

# INDIRA COLLEGE OF ENGINEERING AND MANAGEMENT

AN AUTONOMUS INSTITUTE
AFFILIATED TO SPPU (2024-25)

# INGENIUM



# DEPARTMENT OF # BASIC ENGINEERING SCIENCE

(FIRST AUTONOMOUS BATCH)
2024-25

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## **ABOUT US**



Indira College of Engineering and Management, established in 2007, is a venture of SCES. The institute is approved by the All-India Council for Technical Education (AICTE), New Delhi, and the Government of Maharashtra, and is affiliated with the University of Pune.

The post-globalization era in India has resulted in rapid development activities, shaping a strong economic landscape. Infrastructure developments are meeting industrial needs and making India a promising destination. This has created a demand for professionals with expertise in multiple disciplines to spearhead growth. Engineering is an instrumental branch that will define the future course of these ambitious development plans.

At Indira College of Engineering and Management, we are committed to nurturing the required expertise under one roof by creating competent and motivated technocrats and managers of tomorrow, who will use their technical knowledge and managerial skills to confidently and successfully lead organizations.

The campus is state-of-the-art, located in the serene and picturesque setting of Maval Taluka, just a few minutes' walk from the Mumbai-Pune Expressway. The growth of ICEM over the past four years has been exemplary and reflects our unwavering commitment to excellence. This success is the result of teamwork by our dedicated and committed staff, under the stewardship of the management.

Our students, who come from diverse strata of society, have adapted well to our philosophy, namely the Indira culture.

#### Chairperson's Message

"Education is not just about learning facts, but about building a life of meaning, courage, and contribution."

As the new academic year begins and another chapter unfolds at Indira

College of Engineering and

Management, I take immense pride in welcoming our vibrant and ambitious batch of first-year engineering students. The 18th Induction

Programme stands as a symbol of new beginnings a doorway to discovery, growth, and transformation.

At Indira, we have always believed in nurturing not just scholars, but future leaders, innovators, and changemakers. Our role is not limited to equipping you with technical knowledge, but to also empower you with the values, vision, and versatility that today's world demands.



In this fast-changing global landscape, the qualities that will define your journey are **adaptability, critical thinking, resilience, and above all, purpose**. I urge each of you to remain curious, stay grounded in integrity, and never stop exploring the possibilities that lie ahead.

You are entering an institution that stands for **excellence**, **inclusivity**, **and innovation**. Make the most of every opportunity whether it's inside the classroom, through projects, leadership roles, or entrepreneurial ventures. Step forward with confidence, for you are now part of the Indira family a community that believes in the power of dreams and the promise of potential.

As you embark on this exciting journey, remember: **Success is not only measured by what you achieve, but also by how you grow, how you lead, and how you give back**.

Wishing you a journey filled with knowledge, courage, and purpose.

Warm regards,

#### Dr. Tarita Shankar

#### Chairperson, Indira Group of Institutes

#### **Academic Advisor's Message**

"The best engineers don't just build machines they build mindsets, solutions, and the future."

It gives me immense pleasure to extend my heartfelt greetings to all the first-year students embarking on their academic journey at Indira College of Engineering and Management.

Being part of the 18th Induction
Programme was a truly enriching
experience. It allowed me the opportunity
to interact with the fresh batch of future
engineers and share a few thoughts that I
believe are essential for not only surviving
but thriving in today's fast-changing world.



In this dynamic age driven by innovation,

the role of an engineer is far beyond the confines of textbooks and laboratories. To make a meaningful impact, one must blend technical excellence with qualities such as discipline, adaptability, curiosity, and leadership. Academic scores are important but so is your ability to solve problems creatively, communicate effectively, and work collaboratively in diverse teams.

As I mentioned during the session, a growth mindset is your greatest asset. Keep learning, keep evolving. Don't be afraid of failure it often serves as the foundation of the greatest innovations. Stay open to change, seek new perspectives, and develop the courage to explore paths others might hesitate to take.

