

ACTIVITY REPORT 2023-2024





CONTENTS

Title	Page No.
Excom 2023-24	2
1. Introduction	6
1.1 Vision	6
1.2 Mission	6
1.3 Objectives	6
1.4 Our Goals	6
2. List of new Patents and Startups incubated	6
2.1 New Startups in Preincubation 2.1.1 BIO RAIN 2.1.2 RECIRCULATE 2.1.3 LET'S TRIVIA 2.1.4 BIT BUILDERS 2.1.5 ZCRIPT 2.1.6 REXA 2.1.7 THE CCPEEPS 2.1.8 1-KANTROL	8 8 9 9 10 10 10 11
3. Activities in 2022-2023	13
3.01 SEAL THE DEAL	13
3.02 WORKSHOP INTRODUCTION TO DATA SCIENCE	14
3.03 SMART INDIA HACKATHON	15
3.04 PROBLEM SOLVING AND IDEATION	16
3.04.1 MASTERING PYTHON WORKSHOP	16
3.04.2 ARDUINO ADVENTURE	17
3.05 INSPIRE-A-THON	18
3.06 STARTUP SURGE	19
3.07 WEBINAR ON BUSINESS INTELLIGENCE	20
3.08 YIC	20
3.09 CREATORS CARNIVAL	21
3.10 ALL YOU NEED TO KNOW ABOUT HACKATHON	22
3.11 JEOPARDY JAM	23
3.12 HACK4TKM	24

3.13 YIP ORIENTATION	26
3.14 Idealab visit	26
3.14.1 Idealab visit from TKM IT students	
3.14.2 Idealab visit from RIT Kottayam students	
4. Achievements	27
5. Conclusion	27
6. Contact Us	28

The IEDC at TKM College of Engineering witnessed remarkable involvement of girls in its activities during the academic year 2023-2024. Girls took on significant roles, showcasing their skills and leadership in various capacities, reflecting the inclusive and diverse environment fostered by the cell.

The CEO of IEDC for the term was a girl, exemplifying strong leadership and significantly contributing to the organization's success. A substantial percentage of participants in workshops, hackathons, and other events organized by IEDC were girls, underlining their growing interest and enthusiasm in innovation and entrepreneurship.

Female students were not only active participants but also pivotal organizers of events, playing crucial roles in planning and execution. Notably, one of the coordinators of HACK4TKM, a national-level hackathon conducted by IEDC TKMCE, was a girl.

The notable involvement of girls in IEDC's initiatives reflects the cell's commitment to promoting equal opportunities and fostering a collaborative environment where everyone can thrive.

EXCOM 2023-2024

Dr.Sadiq A	Nodal Officer
Prof. Shafi M N	Assistant Nodal Officer

Jayalekshmi K S	CEO
Gokul R	COO
Sudev	COO
Philip Eldho Varghese	CIO
Gouthem R	СТО
Sooryajali R	СМО
Chaitanya Sudheer	CCO
Ajnas	CSO
Muhammed Faizal N	CFO
Nanda Kumar	Operation Head
Tony Augustine Frank	Operation Head
Almira Khan	IIC Student President
Mubaris K T	Maker Space head
Jeena J R	IR Cell Head

Prakeerth J Madhu	IR Cell Head
Rohith S	E Cell Head
Malavika A	E Cell Head
Sahal M	SIG Head
Devi Chandana S	SIG Head
V .Mahalekshmi	Finance Head
S Suraj	Finance Head
Ashiq Fazal	Design Head
Abhiram P R	Design Head
Devika P Girijan	E Cell Women Head
Joan Hanna James	E Cell Legal Advisor
Muhammed Mizaj	Webmaster
Akhila C	E Cell Alumni Coordinator
Bhadra J R	Documentation Head

Rahul Kumar B S	Documentation Head

1.INTRODUCTION

1.1 VISION

The Innovation and Entrepreneurship Development Cell aims to help students develop a spirit of Innovation and Entrepreneurship and to undertake major initiatives to assist the promotion of the same in the region by providing them the facilities to create the products and the services that will take us together towards a brighter future.

