DSA	Dsa Busted Participation Certificate
27	Aditi Talnikar	IBM	Process Mining
28	Shubham Bhandwalkar	Tutedude	Data Analytics
29	Sagar Hinge	Edunet	Ai
30	Rutuja Jadhav	Apana College	Data Structures
31	Shravani Jadhav	NPTEL	Data Structures And Algorithms
32	Prathmesh Salunkhe	NPTEL	Data Structures And Algorithms
33	Harshvardhan Sawant	Aspire	Soft Skills
34	Prathamesh Chaudhari	Apan College	Data Structures And Algorithms
35	Anupama Tilak	IIT Bombay	Cpp
36	Shravanee Ramdasi	Tutedude	Data Analytics
37	Om Jadhav	Rapidminar	Machine Learning
38	Sanika Thite	Unstop	Css
39	Onkar Wajage	Cisco	Data Analytics
40	Yash Hanamghar	Great Learing	Machine Learing
41	Vishal Shitole	Aspire	Soft Skills
42	Eshita Shirolkar	IBM	Process Mining
43	Disha Barapatre	Participation	Certificate
44	Yuvraj Muley	Codechef	C++
45	Arya Deshpande	Iste Approved	Full Stack Development
46	Ruturaj Patond	Apna College	Dsa - Alpha Batch

47	Arvind Eknath Gavande	Particepation	Coding
48	Vishwendra Vijay Patil	Aspire	Soft Skills
49	Hibare ShrutiKa Goapl	NPTEL	Android Development
50	Ankit Ananda Gholase	Code Alpha	Web Development
51	Yashwardhan Manikshetty	Aictc-Eduskills	Data Science
52	Bhagat Omkar	Code Alpha	Web Development
53	Omkar Erande	Coursera	Cybersecurity
54	Yash Kamthe	Coursera	AI
55	Shubham Dhobale	Coding Ninja	Node Js
56	Akash Khalekar	Udemy	Javascript
57	Gaurav Mohagaonkar	Udemy	Postgresql
58	Gaurav Mohagaonkar	NPTEL	Programming In Java



4. Student Internships

Sr. No.	Students Name	Company Name	Domain of work
1	ADAK ANUSHKA PRASHANT	CodTech It solutions pvt.ltd	cyber security and ethical hacking
4	AWALE SANDIP KALAPPA	Infotech Pvt. Ltd.	Full Stack Development
5	BARAPATREDISHA MILIND	TechnoHacks Solutions	Java Development
6	BHAGAT OMKARNAVNATH	Saiket Systems	Web Development
7	BHANDWALKAR SHUBHAM PRASHANT	Oasis Infobyte	Data Analytics
8	BHAVESHSHASHANK SONAR	Injotech India pvt.	Data Science
9	BHISE DNYANESHWAR SUKHDEV	prodigy infotech	Software Development
10	CHAUDHARI PRATHAMESHKAMLESH	Omega Soft Technologies	Full stack Development
11	DESHMUKH ISHA SANDIP	Maestro Intellect Pvt.Ltd	Full stack Development
12	DESHPANDE ARYA ASHISH	Omega Soft Technologies	Full stack Development
13	DHANDARE PRATIK GAJANAN	Athena Automation	Full Stack Development
14	DUPARGUDE ARYAN RAMCHANDRA	HawksCode Technologies LLP.	Full Stack Development with the MERN STACK
16	GAVANDE ARVIND EKNATH	Edunet Foundation	Data Science
17	GHOLASE ANKIT ANANDA	Omegasoft Technologies	Full stack Development
19	YASH DILIP HANAMGHAR	V-edge slide system	Data Analytics
20	HAWALE VAIBHAV SHANKAR	TechnoHacks Solutions	Web Design and Development
21	HIBARE SHRUTIKA GOPAL	Hollyminds Technologies	Web Development
22	HINGE SAGAR ASHOK	360digitmg	Data Science
24	JADHAV RUTUJANAVNATH	Omegasoft Technologies	Full Stack Development
27	KARPE KALYANI BHAUSAHEB	BlueStock Fintech	Full Stack Development
28	KAUSHAL SUNIL JAISWAL	Omegasoft Technologies	Full stack Development

29	KHADILKAR PRATHAMESHSHRINIVAS	Athena Automation	Mobile App Development
31	KHATRI SHREYA SHIVAJI	Omegasoft Technologies	Full stack
32	KOKARDEKAR PRATHAM SAMIR	Oeesha solutions Pvt ltd.	Web Development
33	KSHIRSAGAR SANSKRUTI SHIRIRANG	Edunet Foundation	UIUX Designer
34	KULKARNI SAHIL MANDAR	Athena Automation	Web Development
35	MANIKSHETTY YASHWARDHAN RAJSHEKHAR	Omegasoft Technologies	Full Stack Development
36	MULEY YUVRAJ SACHIN	EduSkills	Machine Learning
37	MULINTI TEJASHREE CHANDRAMOHAN	CodTech It solutions pvt.ltd	Full Stack Development
38	NALAWADE AARYA GAJANAN	Zidio Development	Web Development
40	PAGAR ASHISHPRABHAKAR	Omegasoft Technologies	Full Stack Development
41	PATIL RUSHIKESH VINAYAK	Eduskills	Google AI and ML
42	PATIL VISHWENDRA VIJAY	Omegasoft Technologies	Frontend Development
43	PAWAR GARGI VIKAS	CodTech It solutions pvt.ltd	Full Stack Development
45	PAWARNIRJARANITINKUMAR	Oasis Infobyte	Python Programming
47	RAMDASI SHRAVANEE YOGESH	Oasis Infobyte	Data Analytics
50	RUTURAJ PATOND	Skills IT Academy	Full Stack Development
51	SALUNKHE PRATHMESHRAVINDRA	Athena Automation, Automation Manufacturing Company	Web development
52	SARADE ONKAR DADASAHEB	Anyatam Adhayayan Pvt.ltd	Data Science
53	SAWANTHARSHVARDHANUTTAM	TechnoHacks Solutions	Web Development
54	SHEWALKAR SANKET MAHESH	Oeesha Solutions Pvt. Ltd	Full Stack Development
55	SHINDE ADITYA MAHESH	Omegasoft Technologies	web Development
56	SHINDE RAVI SANDIPAN	Insight Fusion Analytics	Python and ML
57	SHIROLKAR ESHITA MAHESH	Oasis Infobyte	Web Development and Designing
58	SUTAR ATHARV ABASAHEB	Elite Softwares pvt. ltd.	Full Stack Development