At Indira, you are entering a community that believes in nurturing not just engineers, but future-ready professionals and responsible global citizens. Use this time to experiment, engage, and explore. Let your learning be purposeful, your ambition be bold, and your values be strong.

I have full faith in your potential and look forward to seeing you grow into individuals who lead with intellect and integrity.

Wishing you success, growth, and great discoveries ahead.

Prof. Chetan Wakalkar

Academic Advisor, Indira Group of Institutes

#### Principal's Message

It is with great joy and enthusiasm that I welcome you to ICEM, where your journey toward becoming an engineer begins. This is more than just an academic pursuit it is an opportunity to shape the future. As you walk through these doors, you are entering a world of endless possibilities, where your ideas, curiosity, and dedication will define your path.

Engineering is not just about learning theory it is about using that knowledge to solve real-world problems and bring innovation to life. While academic excellence is important, it is equally essential to develop practical skills, embrace creativity, and focus on continuous learning.



Throughout your time here, you will encounter challenges, but it is through these challenges that you will grow. You will learn the value of discipline and collaboration, and how these qualities, combined with your passion for problem-solving, will enable you to succeed in your career.

As you begin this exciting journey, remember that learning extends beyond the classroom. Engage in research, internships, and industry collaborations, and make the most of every opportunity to apply your knowledge in real-world settings. This holistic approach will not only enrich your academic experience but also prepare you to become an engineer who leads with both expertise and innovation. I encourage you to approach every opportunity with curiosity, determination, and a commitment to excellence. The road ahead will be demanding, but with your hard work and the support of our faculty, you are poised to achieve great things.

Once again, welcome to ICEM. Let's embark on this exciting journey together and pave the way for a brighter tomorrow.

Dr. Nilesh Uke Principal, Indira College of Engineering & Management

#### **HOD's Message**

"Engineering is not just about building the future it's about imagining it, creating it, and shaping it for the betterment of all."

As the academic year begins, students at ICEM are embarking on a journey that will lay the groundwork for their futures as innovators and problem-solvers. The foundation of their learning starts with core engineering principles and sciences subjects that not only shape their technical expertise but also cultivate critical thinking, creativity, and resilience.

In today's rapidly evolving world, engineering goes beyond traditional boundaries. It requires an interdisciplinary approach that allows students to connect ideas from various fields and apply them in



practical, impactful ways. At ICEM, we foster an environment where students are encouraged to explore, experiment, and collaborate to bring fresh perspectives to the challenges they'll encounter.

The path ahead will be filled with opportunities to grow, innovate, and make a meaningful difference. With a strong academic foundation, a focus on real-world applications, and the support of dedicated faculty, ICEM students are equipped to lead the way in shaping the future of engineering.

As students immerse themselves in their studies, they are not just gaining knowledge; they are learning how to apply that knowledge in ways that will transform industries, improve lives, and shape the future. At ICEM, we are committed to nurturing the next generation of engineers who will drive progress through innovation, teamwork, and a commitment to excellence.

This year promises to be one of growth, discovery, and excellence paving the way for the engineers of tomorrow to make their mark on the world.