1.2 MISSION

To develop an ecosystem with required infrastructure that can enable students and faculty to innovate and prototype their potential ideas with industrial standards and support from Government, industry and reputed academic institutions around the world and help them to realise their potential.

1.3 OBJECTIVES

- 1. To design and develop innovative products of social relevance.
- 2. To create entrepreneurial culture among faculty members, students and Alumni.

- 3. Support other institutions around TKM to effectively carry out entrepreneurial activities on their campus.
- 4. Focus more on innovation driven entrepreneurship from student projects.
- 5. Encourage more women entrepreneurs.
- 6. To promote start-up initiatives from Faculty and Students.
- 7. Encourage students to complete their engineering studies with all entrepreneurial skill sets that are required for becoming successful personalities in their life.

1.4 OUR GOALS

- 1. Restructure the IEDC website.
- 2. To turn the IEDC Studio to a work hub that stimulates productivity and creativity.
- 3. To help student groups to prototype their ideas.
- 4. Conduct quality events for the students.
- 5. To improve innovation, creative and design thinking among the student community.
- 6. Organise FDP, SDP, seminars and workshops, distinguish talks for students, Faculty and Alumni and promote entrepreneurial culture.
- 7. Strengthen Institute-Industry interaction cell activity and effectively use the outcomes for achieving the mission.
- 8. Help at least 10 student groups to begin a startup within a college incubation facility.
- 9. Improve quality of research work among students and to attain patents which can be commercially used in production.
- 10. Provide a platform for students to develop innovative products with global recognition and generate business opportunities.
- 11. Generate revenues through consultancy work and student start-ups.

2. STARTUP PREINCUBATION

2.1 NEW STARTUPS IN PREINCUBATION

In 2023, we registered approximately nine startups under the IEDC (Innovation and Entrepreneurship Development Centre).

2.1.1 BIO RAIN

BioRain addresses the need for sustainable and affordable rainwear solutions. By manufacturing raincoats made from bioplastics, BioRain offers an eco-friendly alternative to traditional rainwear materials. Its easy-to-carry and single-use design makes it ideal for individuals on the go, while its affordability ensures accessibility to a wide range of consumers.

Founder: Muhammed Sufian, Ayush, Jayaraj



2.1.2 RECIRCULATE

Recirculate aims to address the challenges students face in acquiring educational materials affordably. By providing a platform for buying and selling both new and used books, as well as other educational items, RECIRCULATE creates a sustainable marketplace within the college community. It not only helps students save money but also promotes the reuse of educational resources, contributing to environmental sustainability.

Founder: Jayalekshmi

Website: https://recirculate.co.in/

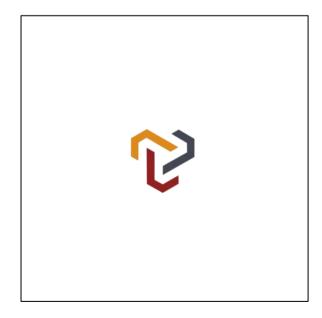


2.1.3 LET'S TRIVIA

Trivia is an innovative startup that specialises in providing a comprehensive suite of services to empower individuals with the skills and knowledge needed to succeed in the competitive job market. With a primary focus on placement training, marketing, and skill development courses, Trivia is committed to bridging the gap between education and employability.

Founder: Abhijith Hari, Aswin A

Website: https://triviaofficial.000webhostapp.com/



2.1.4 BITBUILDERS

BIT BUILDERS fills a crucial niche by providing hardware solutions and project assistance to students undertaking electronics projects. Whether it's designing custom electronics products or providing guidance on PCB module development, BIT BUILDERS offers invaluable support to students pursuing hands-on learning experiences. By fostering innovation and creativity, BIT BUILDERS empowers students to bring their ideas to life

Founder: Gouthem R, Gokul R



2.1.5 ZCRIBT

Skill development and educational support to engineering students through an educational platform Founder: Mubaris K T



2.1.6 REXA

REXA serves as a convenient platform for individuals and businesses to list and discover various services and products. From freelance services to unique handmade products, REXA connects buyers and sellers, facilitating transactions and fostering a vibrant marketplace community. With its user-friendly interface and diverse range of offerings, REXA simplifies the process of buying and selling online



2.1.7 TheCCpeeps

The CC peeps brings together a community of creative professionals with a shared passion for design. By providing a platform for collaboration and networking, The CC peeps fosters creativity and innovation in various design fields. Whether it's graphic design, web design, or product design,

The CC peeps offers opportunities for designers to showcase their work, exchange ideas, and collaborate on projects

Founders: Ijab M Rahman , Abhijith N.