59	TALNIKAR ADITI VISHAL	Oasis Infobyte	data Science
61	VISHALNARAYAN SHITOLE	SprogSense	Frontend development
62	WAJAGE ONKAR ATUL	Oasis Infobyte	Python Programming
57	ERANDE OMKAR SANTOSH	Oasis Infobyte	Web Developement
56	OM YASHWANT WADHANE	Suven Consultants & Technologies	Frontend development

Internship Certificates of Student

 **INJOTECH INDIA PRIVATE LIMITED**
 Regd Office: Plot No. 11, Ghat No.1559, Village-Chikhali, Dehu-Auland Road, Pune: 411 002.
 ☎ +91-9804949000
 City Office: Office No. 44, 5th floor, "Yugay Mengal Complex", Near ICICI Bank, Kothrud,
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 ☎ +91-8605014725 / 9604646600 / 20-4809072 / 20-299508
 E-mail: info@injotech.co.in; injotechindia@gmail.com
 CIN U-93000 PN 2013 PTG 140682

Ref: ITIPL/Appt./Internship/2024-25

Date: 22nd February 2024

To,
 Bhavesh Shashank Sonar
 Marathwada's Mitramandal College of Engineering,
 Pune

Subject: Internship Completion Certificate
 Dear Bhavesh,

We are delighted to officially acknowledge your successful completion of the Data Visualization internship at Injotech India Pvt Ltd. Your contributions during your tenure, from 22nd October 2024 to 22nd February 2025, have been greatly appreciated.

Throughout your internship, you played an integral role in the Cylinder Heatmap visualization project. Under the expert guidance of our technical head, Mr. Ganesh Jagtap, you not only developed your skills in data visualization but also made a meaningful impact on our projects through your dedication and innovative approach.

Your enthusiasm, commitment, and ability to work collaboratively with our team have left a lasting impression. We are confident that the experience and skills you have gained during your internship will serve you well in your future professional endeavors.

Thank you for your valuable contributions and for being a part of our team. We wish you every success in your career ahead. Should you need any further information or assistance, please feel free to contact us at info@injotech.co.in.

Warm regards,

For Injotech India Pvt Ltd
Uma Karambelkar
 Digitally signed by
 Uma Karambelkar
 Date: 2025.04.10
 12:24:27 +05'30'
 Uma Karambelkar
 Authorised Signatory

Regd. Office & Lab: Plot No. 11, Ghat No. 1559, Village-Chikhali, Dehu-Auland Road, Dist. Pune: 411 002. (INDIA) +91 9804946600

 **Oeesha**
 Solutions Pvt. Ltd.

MOBILE: ☎ 98906 23259
 91122 23259

MAIL & WEB: manoj.deshpande@oeesha.com
www.oeesha.com

ADDRESS: 128/2, 65 Gharkul, Lane 5, Navketan Society, Kothrud, Pune 411 038

CERTIFICATE
TO WHOMSOEVER MAY BE CONCERNED

Date: 15/03/2025

This is to certify that **Mr. Pratham Kokardekar**, a student of Third Year Information Technology at **Marathwada Mitra Mandal's College of Engineering, Pune** (affiliated to Pune University), has successfully completed his internship at **Oeesha Solutions Pvt. Ltd.** from **15 January 2025 to 15 March 2025**.

During this period, he worked on **RATIB - Newspaper Distribution and Management System**, contributing to:

1. Web Development using HTML, CSS, and JavaScript
2. UI/UX Design
3. API Integration
4. Firebase Authentication & Database Management

Mr. Pratham Kokardekar displayed **good technical skills, professionalism, and dedication** throughout his internship. We appreciate his contribution and wish him success in all future endeavours.


Mr. Manoj Deshpande
 Founding Director
 Oeesha Solutions Pvt Ltd.



5. Student Publications

Sr. No.	Name of Students	Paper Title	Publisher
1	Naman Agnihotri	AI-Powered Exam Assessment System for Handwritten Answer Sheets	International Journal Of Innovative Science and Research Technology
	Harshvardhan Grandhi		
	Sanika Kharade		
	Dhanashri Patil		
2	Nishita Bhagwat	A Holistic Approach to Defect Detection in Solar Modules: Leveraging Lifecycle Data for Improved Performance	International Journal Of Innovative Science and Research Technology
	Vedant Dalal		
	Soaham Mohaadkar		
	Atharva Phadke		
3	Hitesh Marathe	Road Accident Detection Using Machine Learning	International Journal Of Scientific Research in Engineering and Management
	Aryan Kuchankar		
	Aryan Salunkhe		
4	Omkar Jainak	SMART SKILLS: AI POWERED JOB PROFILE REAL TIME SKILL RECOMMENDATION ENGINE	International Conference & Start-up Conclave on Science, Engineering & Technology
	Rushikesh Joshi		
	Khushal Patil		
	Naveena Bhat		
5	Arundhati Wani	A Multilingual Web-Based Approach to Speech Emotion Recognition: Challenges and Solutions	International Conference on Lifespan Innovation (ICLI 2025)
	Rujuta Kulkarni		
	Vishvjitा Savkare		
	Ananthan Nair		
6	Varad Deshmukh	Skin Disease Diagnosis using AI/ML	IJIRT
	Aditya Rathod		
	Atharva kakde		
	Varad Kamble		
7	Chaitanya Andhale	Fruit Disease Detection using VGG16 and Flask: A Deep Learning-Based Web Application for Precision Agriculture	International Journal for Research in Applied Science & Engineering Technology (IJRASET)
	Sumit Jaiswar		
	Puneet Dixit		
8	Vaibhavi Ladhe	AI-Powered Online Platform for Streamlined Meeting Management	International Journal Of Innovative Research In Technology
	Suraj Magdum		
	Dhruv Mahajan		

