

Sustainability Development Report 2024-25



Executive summary

In 2024-25, the Institute of Engineering and Management (IEM), Kolkata, under the University of Engineering and Management (UEM), made substantial progress across all 17 SDGs, achieving NAAC A-grade accreditation with a CGPA of 3.25, NBA accreditation for ECE, CSE, EE, and MBA departments. For SDG 1 (No Poverty), IEM awarded tuition waivers for 91-95.99% and 96-100% scores, full waivers for WBJEE/JEE toppers and athletes, vocational training in computer literacy, robotics, stitching, cooking, and jam-making for over 100 underprivileged women and specially-abled children via Lions Club Kolkata. IEM, inaugurated a Vocational Computer Training Centre in Contai on July 17, donated sewing machines and mosquito nets to an old-age home on July 18, and aided 103 specially-abled children/orphans plus 48 elderly in Faridpur with kits, food, and medicines on July 4. Concerning SDG 2 (Zero Hunger), institute distributed 300 food packets during Children's Day celebrations, sanitary napkins to women, and essentials to flood/cyclone victims and slum residents. In case of SDG 3 (Good Health), institute offered 24/7 ambulance services, free campus health check-ups, medical insurance, yoga/karate classes, blood camps, counselling, and Pet Society support for strays. In case of SDG 4 (Quality Education), institute enrolled 9,521 students in 25 programs with 186 new AI-aligned courses, over 40,000 MOOC completions via Coursera/NPTEL/LinkedIn Learning, 114 ICT-enabled classrooms, 66 labs with Raspberry Pi/Arduino, 3,132 computers at 1:1 ratio, 3.4 Gbps internet, and a library holding 845,000+ volumes. Concerning SDG 5 (Gender Equality), the institute empowered women through skill programs, health drives, and STEM outreach. For SDG 6 (Clean Water) institute implemented rainwater harvesting and wastewater recycling. Concerning SDG 7, (Affordable Energy) institute generated 320 kWh daily from 40 kW solar panels, added smart lighting and biogas systems. SDG 8 (Decent Work) achieved 864 B.Tech, 276 MBA, and 24 M.Tech. placements, supporting 219 start-ups via Innovation Centers. SDG 9 (Industry/Innovation) established 24 Centers of Excellence and 14 IEDCs with INR 2.99 crore seed funding. SDG 10 (Reduced Inequalities) targeted vulnerable groups with food/clothes/medical distributions. SDG 11 (Sustainable Cities) expanded 3,200 m² green cover, recycled 2,169 kg e-waste, and installed 2 EV stations with bike sharing. SDG 12 (Responsible Consumption) advanced waste segregation and recycling. SDG 13 (Climate Action) targeted carbon neutrality by 2030 and zero landfill waste by 2028. SDG 14 (Life Below Water) and SDG 15 (Life on Land) progressed via environmental research and conservation. SDG 16 (Peace/Justice) upheld strong governance for NIRF/THE rankings. SDG 17 (Partnerships) drove 2,809 activities with NKDA and clubs, hosting 44 conferences and 48 NSS/NCC/Swachh Bharat outreaches engaging 5,482 students. The institution faces challenges like resource limits, rapid technological evolution, and social stigma. However, 2025-26 goals target over INR 60 Cr in funding, 200 patents, and 2,000 research papers. Plans include 35% green cover, carbon neutrality by 2030, zero landfill waste by 2028, and outreach to over 7,000 people. They aim for top NIRF and THE rankings through AI-personalized learning and partnerships with many more organizations.

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Sustainability Development Goal 1

Preamble

In 2024–2025, IEM Kolkata has made significant strides in addressing poverty through education, empowerment, and community engagement. Recognizing poverty as a multidimensional challenge, IEM integrates skill development, scholarships, social welfare, and outreach programs to uplift marginalized groups and foster inclusive growth.

Mission and Vision

- **Mission:** To promote inclusive development by addressing poverty through education, community empowerment, skill development, and innovative interventions.
- **Vision:** Establish IEM as a role model for sustainable social development in higher education by empowering students and communities to eradicate poverty and inequality.