2.1.8 1-KANTROL

1-KANTROL is dedicated to revolutionizing gate and door control systems using advanced technology. By offering automated solutions that enhance security, convenience, and efficiency, 1-KANTROL aims to set new standards in gate management. Whether it's residential, commercial, or industrial applications, 1-KANTROL provides innovative solutions that prioritize safety and reliability

Founder: Asif Saif S



3. ACTIVITIES IN 2023-2024

3.01 Seal the Deal

August 23, 2023

In celebration of World Entrepreneurs' Day, IEDC TKMCE hosted the spirited "Seal the Deal" competition. TKMCE students formed teams of up to three members to showcase their sales and innovation skills by crafting captivating pitches for mystery products within a limited time frame. The event took place on August 23, 2023, in the IEDC Room, drawing 22 enthusiastic participants who formed seven competitive teams.

Under the coordination of Devika and Faizal, the competition reached an exciting conclusion as Royce Mathew emerged as the champion, securing the coveted cash prize. "Seal the Deal" embodied the essence of World Entrepreneurs' Day, celebrating innovation, teamwork, and the persuasive power of communication. It left participants inspired to continue their entrepreneurial journey and create a positive impact.



3.02 Workshop Introduction to Data Science

August 24, 2024

On August 24, 2024, IEDC and IIC TKMCE, in collaboration with GTech Computer Education, hosted a workshop on Introduction to Data Science at the PTA Hall. Led by experts Muhammed Haris and Swathi Mol, the session attracted around 30 enthusiastic students eager to explore the fundamentals of data analysis and interpretation. Through interactive sessions and practical demonstrations, participants delved into topics such as data collection, cleaning, analysis techniques, and visualisation. This collaborative effort aimed to equip students with foundational knowledge in data science, fostering their interest and potential for future pursuits in this dynamic field.

Coordinated by Nandha Kumar and Sahad, the event exemplified the commitment of various organisations to provide valuable learning experiences for students. The workshop not only empowered participants with essential data science skills but also showcased the potential for future collaboration and innovation in the realm of technology. We extend our gratitude to all attendees and organisers for their contribution to making the Introduction to Data Science workshop a success



3.03 SMART HACK INTERNAL HACKATHON - (Smart India Hackathon)

27 September 2023

An Internal Hackathon, organized by IIC and IEDC TKMCE on September 27, 2023, as part of the Smart India Hackathon (SIH) initiative, aimed to address challenges in education accessibility and environmental sustainability. The 4-hour event fostered critical thinking and collaborative problem-solving among student teams, preparing them for the national SIH competition. With 14 innovative teams participating, including a notable representation of women, the hackathon showcased visionary

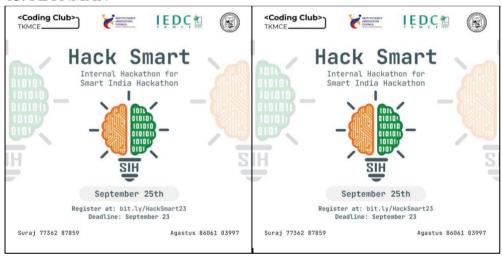
ideas spanning themes such as Smart Communication, Healthcare & Biomedical devices, and Agriculture & Rural Development. Nominated teams displayed remarkable ingenuity in tackling real-world issues.

A panel of esteemed judges, including faculty members and entrepreneurial experts, evaluated the solutions based on criteria such as originality, presentation effectiveness, creativity, technical feasibility, and societal impact. The event not only highlighted the college's commitment to fostering innovation but also emphasized the significance of collaborative efforts in addressing contemporary challenges. Through initiatives like these, the institution aims to empower the next generation of technocrats and contribute to the broader vision of promoting innovation and sustainability in India.