6. Workshops & Technical Events Conducted by Department

1. Skill Development Program on “Blockchain Technology”:

Event name: Skill Development Program on “Blockchain Technology”

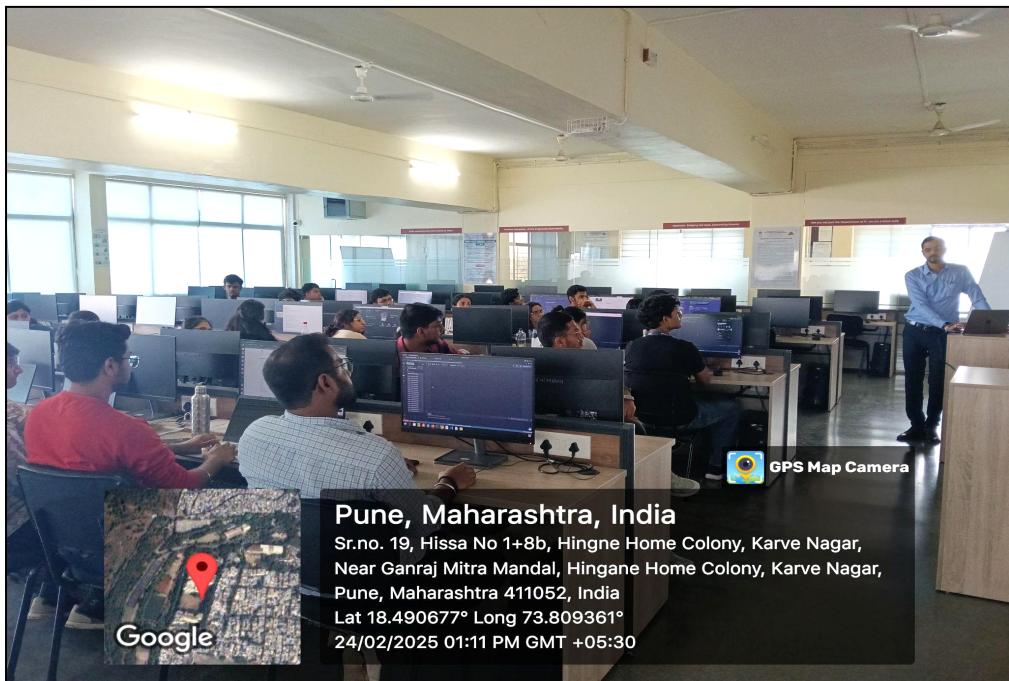
Event date: 21/02/2025 to 27/02/2025

Platform: Offline

The skill development program was organized to enhance students' knowledge and practical understanding of blockchain technology and cryptocurrency development. The session catered to SE, TE, BE, and M.Tech Students, offering a blend of theoretical concepts and hands-on training to help them apply their learning effectively. The SDP was conducted from 21/02/2025 to 28/02/2025 for a total of 30 hours. A total of 32 students participated in the SDP.

The skill development program successfully provided TE, BE, and M.Tech students with in-depth knowledge of blockchain and cryptocurrency technologies. The sessions included both theoretical and practical learning, equipping students with valuable skills applicable to real-world blockchain applications. The interactive format encouraged





2. Skill Development Program on “Hadoop, Spark and Data Visualization”:

Event name: Skill Development Program on “Hadoop, Spark and Data Visualization”

Event date: 17/02/2025 to 22/03/2025

Platform: Offline

The skill development program was organized to enhance students' knowledge and practical understanding of blockchain technology and cryptocurrency development. The session catered to SE, TE, BE, and M.Tech Students, offering a blend of theoretical concepts and hands-on training to help them apply their learning effectively. The SDP was conducted from 21/02/2025 to 28/02/2025 for a total of 30 hours. A total of 32 students participated in the SDP.

The skill development program successfully provided TE, BE, and M.Tech students with in-depth knowledge of blockchain and cryptocurrency technologies. The sessions included both theoretical and practical learning, equipping students with valuable skills applicable to real-world blockchain applications. The interactive format encouraged

▪ Spoken Tutorial :

Event Name : Spoken Tutorial Online Test

The summary of the result of the spoken tutorial test for Sem-II were as follows :

Branch	Year	Course Name	Candidates Appeared	Candidates Passed	Passing Percentage
IT	S.E	Java	64	63	98.43
IT	T.E	Advance CPP	65	65	100
IT	B.E	Javascript	62	61	98.38

● Parent Teacher Meeting :

Event Date: 08/02/2025

Mode of Conduction: Offline

Venue: AC 401, IT Department, 4th Floor, MMCOE, Karvenagar.