#### Dr. Poorna Shankar

HOD-First Year Engineering, Indira College of Engineering & Management

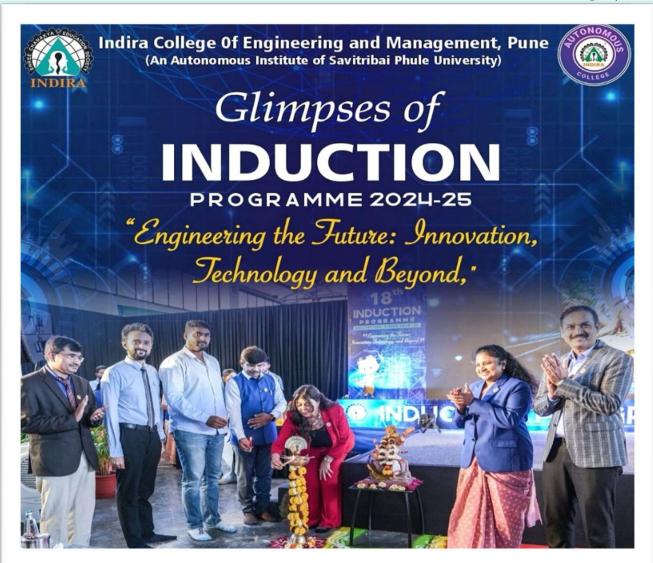


#### 🗬 Orientation 2024-25: A New Beginning 💡



18/09/2024, The first day at Indira College of Engineering and Management (ICEM) marked a beautiful beginning for the First Year Engineering (F.E.) students. Filled with a mix of excitement, curiosity, and a few nervous smiles, the campus buzzed with fresh energy. From exploring classrooms to connecting with peers and attending their very first sessions, every moment was a step into a new and promising journey. Warm guidance from faculty and the welcoming campus environment made students feel at ease, setting the tone for a fulfilling and inspiring academic life ahead.





#### "Engineering the Future: Innovation, Technology, and Beyond."

On 20/09/2024, The Induction Programme 2024-25 at Indira College of Engineering and Management, Pune, marked the beginning of an exciting journey for first-year engineering students. The event, designed to welcome and orient the freshers, was a grand celebration filled with motivation, inspiration, and knowledge-sharing.

The programme commenced with the traditional lamp-lighting ceremony, symbolizing the pursuit of wisdom and enlightenment. The dignitaries, faculty members, and students gathered to witness this auspicious beginning, setting the stage for an engaging and insightful induction experience.

# "Unfolding the Path to a Bright Future!"















# "Where Ideas Take Shape, and Creativity Finds a Voice"! 🛟 🧎

On 15/11/2024, The Poster Competition at Indira College of Engineering and Management was a vibrant showcase of imagination and intellect. From thought-provoking themes to stunning visuals, students expressed their innovative ideas with artistic brilliance. The event began with a grand inauguration, symbolizing the spirit of learning and collaboration. Each poster reflected a unique perspective, blending creativity with technical insight. This competition not only celebrated artistic expression but also encouraged students to think critically and present their ideas visually. A true testament to the power of innovation and teamwork!









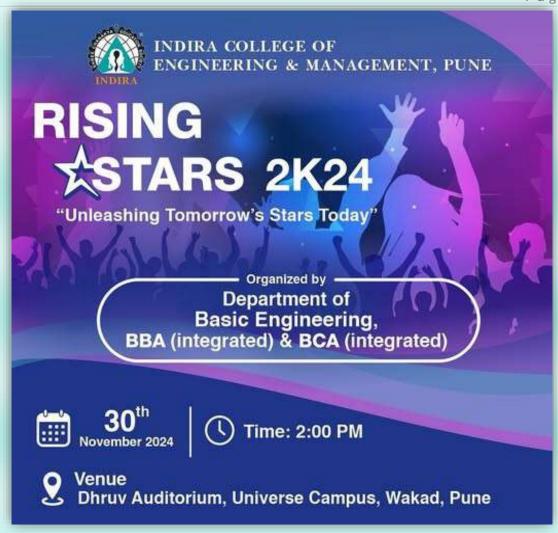
#### Observing, Guiding, Inspiring

Walking through the vibrant displays, teachers engaged students in thought-provoking discussions, turning each presentation into a powerful learning experience. 

Their support made every idea shine brighter!









The energy was electrifying, the stage was dazzling, and the atmosphere was charged with excitement as **Indira College of Engineering & Management** hosted **Rising Stars 2K24** a grand celebration of talent, creativity, and passion!

From breathtaking dance performances % to soul-stirring musical acts % from awe-inspiring theatrical dramas % to mesmerizing art displays % , every corner of the auditorium radiated brilliance! %  $\lozenge$  The event was a perfect platform for students to showcase their unique skills and artistic flair, making it an unforgettable experience on 30/11/2024!!!