Nominated teams:

- 1. OCTUSE
- 2. CODE ROOKIES
- 3. RESPONDER
- 4. GOOGLY
- 5. BUG BUSTERS
- 6. LIGHTELLIGENT
- 7. SOFI
- 8. TECHNOCRATS
- 9. RADIATE 1
- 10. SURVIVORS
- 11. SOCHTECH
- 12. INNOVENTURES

13. FEYNMAN





3.04 Problem Solving and Ideation Workshop

Date: 6-8 October 2023

A Python workshop and Arduino Adventure workshop were conducted under problem solving and ideation by IEDC TKMCE, providing participants practical skills for creative technological solutions.

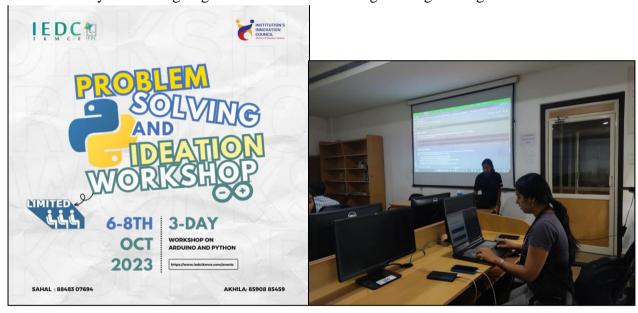
3.04.1 Mastering Python Workshop

Mastering Python: A Python Workshop The Mastering Python: A Python Workshop hosted by IIC TKMCE and IEDC TKMCE held from October 6th to 8th, 2023, was an enriching experience for participants. This event was attended by 17 participants and it catered to both novices and seasoned coders, offering them a chance to delve into Python's vast capabilities. Attendees had the opportunity to engage in interactive coding sessions and work on hands-on projects, making it a comprehensive learning experience. The workshop was not only informative but also highly rewarding, with participants gaining valuable insights into Python's versatility and endless possibilities. Attendees found the sessions engaging, and the expert presenters imparted valuable insights, leaving participants with a deeper understanding of Python and the ability to harness its potential effectively. Under the coordination of Akhila and Sahal, this workshop was a rewarding and useful experience for all the participants, promising to be a valuable asset in their coding journey.

3.04.2 Arduino Adventure Workshop

The Arduino Adventure workshop at TKM College of Engineering, organized by the Innovation and Entrepreneurship Development Cell (IEDC) in collaboration with the Institute's Innovation Council (IIC), unfolded from October 6th to October 8th, 2023. This transformative event, held in partnership with Idealab, attracted 45 students, showcasing IIC's central role in fostering innovation and dynamic learning experiences. With a focus on Arduino technology, the workshop, coordinated by Sahal and Athira, featured hands-on activities and expert sessions by Gokul and Goutham, solidifying IIC's position as a key catalyst for innovation at the college.

This collaborative effort with Idealab, facilitated by the IEDC and IIC, not only emphasized the commitment to practical knowledge and innovation but also set the stage for promising future initiatives. The success of the workshop showcased the combined strength of IEDC and IIC in creating a vibrant ecosystem of ongoing initiatives at TKM College of Engineering.

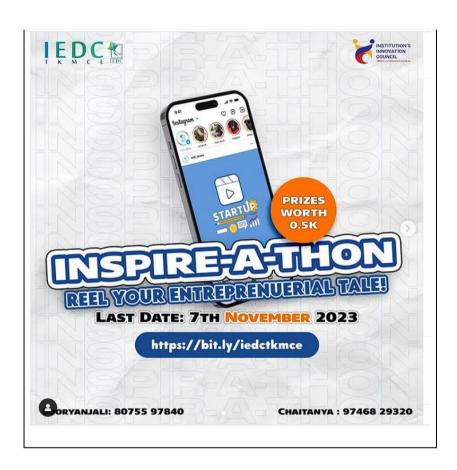


3.05 INSPIRE-A-THON: A Reel Challenge

November 7th, 2023

In celebration of National Entrepreneurship Day, IEDC TKMCE, in partnership with IIC TKMCE, curated the captivating 'Inspire-a-thon': a reel challenge, inviting filmmakers and storytellers to explore