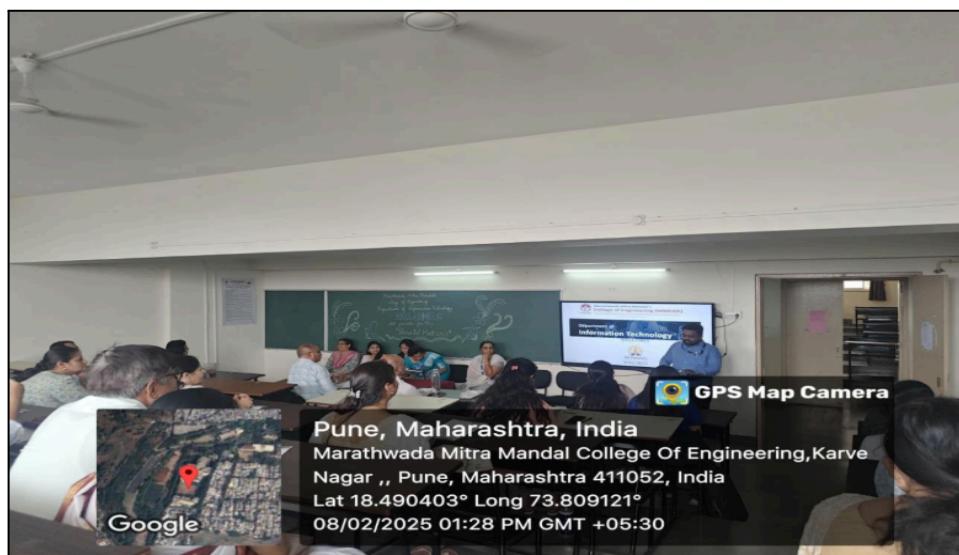
Parent Teacher meeting for the academic year 2024-25, Semester-II was conducted on 08/02/2025 in the college campus. Around 32+ Parents from SE, TE and BE were present for the Meeting.

The details of Parent Teacher meeting conducted are as below:

- *Registration of Parents from 12:30 PM to 1:00 PM.*
- *Commencement of the Parent Teacher meeting at 1:15 pm with the welcome speech by Mr. V.K. Sāmbhar.*
- *Felicitation of the SPPU university ranker and academic toppers for 2024-25 Semester-II.*
- *Department presentation regarding infrastructure details and progress of the The department was presented by Dr. Swapnaja A. Ubale , HOD.*
- *Ms. Punam Chavan, Academic Coordinator discusses the academic policies, unit test, and exam policy with parents.*
- *Ms. Preeti Joshi, Training and placement coordinator, highlights training and placement activities, the efforts taken by the department and college for placement of students.*
- *Questions and issues of the parents were then addressed by HOD Dr. Swapnaja Ubale and faculty members of the Department.*
- *The parent teacher meeting concluded at 3:15 pm followed by refreshment.*

Following points were discussed in Meeting:

1. At the start of the Presentation the Vision and Mission of the Department was disseminated to the Parents.
2. Briefed about various activities conducted in the department like skill-development programs, Curriculum gap bridging Lectures, Guest Lectures, Workshops, coding competitions and other events conducted under ITSA, IT Tech. Club and ACM student chapter.
3. Last year and the current year placement scenario were discussed with the parents.
4. Discussed the efforts taken by the Department and College for placement and internship.
5. Mrs. Preeti Joshi , TPO Coordinator of the department discussed various initiatives taken by the college for Students' Internships and Placements.
6. Parents appreciated the efforts taken by the College and Department and were happy to meet the faculties in person.





7. *Seminars / Guest Lectures Conducted by Department*

Sr. No.	Name of Resource Person	Designation and Organization	Topic of Lecture	Date	Beneficiary
1	Mr.Yogesh Murumkar	CEO, Bharat Software, Baner Pune	Unlocking Insights with Hadoop	30/01/2025	54
2	Ms. Mayuri Hirgude	RPA Trainer, AutomationEdge, Pune	“Agile & Jira: Industry Tools for Modern Software Development”	05/03/2025	42
3	Ms. Yoshitha Reddy	Senior Software Engineer at CBRE, Hyderabad	“The Analytics Revolution: BI Tools for Tomorrow”	28/02/2025	65
4	Bharat Mazire	R&D Engineer II, Ansys Pune	“Virtual Reality”	06/03/2024	38
5	Dr. Deepak Kshirsagar	Asst. Prof. COEP	Web Security using Machine Learning	3/3/2025	41

8. ACM Student Chapter Activities

The students selected for the mentioned posts of MMCOE ACM Students chapter , for the AY 2024-25 are as below:

Sr. No.	Name of Post	Name of Student
1	Chairperson	Ms. Shravani Avinash Jadhav
2	Vice Chairperson	Ms. Sanika Thite
3	Treasurer	Ms. Anupama Tilak
4	Joint-Treasurer	Ms. Aditi Talnikar
5	Secretary	Ms. Arya Deshpande
6	Joint-Secretary	Mr. Aditya Shinde
7	Webmaster	Mr. Bhavesh Sonar
8	Creative Head	Ms. Devika Deshpande
9	Event Manager-Frontend	Mr. Ishan Kasande
10	Event Manager-Technical	Mr. Kunal Pawar
11	Publicity and Sponsorship Head	Mr. Vaibhav Hawale
12	Social Media Manager	Ms. Eshita Shirolkar
13	Department Coordinator	Mr. Vishesh Chourasia
14	Department Coordinator	Mr. Onkar Wajage
15	Department Coordinator	Ms. Inshal Hashmi
16	Department Coordinator	Ms. Anushka Bhitade

● ACM Event/Workshop :