# "One Stage, Countless Dreams, Infinite Brilliance!" \( \backslash \backslash \backslash \backslash





# "Talent Ignites, Passion Shines, Legends Rise! "









## **GUEST LECTURE** ::



## Session on

# **BECOMING A MODEL STUDENT & NUTRITIONAL AWARENESS**

On 06/02/2025. A motivational lecture was conducted at *Indira College of Engineering* and Management on the theme "Becoming a **Model Student and Nutritional Awareness."** 

The session aimed to inspire students to adopt a balanced lifestyle by excelling academically while also prioritizing their physical and mental well-being. Key topics included time management, discipline, goal setting, and the importance of a nutritious diet in maintaining focus and energy. The speaker highlighted how proper nutrition enhances concentration, reduces stress, and boosts overall performance.



The session also touched upon daily habits, mindfulness, and the role of self-discipline in shaping a successful student. Students left feeling empowered, motivated, and better equipped to lead a healthier, more focused academic life. The lecture ended on a high note, reminding everyone that success isn't just about grade it's about growing into responsible, confident, and healthy individuals ready to face the future with purpose.





## 🖳 Value-Added Program 💂 📝





A 30-hour training program was conducted to enhance students' technical proficiency in MS Excel 🚺 , PowerPoint 📸 , and Word 🖹 . The sessions were interactive and hands-on, helping students build essential skills for academic and professional success. This initiative empowered participants with tools to present, analyze, and document their work effectively & successfully concluded on 07/02/2025. 💋 🌀















# **AVISHKAR: SPORTS**



On 14/02/25 & 15/02/25, The much-awaited Sports Event - Avishkar was held with great enthusiasm at Indira College of Engineering and Management. The event brought together students from various departments to showcase their skills, strength, and team spirit across a wide range of sports including 🚷 football, 🏀 basketball, 👂 badminton, 🏑 cricket, and more. The atmosphere was electric, filled with cheers, friendly competition, and high energy. Avishkar not only promoted physical fitness but also fostered unity, discipline, and sportsmanship among participants. 🧣 💧 🍪



# TECH FEST 🙉



#### INDIRA COLLEGE OF ENGINEERING AND MANAGEMENT

DEPARTMENT OF BASIC ENGINEERING AND SCIENCE



AZIONARE

2K25

PRESENTS

# TECH QUIZ AND ESPORTS

We are excited to invite you to our upcoming Events

17.02.2025

Prof.Trupti Kathale
FESA Coordination

Dr. Poorna Shankar
HOD
Deaprtment of Basic
Engineering and
Science

Dr. Nilesh Uke
Principal
ICEM

See you there!





# 🔸 💡 TECH QUIZ 2025 📲 🙉







ESPOTRS 2025









#### Note: The second of the second





A group of enthusiastic students from Indira College of Engineering and Management participated in a prestigious tech event held at a reputed institute. They engaged in various competitions like coding, robotics, and idea pitching, showcasing their technical skills and innovative thinking. The experience proved to be both enriching and inspiring, boosting their confidence and exposure to the tech world.



#### Elite NPTEL ONLINE CERTIFICATION (Funded by the MoE, Govt. of India)

Skill India

PIMPRI CHINCHWAD EDUCATION TRUST'S Pimpri Chinchwad College of Engineering and Research, Ravet Department of Electronics and Telecommunication



This certificate is awarded to NAWALE GAURAV RAJU

CERTIFICATE

for successfully completing the course Python for Data Science

with a consolidated score of 70

Online Assignments 18.33/25 Proctored Exam 51.82/75 Total number of candidates certified in this course: 15251

from Indira College Of Engineering and Management has successfully participated in Utkarsh 2K25, a National Level Project Competition under the domain of Software(AI/ML/VLSI) organized by EaTC Department PCCOEaR on 26th March 2025 We appreciate the dedication and efforts shown by the participant



Jan-Feb 2025 (4 week course)











Indian Institute of Technology Madras









Pimpri Chinchwad College of Engineering and Research, Ravet Department of Electronics and Telecommunication



Department of Electronics and Telecommunication CERTIFICATE

has successfully participated in Utkarsh 2K25, a National Level Project

Department PCCOE&R on 26th March 2025.