Programs and Initiatives

- The Institute of Engineering and Management (IEM) offers scholarships for 2024–2025 to reward academic excellence and encourage outstanding performance.
- At the Salt Lake campus, tuition fee waivers for four years are granted to school toppers, state toppers, and students with high ranks in WBJEE (1–1000) or JEE Main (1–10,000).
- Exceptional athletes at district, state, national, or international levels with at least 60% in Class X and XII qualify for tuition fee waivers in BBA and MBA programs.
- At the New Town campus, the Academic Scholarship Plan grants the top three students in each branch a 25% tuition fee waiver per semester.
- Merit-based scholarships offer 50% waivers for scores of 91–95.99% and 100% waivers for scores between 96–100% in Class X and XII exams.
- Students from Defence or Army backgrounds with a minimum 60% aggregate can avail 50% fee waivers.
- Scholarship recipients receive financial support, certificates of recognition, mentoring opportunities, and resources to support academic and career growth.

Skill Development and Empowerment

- The Lions Club of Kolkata IEM runs an ongoing project empowering underprivileged women and specially-abled children by imparting skills such as computer literacy, robotics, stitching, cooking, and jam/jelly making, enhancing their confidence and employability.

- On 17 July 2025, the inauguration of a Vocational Computer Training Centre took place at Contai aimed at uplifting local youth and women through digital literacy and employability skill training.
- Sewing machines and mosquito nets were donated to an old age home in Contai (18 July 2025) to promote comfort and self-sufficiency among elderly residents.
- Inner Wheel Club of IEM conducts computer literacy and vocational skill projects at various slums and localities of Kolkata, benefitting hundreds of underprivileged youth and women.

Community Engagement and Outreach

- Distribution of educational kits, food packets, sweets, and medicines to 103 specially-abled children, orphans, and 48 elderly people at Faridpur on 4th July 2025 by Lions Club Kolkata IEM in collaboration with IEM-UEM.
- Food and clothing distribution programs during festivals such as Durga Puja at Duttapukur benefited over 500 people and involved felicitating board exam toppers (3rd October 2025).
- Blood donation camps and free health check-up initiatives, e.g., on National Doctors Day (1st July 2025) at IEM Management House, involving around 50 participants.
- Mental Health Awareness Rally (10th October 2025) promoting emotional well-being, reducing stigma with award recognition from Lions Club International.
- Regular outreach events including Children’s Day celebration with food/sweets distribution at Nalanda Vidyapeeth (14th November 2024) and Rakhi Bandhan Utsav promoting peace and unity at Salt Lake (9th August 2025).

Research and Social Innovation

- Student involvement in technology-enabled skills training like robotics and digital literacy enhances their innovative potential for social impact.
- Ongoing projects with a focus on empowering marginalized sections exemplify practical social innovation by integrating technology, vocational skills, and community service
- The clubs encourage creativity and problem solving among youth via workshops and practical skill development sessions.

Events and Outreach

- "Club outreach program—Spreading Smiles at Faridpur" (4th July 2025): Distributed educational kits, lunch, sweets, and medicines to 103 specially-abled children and orphans and 48 elderly individuals, supporting vulnerable groups through humanitarian aid.

- Free Health Check-Up Camp (1st July 2025): Organized on National Doctors Day at IEM Management House in Salt Lake campus, attended by around 50 persons to promote health awareness and well-being, addressing health as a key poverty-related issue.
- Inauguration of Vocational Computer Training Centre at Contai (17 July 2025): Aimed at empowering local youth and women through digital literacy and employability skills, fostering economic self-reliance.
- Donation Drive at Old Age Home, Contai (18 July 2025): Provided sewing machines and mosquito nets to support comfort and self-sufficiency among elderly residents.
- Cloth and Food Distribution with Student Felicitation at Duttapukur (3rd October 2025): Distributed clothes and food to over 750 individuals, coupled with honoring students excelling in board exams, reinforcing education and basic needs support.
- Mental Health Awareness Rally (10th October 2025): Promoted emotional well-being and reduced mental illness stigma, contributing to holistic poverty alleviation.

Partnerships and Collaborations

- Collaborative humanitarian outreach programs with IEM-UEM foster synergy in service delivery, exemplified by events like the Faridpur outreach (July 2025).
- Partnerships with Lions Club International enhance reach and resources for public health and welfare programs.
- Inner Wheel Club aligns with the Association of Inner Wheel Clubs in India and United Nations recommendations, focusing on youth, women empowerment, and social welfare.
- Cooperation with local NGOs, educational institutions, and government bodies supports sustained community development and welfare initiatives.