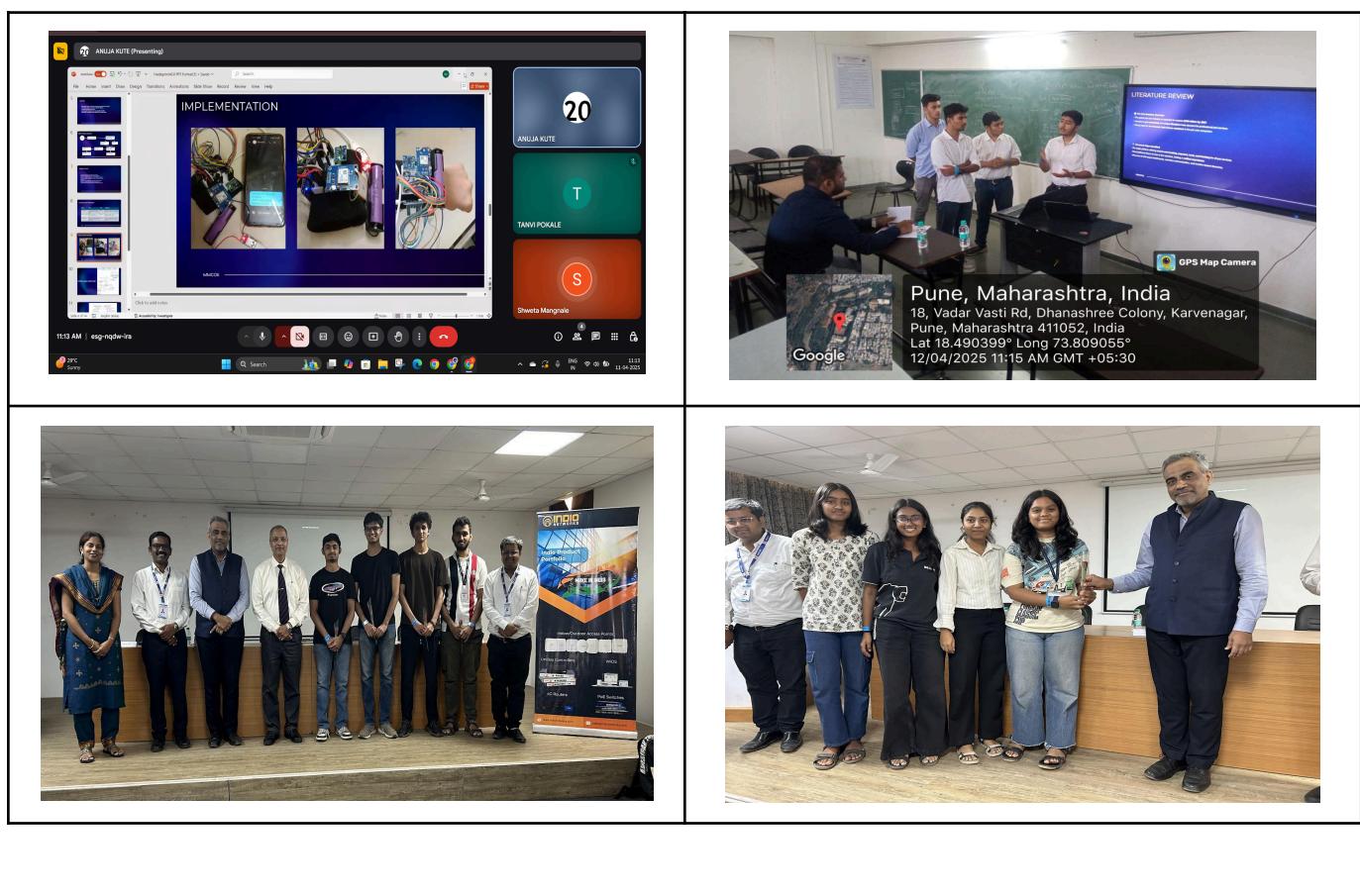
Event Name : Hacksprint v6.0: Ideate, Innovate, Implement

Event Date: 10th April 2025 - 12th April 2025

Event Detail:

HackSprint v6.0, a 36-hour hybrid hackathon organized by ACM Student Chapters and ISTE of MMCOE, Pune, was held from **10th-12th April 2025** with **49 teams and 181 participants**. The event featured problem statements from industry sponsors, supported by mentorship and monitoring sessions from alumni and experts. The valedictory ceremony, graced by **Mr. Makarand Joshi, TATA Technologies**, celebrated winners from MMCOE, PICT, VIT, DY Patil, DES, and Cummins, with cash prizes sponsored by Indio Networks, BS6 AutoIndia, and ArrayPointer. The hackathon fostered **innovation, teamwork, and industry collaboration**, marking another successful edition.

Glimpses of the Event:



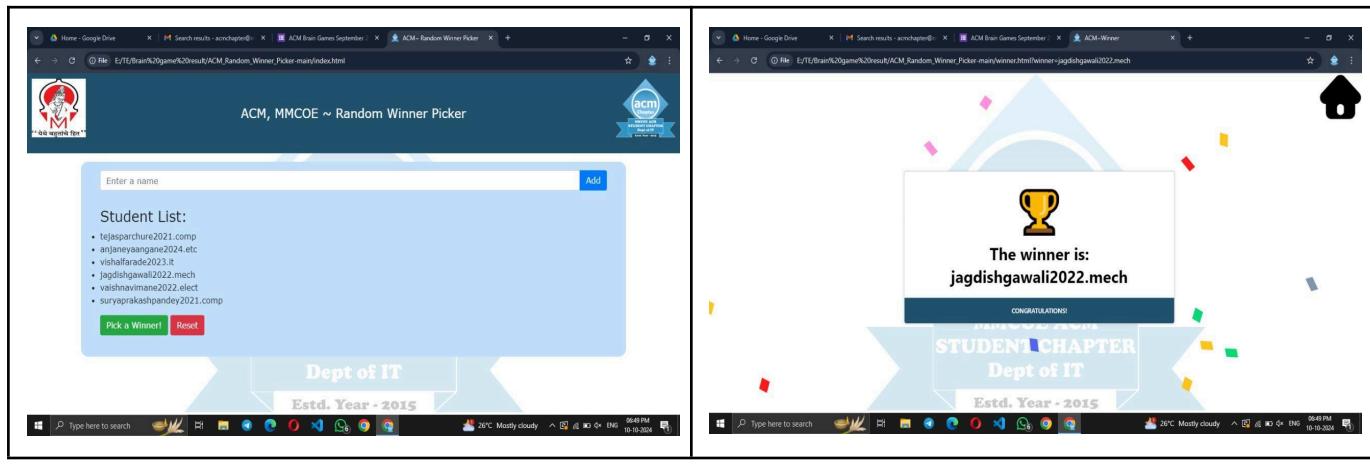
Event Name : Tech-Spark 2k24-25 Project Competition**Event Date: 24th April, 2025****Event Detail:**

The **Tech-Spark 2k24-25 Project Competition** was conducted by the Department of Information Technology in collaboration with **ACM Students' Chapter MMCOE and IT Student Association (ITSA)**. The event was a Project Competition conducted on **24th April 2025**. The event was open to all SE, TE, BE students across all the branches and inter colleges. The event encouraged participants to showcase their ideas and their projects. Selected teams were awarded with cash prizes and participation certificates.