We appreciate the dedication and efforts shown by the participant

PIMPRI CHINCHWAD EDUCATION TRUST'S Pimpri Chinchwad College of Engineering and Research, Ravet





#### CERTIFICATE

This is to certify Mahek Bhupendra Chandak from Indira College Of Engineering and Management

Competition under the domain of Software(AI/ML/VLSI), organized by E&TC

from Indira College Of Engineering and Managemen This is to certify has successfully participated in Utkarsh 2K25, a National Level Project Competition under the domain of Software(AI/ML/VLSI), organized by ESTC Department PCCOESR on 26th March 2025 We appreciate the dedication and efforts shown by the participant















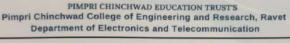












# CERTIFICATE

OF PARTICIPATION

is to certify Ashish Parag Dange from Indira College Of Engineering and Management has successfully participated in Utkarsh 2K25, a National Level Project Competition under the domain of Software(AI/ML/VLSI), organized by EBTC Department PCCOEBR on 26th March 2025.
We appreciate the dedication and efforts shown by the participant.



PIMPRI CHINCHWAD EDUCATION TRUSTS Pimpri Chinchwad College of Engineering and Research, Ravet Department of Electronics and Telecommunication



CERTIFICATE

is to certify Atharva Anant Kolle from Indica College Of Engineering and Managhas successfully participated in Utkarsh 2K25, a National Level Project from Indira College Of Engineering and Management Competition under the domain of Software(AI/ML/VLSI), organized by EBTC Department PCCOE&R on 26th March 2025 We appreciate the dedication and efforts shown by the participant





















## Session on

## SIGNIFICANCE OF RESEARCH

On 28/02/2025 Dr. Nilesh Uke, Principal of Indira College of Engineering and Management, conducted an insightful session on Research Paper Writing and Publication for students and faculty. He emphasized the importance of academic research in technical education and guided participants on key aspects such as identifying research problems, structuring papers, referencing, and selecting the right journals. The session aimed to cultivate a strong research culture among students, encouraging them to think critically, contribute to innovation, and aim for national and international publications.





## **INNOVATION MEETS CRAFTSMANSHIP**



# IICMR & DEBATE COMPETITION











# PARENT-TEACHER MEETING (PTM)

On 22/03/2025, A Parent-Teacher Meeting (PTM) was successfully conducted at Indira College of Engineering and Management in both online and offline modes, ensuring maximum participation and convenience for parents. The meeting focused on academic progress, attendance, and student development, creating a strong platform for collaboration between parents and faculty. The hybrid format allowed flexibility while maintaining the essence of personal interaction and constructive feedback.





#### PROJECT-BASED LEARNING 🛠



On 04/04/2025, A Project-Based Learning (PBL) session was successfully conducted at Indira College of Engineering and Management  $\stackrel{\leftarrow}{m}$ , providing students with hands-on experience 🤾 in applying theoretical concepts 💄 to real-world challenges 💿 . Through collaborative projects 🤝 , students enhanced their problem-solving 🧠 , teamwork 👥 , and innovation 💡 skills, making learning both practical 🧰 and engaging 🧎 .





## INTERNATIONAL CONFERENCE ON NEXTGEN TECHNOLOGY AND AI FOR A SUSTAINABLE FUTURE (NTAI2025)

On 12/04/2025 & 13/04/2025, Ms. Sai Deshmukh, Ms. Shreya Sawant & Mr. Ashwin Dharme Sir & Another Team of Ms. Madhura Raut, Mr. Johnsen Abraham, Mr. Deep Biswas, Mr. Jensen Abraham, Ms. Vaishnavi, Ms. Pratiksha Lokhande from Indira College of Engineering and Management, proudly represented the institute by presenting their research paper at the prestigious International Conference on NextGen Technology and AI for a Sustainable Future (NTAI2025). Promote sustainability, gaining recognition of artificial intelligence to promote sustainability, gaining recognition from peers and experts in the field. Their participation showcased the academic excellence and research potential nurtured at ICEM, inspiring fellow students to pursue impactful research.