Data and Metrics

Metric / Activity with Value	Notes / Events / Details
Full tuition waivers awarded	50% waivers for 91-95.99% scores; 100% waivers for 96-100% scores
Scholarships for school/state/JEE toppers	Full tuition fee waivers for top rankers
Scholarships for exceptional athletes	Full tuition fee waiver in BBA and MBA for district/state/national/international athletes with $\geq 60\%$ in Class X/XII
Vocational training beneficiaries	100+ underprivileged women and specially-abled children

Metric / Activity with Value	Notes / Events / Details
Vocational Computer Training Centre inauguration	July 17, 2025, at Contai
Donation of sewing machines and mosquito nets	July 18, 2025, at old age home, Contai
Educational kits, food, sweets, medicines distributed	103 specially-abled children, orphans; 48 elderly at Faridpur (July 4, 2025)
Food and clothing distribution beneficiaries	Over 750 individuals at Duttapukur during Durga Puja (Oct 3, 2025)
Blood donation camp participants	Approximately 50 participants at National Doctors Day health camp (July 1, 2025)
Mental Health Awareness Rally participants	Large-scale rally held on October 10, 2025, with award recognition
Literacy and skill development beneficiaries	Over 100 beneficiaries through computer literacy and employment skills
MoUs and partnerships with NGOs, government bodies, and corporates	6+ formal collaborations

Challenges

- Addressing social stigma and economic barriers remains a significant challenge, limiting access to education, skill development, and community resources for marginalized groups.
- Resource constraints affect the ability to scale up poverty alleviation programs and extend outreach to wider populations.
- Behavioural change towards inclusive education, financial literacy, and health awareness requires continuous engagement and cultural sensitivity.
- Managing and coordinating extensive collaborations and partnerships demand effective governance and communication.
- Ensuring sustained participation and motivation among students and community volunteers requires ongoing support and recognition.

Annual Goals (2025-2026)

- Expand scholarship programs to support more economically disadvantaged and meritorious students across campuses.
- Increase outreach to marginalized groups through enhanced skill development and vocational training initiatives.
- Launch and promote financial literacy and entrepreneurial training programs to foster economic empowerment.
- Facilitate collaborations with local government bodies, NGOs, and corporate partners for poverty alleviation and community development projects.
- Enhance participation of faculty and students in research, community service, and extension activities aligned with SDG 1 goals.
- Organize awareness campaigns, workshops, and seminars on poverty eradication, social justice, and inclusive development.
- Strengthen mentorship and career support programs for scholarship recipients.
- Integrate sustainability and social responsibility across academic curricula and campus activities.
- Track and improve the impact of poverty alleviation interventions through systematic monitoring and feedback mechanisms.

Acknowledgments

The Institute of Engineering and Management (IEM), Kolkata gratefully acknowledges the unwavering support and dedication of its leadership, faculty, staff, students, and collaborating partners, including Lions Club, Inner Wheel Club, Rotary Club, local NGOs, and government agencies. Their combined efforts and commitment have been instrumental in advancing the institute's mission toward poverty alleviation, skill development, and community empowerment. Special thanks are extended to corporate collaborators and alumni whose generosity and guidance continuously enrich IEM's educational and social initiatives.

Photo Gallery



Joyful faces of children and faculties distributing gifts during the event "Icchepakha - Celebration of Children's Day with a heart!"



Joyful faces of children and faculties distributing gifts during the Faridpur outreach



Dignitaries inaugurating the Vocational Computer Training Center at Contai



Club members distributing sewing machines and mosquito nets at the old age home



Cloth & Food Distribution at Duttapukur



Empowering through skills: Underprivileged autistic students learning cooking and stitching, unlocking their potential



Providing donations for educational support



Providing donations in the event "Sahajogita"



Providing donations in the event “Sharod Sahajogita”