Glimpses of the Event:

Event Name : Brain Games**Event Date: End of every month****Event Detail:**

Brain Games is a monthly event, where we will release a quiz based on logical thinking and one student will be declared winner based on his / her score in the quiz every month. In cases where more than one student scores full marks, the winner will be chosen based on a lucky draw. Winners are awarded with ACM goodies.

Glimpses of the Event:

9. Students Association (ITSA) Activities

- ITSA is an association of IT department students for the students by the students of the students. ITSA was formed in AY 2014-2015.
- ITSA Student Committee for 2024-25:

Sr. No.	Post	Name
1	President	Mr. Prathamesh Khadilkar
2	Vice President	Mr. Onkar Sarade
3	Secretary	Mr. Kaushal Jaiswal
4	Department GS	Mr. Ruturaj Patond
5	Treasurer	Ms. Sanika Thite
6	Social Media Head	Mr. Onkar Wajage
7	Creative Head	Ms. Aditi Talnikar

ITSA Event/Workshop :

Event Name :Technosocial Activity

Event Date: 19 March 2025

Event Detail:

ITSA Club, Department of Information Technology, MMCOE organized a techno-social activity focusing on computer literacy and online safety awareness at Pune Municipal School Narhe. This initiative aimed to bridge the digital divide and promote technological literacy among students from underprivileged backgrounds.

Participants: A group of 09 students from MMCOE, along with 2 faculty members, Dr. Bharat P. Vasgi and Ms. Punam V. Chavan has participated in the techno-social activity. The participants were selected based on their interest in community service and technology.

Glimpses of the Event:



Event Name :Skill Development program on Blockchain Technology

Event Date: 21/02/2025 to 27/02/2025

Event Detail:

The skill development program was organized to enhance students knowledge and practical understanding blockchain technology and cryptocurrency development. The session catered to SE, TE, BE, and M.Tech Students, offering a blend of theoretical concepts and hands-on training to

help them apply their learning effectively. The SDP was conducted from 21/02/2025 to 28/02/2025 of a total 30 hours. Total 32 students participated in the SDP.

Glimpses of the Event:



Event Name :BE Farewell function

Event Date: 28 April 2025

Event Detail:

The farewell programme for the Batch of 2024 was a heartfelt event conducted on April 28, 2025, by the Information Technology Students' Association (ITSA) in association with the Department of Information Technology. The event aimed to bid goodbye to the graduating students and extend best wishes for their future endeavours.

The event commenced with a warm welcome and a presentation by the Head of Department, Dr. Swapnaja Ubale madam. In her speech, she highlighted the significant achievements and contributions of the Batch of 2024. She acknowledged their hard work, dedication, and the positive impact they had on the department. Other faculties also expressed their best wishes for the students' future, encouraging them to continue striving for excellence.

Glimpses of the Event:



10. IT Tech Club

About Club: MMCOE IT Tech will work as a platform for students where they will be able to build their technical skills and bring the best out of them in today's dynamically developing world.

Office Bearers for A. Y. 2024-25

Sr. No	Name of Post	Name of Student
1.	President	Mr. Ruturaj Patond
2.	Vice-President	Mr. Sahil Kulkarni
3.	Student Advisor	Mr. Umakant Shinde
4.	UI / UX Head	Ms. Nihira Patil
5.	Web Development Head	Mr. Vishal Shitole
6.	Data Science & AL-ML Head	Ms. Tejashree Mulinti
7.	Social Media Head & Event Management	Mr. Pratham Kokardekar
8.	Support Team Lead	Mr. Prathmesh Salunkhe

11. *Center of Excellence*

Activities under COE

Sr. No.	COE	Event Conducted	Domain
1	Blockchain	SDP on "Blockchain Technology"	Blockchain Technology
2	Computational Intelligence	SDP on Hadoop, Spark and Data Visualization	Data Science and Machine Learning

Glimpses of Events



SDP on "Blockchain Technology"

12. Result (AY 2024-25 Sem II)

Sr. No.	Class	No. of Students Appeared	Passing Percentage
1	SE	72	86.11
2	TE	63	98.41
3	BE	71	100%

Our Toppers

Class	Rank	Name of Student	SGPA
SE	1	Pangarkar Malhar Yogesh	9.73
	2	Somanache Rajvi Sachin	9.59
	3	Paranjape Aditya Sachin	9.45
TE	1	Khandare Prathmesh Subhash	9.79
	2	Kulkarni Sahil Mandar	9.64
		Mulinti Tejashree Chandramohan	
	3	Omkar Kishor Patil	9.6
		Pawar Siddhi Suresh	
BE	1	Velankar Isha Shivaji	9.65
	2	Ladhe Vaibhavi Vikas	9.52
	3	Magdum Suraj Gafar	9.35

13. Technical Blogs by Students

Title : From RAG to Agents: The Next Leap in AI Evolution

Author : Shravani Avinash Jadhav(BE-IT)

♦ **Introduction**

Large Language Models (LLMs) like GPT-4 and LLaMA have changed how we interact with AI. But they face two key challenges:

- **Hallucinations** → generating factually incorrect outputs.
- **Static Knowledge** → inability to access real-time or domain-specific info.

To solve this, two powerful paradigms have emerged:

👉 **Retrieval-Augmented Generation (RAG)** – improves accuracy with external knowledge.