## NATIONAL CONFERENCE ON TECHNOLOGICAL ADVANCEMENTS IN ACADEMIA AND INDUSTRY 4.0

On 12/04/2025 & 13/04/2025, At the National Conference on Technological Advancements in Academia and Industry 4.0, Gaurav Raju Nawale, a student of ICEM , presented an insightful paper titled "The Future – Brain Computer Interface with Artificial Intelligence" . In his presentation, Gaurav explored the powerful convergence of neuroscience and artificial intelligence , showcasing how Brain-Computer Interfaces (BCIs) can reshape the future of communication , healthcare , and human augmentation . He highlighted how AI enhances BCI systems through adaptive learning , real-time data processing , and intelligent decision-making , offering a visionary perspective on human-machine integration .



The Future – Brain Computer Interface with artificial Intelligence (Short Review)

Gaurav Raju Nawale#1

Computer Engineering Department,
Indira College of Engineering and Management, Pune
Savitribai Phule Pune University
Chha. Sambhajinagar, Maharashtra- India
gaurav.nawale@indiraiccm.ac.in
nawalegaurav26@gmail.com

#### A Self-Defence Talk by Mahek Chandak



"Strong is not just how you look — it's how you protect, act, and lead."

On 16/04/25, Mahek Bhupendra Chandak, a dynamic student from First Year Engineering of *Indira College of Engineering and Management*, delivered an inspiring guest lecture on Self-Defence at Indira Global School of Business today. Her session focused on the importance of selfawareness, basic defence techniques, and mental preparedness in handling real-life situations. With engaging demonstrations and confident delivery, Mahek empowered the audience especially young women to stay alert, strong, and fearless. Her initiative was highly appreciated by faculty and students alike, reflecting her leadership skills and commitment to social responsibility at such an early stage in her academic journey.





#### Trailblazers of Innovation 6



On 09/05/25, Out of three dynamic teams from ICEM, Team Moodify - Your Face, Your Playlist stole the show at the AISSMS Project Exhibition! Competing against 147 projects, they scored an impressive 47/50 in the first round and advanced to the Top 12 finalists.

Their unique idea—creating playlists based on facial emotions—won hearts and high praise from the judges. 🦞 🎜

Kudos to the brilliant team:

Omkar Kadam, Siddhi Jagtap, Rucha Sonar, Omkar Gangwani, Shambhuraj Pawar

Your creativity and hard work made ICEM proud! 🚀 🞉





#### **EXTRACIRRICULAR ACTIVITIES ACHIEVEMENTS**

On 14/05/25, Gaurav Nawale Raju from ICEM for earning a special certification from the ICEM Library for recording the maximum study hours and maintaining regular attendance throughout the semester.

(b) III His commitment to consistent learning and academic discipline is truly commendable. 🧩 Such dedication not only reflects personal excellence but also inspires fellow students to make the