the intersection of creativity and entrepreneurship. Hosted exclusively on Instagram, the event encouraged participants to unleash their creativity, craft inspiring narratives, and share their vision. Teams amplified the collaborative spirit, pooling diverse talents, with three enthusiastic participants taking up the challenge by the November 7th, 2023 deadline, competing for a prize pool of 0.5K. After a thorough evaluation, Ashwin Raj emerged as the winner, showcasing a remarkable ability to weave a compelling narrative resonating with the essence of entrepreneurship. The Inspire-a-thon not only provided a platform for artistic expression but also highlighted the power of storytelling in conveying entrepreneurial ideas, leaving participants inspired and emphasizing the integral role of creativity in the entrepreneurial journey.



3.06 STARTUP SURGE

20 November 2023

On November 20, 2023, IEDC TKMCE, in collaboration with IIC, organised the dynamic event "Startup Surge." This transformative gathering seamlessly fused innovative startup concepts with engaging talk sessions. The distinguished Muhammed Salmun, an alumnus of TKMCE and the keynote speaker, currently holds the position of co-founder in several pioneering startups.

The primary aim of this program was to inspire and provide guidance to budding startups, furnishing them with a valuable opportunity to connect, learn, and shape their entrepreneurial aspirations into tangible initiatives. The event unfolded within the premises of TKMCE and drew the active participation of 25 enthusiastic individuals, all poised to translate their entrepreneurial aspirations into actionable endeavours.

The engaging sessions commenced promptly at 4:30 PM and spanned a duration of one and a half hours, providing an immersive experience for all attendees. Several startups originating from TKMCE, namely BIO Rain, Rexa, Trivia, and Kantrol, took centre stage during the event, leveraging the SURGE platform to register their attendance and actively participate in the sessions.

3.07 Webinar on Business Intelligence

20 November 2023

On November 20, 2023, the IEDC collaborated with Lets' Trivia Startup to host an enlightening webinar on Business Intelligence (BI), drawing in around 15 participants to the online event. Led by Vyshak J, an experienced freelance Data and Business Intelligence Engineer, the session provided a comprehensive exploration of BI's significance in contemporary business landscapes. Participants actively engaged in discussions, gaining insights into fundamental data analytics concepts and practical BI tool applications for informed decision-making. Vyshak J's expertise and use of real-world examples enriched the session, leaving attendees eager for future events focusing on emerging BI trends and technologies. Overall, the webinar underscored the growing importance of data-driven insights in shaping strategic decisions, highlighting the value of initiatives like this in fostering awareness and proficiency in Business Intelligence among professionals and enthusiasts alike.

3.08 Glitch

Date: 8 th December

In collaboration with IEEE TKMCE, GLITCH, jointly organised by the Innovation and Entrepreneurship Development Center (IEDC) and the Innovation and Incubation Cell (IIC) of TKM College of Engineering (TKMCE), aimed to empower students with the tools and platform to innovate and implement. The Mini Product Competition highlighted exemplary projects from teams like "Smart X" and "Synergy Six," reflecting the collaborative spirit between IIC and IEDC. The involvement of IIC TKMCE added depth, offering diverse perspectives and mentorship. Through workshops and

networking opportunities, participants gained insights and connections, fostering a supportive ecosystem for budding entrepreneurs. In essence, GLITCH exemplified the collective commitment to fostering innovation and entrepreneurship, providing students with the means to make a tangible impact.