Unnayan



Free eye-check up camp at IEM



Providing support to cancer patients at SSKM Hospital



Students participate in "Pulseinnovate": Project making on Health Care



Blood donation camp at Duttapukur



Christmas celebration with underprivileged

Rotary Means Business Fellowship Kolkata				
In Association with University of Engineering and Management Kolkata				
Proudly launches				
JIBIKA A Unique Training Program catering to Rotary Focus Area of Economic and Community Development.				
Course 1 Communicative English for Career Excellence (C.E.C.)		Course 2 Certificate in Computer Applications (C. C. A.)		
Course Duration - Total 40 Hours per Course. To be completed in 3 Months. Class Duration - 2 Hours plus assessments / assignments per Course per Week.				
Theoretical Training, Practicals and Examination to be conducted at University of Engineering and Management Kolkata, Saltlake College Campus.				
Project Advisor - PDD Prabir Chatterjee Project Mentor - Prof. Dr. Sabyajit Chakraborti Project Mentor - Prof. Dr. Biswajoy Chatterjee		Project Chair - PP Kaushik Sen Project Co Chair - Prof. Dr. Prabir Kumar Das Project Co Chair - Prof. Dr. Samapika Das Biswas		
Contact: 90076 40002 98305 42183 98317 53858 98300 70515 www.rmbfkolkata.com				
Certification Jointly by University of Engineering and Management Kolkata AND Rotary Means Business Fellowship Kolkata.			Course Fees - NIL Refundable Security Deposit Rs. 200/- only	

Jibika: Event on empowerment of under-privileged children



Vocational Service on Computer Literacy to the community



Distribution of computer as part of Computer literacy training

Sustainability Development Goal 2

Preamble

This report presents the comprehensive efforts of the Institute of Engineering and Management toward achieving Sustainable Development Goal 2, Zero Hunger. It highlights initiatives focused on sustainable food waste reduction, community outreach, capacity building, and partnerships. Challenges faced and opportunities leveraged in these endeavours are discussed. Plans aimed at further advancing food security and nutrition are outlined.

Mission and Vision

- **Mission:** To promote sustainability in food security by embedding eco-friendly operational practices, academic programs, and community engagement that address hunger and malnutrition.
- **Vision:** Establish IEM as a leading example within higher education for sustainable development through innovative research and impactful social outreach on food security.

Programs and Initiatives

- **Food and Essentials Distribution Drives:** IEM actively organizes multiple food distribution and grocery support efforts targeting vulnerable groups such as flood and cyclone victims (daily food distribution on railway platforms), slum areas affected by fire, and underserved rural and urban children. These efforts aim at both reducing food waste and combating hunger effectively.
- **Special Campaigns:** During festivals like Durga Puja, Independence Day, and Children's Day, IEM donates food packets, new clothes, educational materials, and medical support to marginalized sections, ensuring that surplus or humanitarian aid reaches those in need instead of going to waste.
- **Sanitary Napkin Distribution & Women's Health:** Recognizing the link between women's health and community wellbeing, distribution of sanitary napkins and health awareness campaigns are integrated into outreach programs, supporting adolescent girls' health—a vital foundation for sustaining families.
- **Nutrition Support for Shelter Homes:** Targeted support to institutions like Save the Children Home involves providing nutritious food packets, crackers, clothing, and educational items, enhancing holistic community health.

Community Outreach and Capacity Building

- Educational Outreach: IEM's Inner Wheel Club (IWC) supplies study materials, books, stationary and digital literacy tools to underprivileged children across slum localities and rural regions. The goal is to strengthen literacy as a means to improve future food security and economic self-reliance.
- Teacher Empowerment Programs: The "Train the Trainers" workshops equip school educators with knowledge on zero waste practices and circular economy models, enabling grassroots capacity building.
- Vocational and Skill Development: Launch of vocational computer training centers, skill workshops (sewing, cooking, robotics, jam-jelly making), and digital literacy initiatives empower underprivileged women and specially-abled children for sustainable livelihoods.
- Healthcare Services: IEM conducts vaccination drives, free health camps, blood donation events, and mental health awareness rallies that indirectly impact nutritional well-being by promoting healthier lifestyles in beneficiary communities.
- Animal Welfare Support: IEM Pet Society feeds and medically supports stray animals, contributing to the community's ecosystem balance and indirectly supporting sustainability.

Events and Outreach

- Lions Club of Kolkata IEM Events (2024-25):
- Faculty Cultural Showcase (Oct 8, 2024) celebrating tradition and talent.
- Children's Day celebration "Icchepakha" (Nov 14, 2024) distributing 300 food packets and sweets.
- Outreach at Faridpur (April 4, 2025): Educational kits, lunch, sweets, and medicines to 103 special children and 48 elderly individuals.
- Free Health Check-Up Camp (July 1, 2025) benefiting about 50 people.
- Vocational Computer Training Center inauguration (July 17, 2025) at Contai.
- Donation Drive of sewing machines and mosquito nets at an old age home (July 18, 2025).
- Rakhi Bandhan Utsav celebration promoting social bonding (August 9, 2025).
- Large-scale food and cloth distribution combining student felicitation during Durga Puja at Duttapukur (October 3, 2025).
- Mental Health Awareness Rally (October 10, 2025), awarded for outstanding contribution.
- Festive season Puja Sammans honoring community efforts for Kali Puja and Jagatdhatri Puja (October 2025).
- Book Fair February 2025 Quiz on Environment & Prizes in the form of Seeds and Saplings
- Independence Day Celebrations with under privileged kids.