👉 **Agentic AI** – adds reasoning, planning, and action.

Together, they're shaping the next generation of AI.

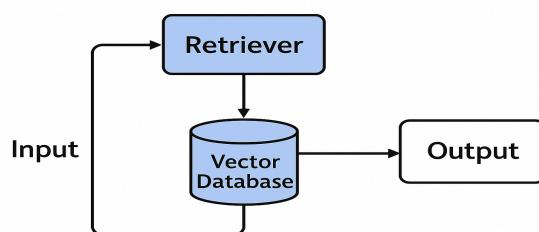
♦ **Retrieval-Augmented Generation (RAG)**

1. What is RAG?

RAG combines an LLM with a **retriever system** (like Pinecone, FAISS, or Weaviate). Instead of relying only on pre-trained knowledge, it retrieves **relevant documents** before answering, making responses more accurate and grounded.

2. RAG Architecture

Retrieval-Augmented Generation (RAG)



3. How RAG Works

1. **User Query** → Input is converted into embeddings.
2. **Retriever** → Finds relevant documents from a vector database.
3. **Generator (LLM)** → Combines documents + query to generate fact-based answers.
4. **Final Output** → Coherent, grounded response.

✓ Example: *“According to a 2024 Nature study, quantum error correction improved fault tolerance by 30%.”*

4. Benefits

- Reduces hallucinations.
- Domain specialization (law, medicine, enterprise).
- Easy updates without retraining.

5. Applications

- Customer support assistants.
- Enterprise knowledge search.
- Legal/medical research.
- Academic assistants.

♦ **Agentic AI**

1. What is Agentic AI?

While RAG improves knowledge accuracy, Agentic AI gives systems the ability to reason, plan, and act autonomously.

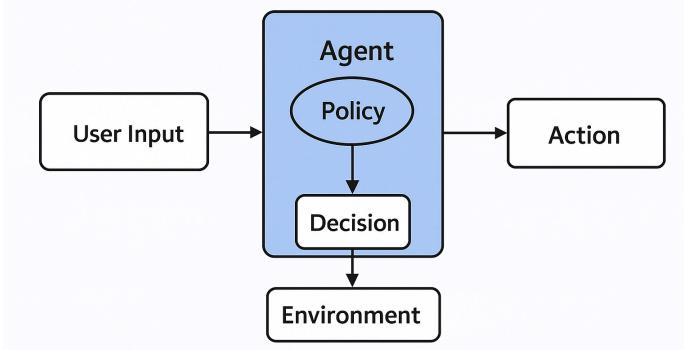
2. Core Capabilities

- **Tool usage** (APIs, databases, calculators).
- **Multi-step reasoning** (chaining actions).
- **Memory** (short + long-term context).

- **Collaboration** (multiple agents working together).

3. Agentic AI Architecture

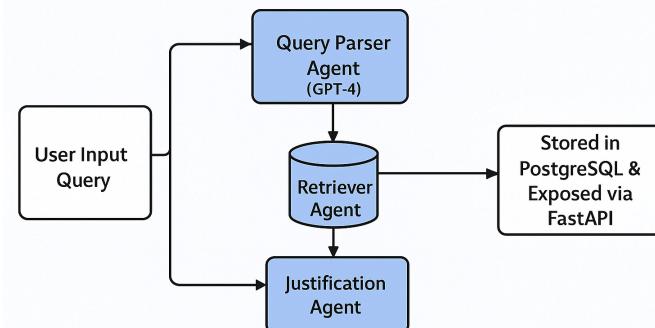
Agentic AI Architecture



4. How It Works

1. **User Input** → Defines a goal (e.g., "Summarize climate research & email it to me").
2. **Agent (Policy + Decision Engine)** → Breaks it into steps (search → summarize → format → send).
3. **Environment** → Interacts with APIs, databases, tools.
4. **Action** → Executes tasks (queries DBs, runs scripts, sends emails).

Autonomous Research Agent Framework



✓ Example Workflow:

"Book me a flight to NY next week and add to my calendar."

- Policy: break task into subtasks.
- Tools: flight booking API + calendar API.
- Action: books flight + schedules event.

5. Applications

- Autonomous research assistants.
- Workflow automation (reporting, scheduling).
- Personal AI with memory.
- Code/debugging agents.

◆ RAG vs Agentic AI

RAG vs Agentic AI

Primary Purpose		
Improves LLM accuracy with external knowledge		Enables reasoning, planning, and autonomous actions
Core Components		Agent (Planner(Policy) + Tools/APIs + Memory+LLM)
Workflow		
Focus		Multi-step decision-making & task execution
Memory		Long-term + short-term memory for continuity
Tool Usage		Workflow automation, research agents, personal AI

◆ Challenges

- **RAG** → Latency, embedding quality, data privacy.
- **Agentic AI** → Safety, hallucinations in planning, ethical boundaries.
- **Combined Systems** → Cost and scalability.

- **Multimodal Agents** → Text, image, voice, video understanding.
- **Enterprise Adoption** → Secure, domain-specific deployments.
- **Ethical AI** → Guardrails for safe decision-making.

◆ Future Outlook

- **RAG + Agents Fusion** → Agents that retrieve knowledge before acting.

◆ Conclusion

The leap from **RAG** → **Agentic AI** marks a shift from AI that *answers* to AI that can *decide and act*.

As these systems merge, we move toward **intelligent, reliable, and autonomous AI**—paving the way for the next era of innovation

Title : Innovative Mental Wellness: Empowering Therapy with AR & VR

Author : Siddhi Pawar (BE-IT)

Introduction

Mental health care is undergoing a digital revolution, and one of the most promising innovations is the integration of Augmented Reality (AR) and Virtual Reality (VR) into therapy. While both technologies have been used independently, they often suffer from limitations like static environments, lack of personalization, high costs, and fragmented user experiences. Our proposed platform addresses these challenges with a unified, adaptive, and emotionally intelligent mental wellness system.