3.09 YIC

Date: 11th December 2024

The Young Idea Conclave (YIC) held its third edition at TKM College of Engineering in Kollam on December 11, with the event being hosted by the college's Innovation and Entrepreneurship Development Cell (IEDC). This all-Kerala event provided a pivotal platform for fostering innovation, collaboration, and entrepreneurship among students. The day commenced with an inspiring inauguration ceremony led by Mr. Anup P. Ambik, CEO of Kerala Startup Mission, and Mr. M. Noushad Ali, Founder of Exs, setting a motivating tone. Facilitated by Mr. Mukund Thakur, the Sub-Collector of Kollam, an engaging exchange of ideas began at 9:30 AM, offering students a valuable opportunity to interact, learn, and share innovative thoughts. The highlight of the event was the Idea Pitching Competition, which drew participants from various colleges across Kerala, with the top 20 teams selected by a panel of judges. Additionally, a stimulating panel discussion featuring experts from diverse fields enriched the learning experience, focusing on topics pertinent to innovation and entrepreneurship. The YIC concluded as a resounding success, significantly contributing to Kerala's entrepreneurial landscape, and stands as a testament to the collaborative efforts of IEDC at TKM College of Engineering in bringing such impactful events to fruition.



3.10 Creators Carnival

Date:11th December 2024

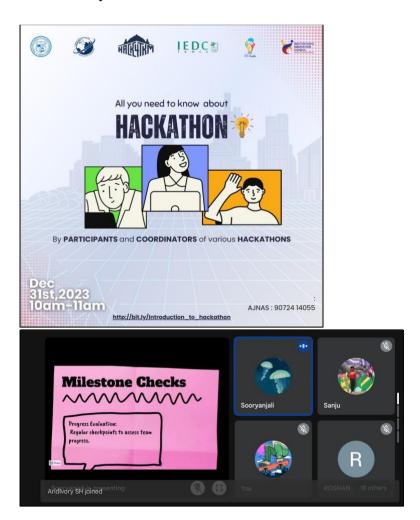
On December 11th, the Creator Carnival event, organised in collaboration with the Innovation and Entrepreneurship Development Cell (IEDC) and the Institute Innovation Council (IIC), aimed to inspire creativity and innovation among students. Approximately 15 projects spanning various domains were submitted, reflecting the diverse interests and skills of participants. The event included a miniproject exhibition where students showcased their projects to peers, faculty, and external guests, fostering collaboration and knowledge exchange. Through this event, students had the opportunity to explore their creativity, innovate, and engage in meaningful discussions, contributing to a culture of innovation and entrepreneurship within the academic community.



3.11 All you need to know about HACKATHON

Date: 31st December 2023

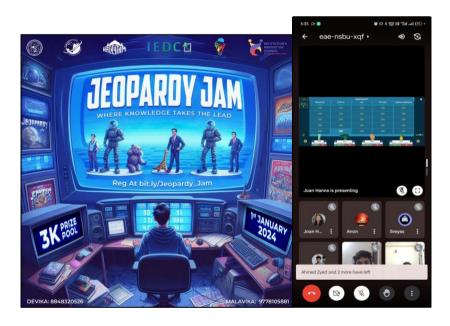
IEDC, in collaboration with the Institute Innovation Council (IIC) and TKM Institute of Technology (TKM IT), organised an informative session titled "All You Need to Know About Hackathons" on December 31st. Led by SooryajangLi, the online event aimed to prepare approximately 25 students for the upcoming Hack4TKM hackathon. The session covered various aspects of hackathons, including their purpose, format, and strategies for success. Participants gained a comprehensive understanding of hackathons, preparing them to participate effectively in the upcoming Hack4TKM hackathon. Overall, the session on "All You Need to Know About Hackathons" provided participants with valuable knowledge and insights, equipping them with the necessary information to engage in hackathon activities confidently.



3.12 Jeopardy Jam

Date: 1st January 2024

In collaboration with the Innovation and Entrepreneurship Development Cell (IEDC) and the Institute Innovation Council (IIC), the Jeopardy Jam quiz competition on January 1st, 2024, served as a preevent for the upcoming Hack4TKM hackathon. With 30 students divided into 8 teams, the quiz featured diverse categories, encouraging teamwork and quick thinking. The event's energy was fueled by students from various backgrounds, fostering camaraderie and competitive spirit. Overall, it provided a stimulating and collaborative learning experience, preparing participants for the challenges ahead in the hackathon while building a sense of community.