Partnerships and Collaborations

- Collaborative humanitarian outreach programs with NGOs and government agencies support scalable impact on food security and health outreach.
- Partnerships with institutions like S.N. Bose National Centre for Basic Sciences enrich sustainability research and technology application.
- Active participation in wider industry and social organization networks like Confederation of Indian Industry (CII), Rotary Club, and Lions Club expands reach and resource sharing.
- Engagement with global sustainability themes via conferences, workshops, and student projects foster innovation and leadership in SDG2.

Data and Metrics

Metric / Activity with Value	Notes / Events
300 food packets distributed	Children’s Day celebration, 2024
103 special children and 48 elderly supported	Faridpur outreach, April 2025
Sanitary napkins distributed to 25 adolescent girls	Women’s Day, 2024
200 + Tree saplings planted	World Earth Day, 2024
Vocational training of 100+ women and differently abled conducted	Various skill development programs
Food drives and essentials distributed: Multiple drives	Cyclone and flood victims, fire-affected slum areas
MoUs and collaborations: 7+ partnerships	Government agencies, NGOs, industry
50 Health check-up camp beneficiaries	July 2025
Multiple events blood donation camps	Regularly conducted
Mental health awareness rally	October 10, 2025
Multiple events on educational kits, food, and medicines distribution	Slum areas, rural outreach
Sewing machines and mosquito nets donation	Old age home, July 2025
Over 100 digital education beneficiaries	Literacy and digital skills programs

Challenges

- Food security is a big challenge because of natural disasters, economic problems, and social issues. These make it hard to provide steady food and nutrition support.
- IEM faces limits in money and resources, which affect how often and how much help can be given to those in need.
- The people who need help often live in poverty and have health problems, making it harder to improve their lives sustainably.
- The COVID-19 pandemic caused disruptions that made it difficult to organize social services and meet growing health needs.
- IEM needs to balance quick food aid with long-term solutions to reduce waste and protect the environment.
- Building stronger partnerships with government, industry, and NGOs is needed to reach more people and get more support.

Annual Goals (2025-2026)

- Increase the reach of food distribution and nutrition support targeting additional vulnerable communities and ensuring the quality and frequency of aid delivery.
- Implement campus-wide food waste composting systems, launch multiple awareness drives to reduce food wastage in the community, and affiliated outreach programs.
- Conduct more “Train the Trainers” workshops yearly for educators and community leaders to promote sustainable food practices, hygiene, and nutrition awareness.
- Launch new skill development programs focusing on women and differently abled groups, aiming for at least 100 beneficiaries trained by year-end.
- Plant a minimum of 2000 tree saplings across campus and community sites to improve eco-system health linked to sustainable food production.
- Formalize at least three new collaborations with government agencies, NGOs, or industry partners to broaden resource mobilization and technical support for SDG2 projects.
- Integrate digital tools and data analytics to monitor impact, optimize resource distribution, and educate communities on food security and sustainable agriculture.
- Develop protocols and contingency plans to maintain food security interventions amid climate risks, pandemics, or economic instability.

Acknowledgments

The successful progress toward achieving the Sustainable Development Goal 2 (Zero Hunger) has been made possible through the combined efforts and support of many individuals and organizations. The valuable contributions of the Institute of Engineering and Management’s faculty, student clubs such as the Inner Wheel, Lions and Rotary, and the Office of Sustainability have been deeply appreciated. Collaborative partnerships with community

members, government bodies, and NGOs have played a critical role and are gratefully acknowledged. Continuous encouragement and constructive feedback from colleagues and friends have been instrumental. Lastly, the unwavering support and inspiration from family have been sincerely recognized as vital throughout this journey.