How AR and VR Could Transform the Future of Mental Wellness

Imagine walking through a peaceful forest, the sound of birds calming your racing mind. Suddenly, your stress levels spike—your heart races, your palms sweat—and instantly, the scene changes. The forest grows quieter, the air lighter, and gentle breathing exercises appear to guide you back to calm.

This isn't science fiction. It's the future of mental health therapy powered by Augmented Reality (AR),

Virtual Reality (VR), and real-time emotional intelligence.

Why Current Tech Falls Short

AR and VR are already being used in therapy, but separately. AR apps might help with mindfulness or exposure therapy, while VR is used to immerse patients in stress-management scenarios. But both have major flaws:

- They **don't adapt in real time** to how you're actually feeling.
- They're often **expensive** and limited to specialized equipment.
- They feel **fragmented**, offering isolated experiences instead of a connected journey.

So while helpful, they're not enough to give people the truly personalized mental wellness support they need.

A Smarter, Seamless Experience

That's where the new invention comes in: a **unified AR-VR mental wellness platform** designed to adapt to you—your body, your mind, your emotions—every step of the way.

Here's what makes it revolutionary:

 **Seamless Transitions** – Start with AR exercises in your living room, then slip on a VR headset to dive into a calming forest or beach, all in one smooth flow.

 **Real-Time Emotional Tracking** – Sensors read your heart rate, skin response, and even brainwaves to understand your stress levels in the moment.

 **Adaptive Environments** – If you're overwhelmed, the system dials down noise, softens colors, or guides you into gentle breathing. If you're calm, it gradually introduces challenges to build resilience.

 **AI Therapy Companions** – Virtual avatars act as empathetic guides, offering encouragement and helping you practice real-world interactions.

 **Beyond Relaxation** – The platform can even help with memory reconstruction for trauma or dream analysis to explore the subconscious.

A Day with the App

Picture this:

- You put on your headset after a stressful day at work.
- The app reads your stress signals and eases you into a soothing AR breathing exercise.
- As your heart rate steadies, it suggests moving into VR for deeper relaxation.
- You find yourself strolling through a quiet forest. When your stress spikes again, the

system softens the sounds, dims the light, and guides you into meditation.

- At the end, you see a report showing how your stress changed, plus tips for tomorrow.

It's like having a **therapist, coach, and safe space in your pocket**.

Why This Matters

Mental health challenges are rising worldwide, but access to therapy remains limited. By making AR/VR therapy **affordable, adaptive, and accessible**, this invention could:

- Help people manage **anxiety, PTSD, depression, and phobias**.
- Offer **personalized care** that reacts instantly to emotions.
- Make therapy available **anytime, anywhere**, not just in clinics.

The Future of Healing

This innovation pushes therapy into a new era: **immersive, interactive, and deeply personal**. Instead of one-size-fits-all solutions, mental wellness becomes a living, breathing experience that grows with you.

With AR and VR working hand in hand, therapy is no longer just something you attend—it's something you **live, feel, and carry with you**.

14. Faculty Highlights

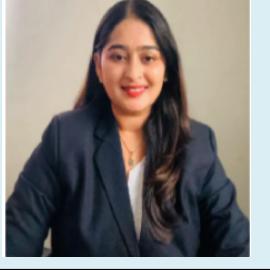
1. Seminar/ Workshop / Conferences Attended :

Sr. No.	Name of Faculty	Name of FDP/STTP/Conferences	FDP/ Workshop/ Conference	No. of Days	Date (From-To)
1	Mr Nikhil Dhavase	"Next Gen AI Skills: A practical approach for Educators"	FDP	5	24th March to 28th March 2025
2	Ms. Rohini Rankhamb	"Research in Education and Learning Outcomes"	FDP	5	17th to 21st March 2025
3	Ms. Rohini Tambe	Full Stack Java by SkillDzire	FDP	15	17th March to 31st March 2025
4	Ms. Punam chavan	Information Security and Privacy Preserving strategies for IOT by NIT Warangal	FDP	10	27 Jan 2025 to 6 Feb 2025
5		NPTEL Workshop on Clinical Neurophysiology Techniques:EEG	Workshop	2	15 March 2025 to 16 March 2025

15. List of faculty members in the Department

- List of Teaching Staff Members :

Name of the Staff & Designation		Name of the Staff & Designation	
Dr. Swapnaja A. Ubale <i>Professor</i>		Dr. Bharati P. Vasgi <i>Associate Professor</i>	
Mrs. Preeti S. Joshi <i>Assistant Professor</i>		Mr. Nikhil S. Dhavase <i>Assistant Professor</i>	
Mr. Jitendra R. Chavan <i>Assistant Professor</i>		Ms. Punam V. Chavan <i>Assistant Professor</i>	
Mrs. Sneha Vanjari <i>Assistant Professor</i>		Ms. Rohini Rankhamb <i>Assistant Professor</i>	

Ms. Priti Warungase <i>Assistant Professor</i>		Ms. Rohini Tambe <i>Assistant Professor</i>	
Mrs. Asharani Chadchankar <i>Assistant Professor</i>		Mrs. Sayali Joshi <i>Assistant Professor</i>	

- List of Visiting/Adjunct/Professor of Practice:**

Name of the Staff & Designation	
Mr. Dipak Pawar <i>Adjunct Faculty</i> <i>ME E&TC, Data Scientist at Collabera Digital</i>	

- **List of Non-Teaching Staff Members :**

Name of the Staff & Designation		Name of the Staff & Designation	
Mrs. Smita Kari <i>Lab Assistant</i>		Mr. Dinkar R. Patil <i>Technical Assistant</i>	

In_Tegenious



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“Innovation is about being open to trying new things and learning from failures ”



**Vinod Dham
Padmabhushan Awardee**

“Father of the Pentium Chip”