3.13 HACK4TKM - Build Beyond the Limit

Date: 16 Feb 2024 to 18 th Feb 2024

Organised by TKM College of Engineering, TKM IT, and IEDC IIC TKMCE, HACK4TKM brought together participants nationwide for a 36-hour collaborative marathon, boasting one of the largest prize pools totaling 270K. Mentored by experts from diverse backgrounds, teams tackled challenges in agriculture, food, and rural development. From 140 applicants, 20 teams were selected, representing varied expertise and perspectives. Throughout the event, participants delved into brainstorming, coding, and prototyping, culminating in innovative solutions presented to judges. Focused on leveraging technology and design thinking, solutions ranged from precision agriculture to sustainable food distribution networks. HACK4TKM not only showcased remarkable teamwork and creativity but also served as a platform for fostering innovation and forging lasting connections among passionate individuals committed to a sustainable future for rural communities.





3.14 YIP Orientation

February 21, 2024

IEDC organised an orientation session for the Young Innovators Programme (YIP) on February 21, 2024, at 7:00 PM in online mode. Led by Chippy L, the YIP District Coordinator for Kollam, the session provided participants with insights into the program's objectives, curriculum, and opportunities. Coordinated by Jayalekshmi and Joan, the event attracted approximately 30 students, demonstrating significant interest and engagement from the target audience. Discussions during the session revolved around the significance of the YIP in fostering innovation, cultivating entrepreneurial skills, and leveraging resources provided by the program. Additionally, participants were guided on how to register for the program and were encouraged to explore its potential impact on their entrepreneurial journey. Overall, the orientation session served as a crucial starting point for participants, setting the stage for their development as young innovators and laying the foundation for future collaboration and growth within the program.



3.15 Idealab visit

3.14.1 Idealab visit from TKM IT students

In collaboration with the Innovation and Entrepreneurship Development Cell (IEDC) and the Institute Innovation Council (IIC), Idealab hosted a visit on January 23, 2024, welcoming 8 students from TKM Arts College. The purpose of the visit was to facilitate knowledge exchange and foster collaboration between the students from TKM Arts College and Idealab, emphasising the importance of interdisciplinary interactions in the field of innovation and entrepreneurship.

Led by Gokul, an IEDC member, the visit included interactive sessions where students engaged in discussions on various aspects of innovation and technology. Additionally, Gokul guided the visit, ensuring a smooth and

enriching experience for all participants. The students were given a comprehensive tour of Idealab's facilities, offering them insights into state-of-the-art laboratories and collaborative spaces.

The visit exposed TKM Arts College students to real-world innovation practices and technologies, providing insights into innovation and entrepreneurship processes. They interacted with experts and researchers, fostering connections and potential collaboration opportunities, empowering them to contribute to the evolving landscape of innovation and technology.

4. ACHIEVEMENTS

- 1. Achieved 7K+ followers on official LinkedIn
- 2. Collaborated with different associations to conduct various events
- 3. Conducted 1 National Level Hackathon

5. CONCLUSION

We have successfully organised many events in the Academic year 2023-24. The impact on new students is our top achievement. The dreams and aspirations of many students have been channelled in the right direction by our team. We believe that much more can be achieved. There have been numerous flaws from our side in the past year. We have corrected it and ensured that the future teams understood it. The new team is all set to redefine the Mission and Vision of IEDC TKMCE as we have. They intend to produce many more innovative startups out of TKMCE. We are looking forward to it as well.

May the spirit of Innovation and Entrepreneurship proliferate in the minds of every Student.

6. CONTACT

Official Email Address - iedc@tkmce.ac.in

Official Website - www.iedctkmce.com

IEDC Nodal Officer - Dr. Sadhikh A - - +91 94973 61282

IEDC Assistant Nodal Officer - Prof. Shafi MN - shafimn@tkmce.ac.in - +91 9496468020

IEDC CEO - Jayalekshmi - jayalekshmiks112@gmail.com - +91 8606683287

IEDC COO - Gokul R - ajithkmuralidharan01@gmail.com - +91 7306476235

LinkedIn Page: https://www.linkedin.com/company/iedc-tkmce

Instagram Page: https://www.instagram.com/iedc_tkmce/

Facebook Page: https://www.facebook.com/tkmiedc