# DIVISION PHOTOGRAPHS 🚀



### "A" DIVISION 🚀





# "B" DIVISION 🚀





## "C" DIVISION 🚀



### "D" DIVISION 🚀



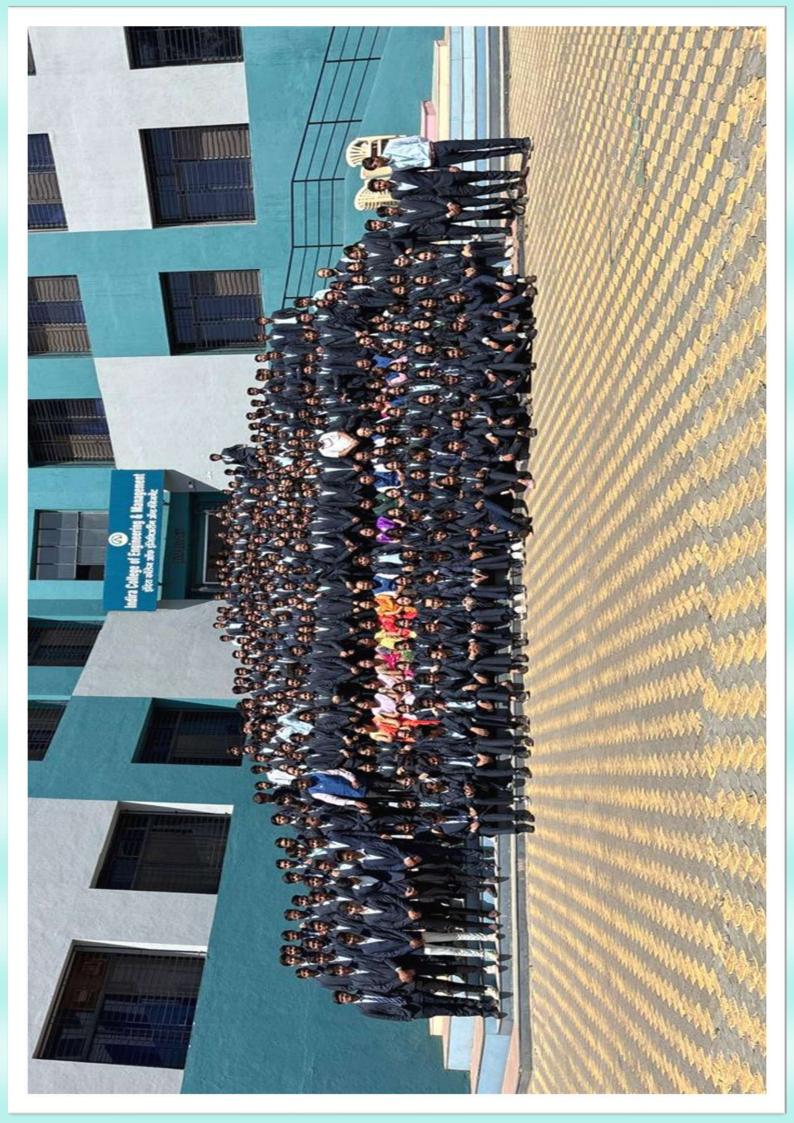
### "E" DIVISION 🚀



# "F" DIVISION 🚀









### 🧡 FIRST SEMESTER 💄





# TOPPERS \*





**ZAYED ABDUL SAYYED** 

**SGPA: 9.7** 



**ANKITA HIRMUKHE** 

**SGPA: 9.65** 



PRATIKSHA LOKHANDE

**SGPA: 9.6** 



**PRATIK SHARAD KONDE** 

**SGPA: 9.55** 



**NEHA KUDALE** 

**SGPA: 9.55** 

### **OUR PATH FINDERS**





Prof. Manjusha Tomar



Gaikwad



Dr. Avinash Bansode



Prof. Supriya Kumbhar



Mr. Ashwin Dharme



Mr. Gore Atul Kundlik



Prof. Mandakini Sanjay Dahiwade





Dr. Dinkar Kisan Choudhari



**Kharbade** 





**Prof. Trupti Kathale** 



Prof. Raghunandan Kale



Prof. Swapnil Chaudhari

#### **FACULTY FROM OTHER DEPARTMENT**





















Suryawanshi



Savitri Pawar

#### **SUPPORTING STAFF**







#### **FESA COMMITTEE**

**Prof. Trupti Kathale – FESA Coordinator** 

Prof. Raghunandan Kale – FESA Sub-Coordinator

**Prateek Mandal - President** 

Samarthya Patil - President

Vallabh Lavate - Vice President

Yuvraj Pawar – Treasurer

**Bhumika Harate - Secretary** 

Pawan Rawat - Secretary

**Humairah Kadekar – Ladies Representative** 



#### **INGENIUM COMMITTEE**

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Vaishnavi Ghodke - Designer

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**Shubham Shinde-Reviewer, Commentator** 













#### INDIRA COLLEGE OF ENGINEERING AND MANAGEMENT

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