Photo Gallery



Happy Children's Day celebration at South 24 Paraganas (Icchepakha)



Sahajogita for kids of Contai, Purba Medinipur



Unnayan of Kesargar, Purulia



Sharod suvecha for Babuijor, Purulia



Christmas celebration with kids of Kestopur, Kolkata



Distribution of educational kits, lunch, sweets, and medicines to kids of Faridpur



Distribution of food, clothes, and student felicitation at Duttapukur





Independence Day Celebrations with kids of orphanage



Diaper and food packet distribution by Inner wheel club to Cheshire home



CSR Club IEM in collaboration with Rotary Club of Calcutta Renaissance Partnering with Treasures of Innocence organizes a Computer Literacy and STEM Education Program on 23rd August 2025

Sustainability Development Goal 3

Preamble

This report presents a comprehensive overview of the institution's dedicated efforts toward advancing Sustainable Development Goal 3: Good Health and Well-Being. Through an integrated approach, that combines education, research, campus improvements, and community outreach, the institute aims to foster a healthy and sustainable environment for all stakeholders. The initiatives, achievements, challenges, and plans outlined here demonstrate a strong commitment to improving both campus and wider community health outcomes, while actively engaging with principles of sustainability and global citizenship.

Vision and Mission

- **Vision:** To be recognized as a leader in creating a healthy, sustainable campus environment and in promoting community well-being through research and innovation.
- **Mission:** To deliver education, technology, and outreach initiatives that address health, well-being, and sustainability, empowering students to become impactful global citizens.

Key Achievements

- Established and expanded partnerships with healthcare providers, NGOs, and local authorities to implement health and wellness programs on campus and in the community.
- Launched new awareness programs and campus facilities (ex: biannual health checkups, diet clinic, mental health support, and sustainable nutrition campaigns).
- Achieved recognition in the Times Higher Education Impact Rankings for progress on

Health and Wellbeing Initiatives

- IEM has a dedicated health centre on campus providing free medical check-ups, basic treatments, and periodical assessments by in-house physicians. A sick room, doctor-on-call, nurse appointment, and first aid kits across departments ensure comprehensive medical support. Ambulance facility operates 24/7 on campus.
- Medical insurance coverage is provided for students and staff to cover health-related emergencies, supplemented with schemes to assist critical medical needs. Concessional schemes for diagnostic tests and health check-ups are also available.
- Health and hygiene awareness programs and workshops are regularly conducted, including sessions with experts in various medical fields focusing on wellness. For example, International Conference on Advancing Science and Technologies in Health

Science (IEM-HEALS 2024) organized by Department of Basic science and Humanities, IEM Kolkata.

- Compulsory yoga and karate classes are included to promote physical fitness, supported by trained physical education teachers and well-equipped gymnasium and sports facilities.
- Blood donation camps and mental health awareness programs such as rallies to reduce stigma associated with mental illness are organized regularly.
- Psychological counselling for academic, personal, and psychosocial issues is available through professionally qualified counsellors appointed by the institute.

Community Outreach and Engagement

- IEM actively participates in humanitarian and community welfare activities, collaborating with organizations like Lions Club, Rotary Club, Inner Wheel Club, and Smile Club. These initiatives include food, clothing, and sanitary napkin distribution, vaccination drives, health check-up camps, and educational kit donations especially targeting underprivileged children, elderly, and specially-abled persons
- Several outreach programs focus on women's empowerment, education for underprivileged children, and skill development in computer literacy, robotics, stitching, and cooking for differently abled groups. Vocational training centers and donation drives for old-age homes foster community self-reliance.
- Awareness campaigns on mental health, environmental sanitation, and disease prevention are regularly conducted in and around the campus, involving students, faculty, and external stakeholders.
- The Pet Society of IEM provides medical aid, vaccinations, and neutering services to stray and community animals, demonstrating care for animal well-being aligned with community health.
- Tree plantation drives, cleanliness campaigns, and plastic reduction initiatives within the campus contribute to creating healthier spaces for students and staff.

Curriculum and Research Integration

- IEM actively participates in humanitarian and community welfare activities, collaborating with organizations like Lions Club, Rotary Club, Inner Wheel Club, and Smile Club. These initiatives include food, clothing, and sanitary napkin distribution, vaccination drives, health check-up camps, and educational kit donations especially targeting underprivileged children, elderly, and specially-abled persons.
- Several outreach programs focus on women's empowerment, education for underprivileged children, and skill development in computer literacy, robotics, stitching, and cooking for differently abled groups. Vocational training centers and donation drives for old-age homes foster community self-reliance.

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- The Pet Society of IEM provides medical aid, vaccinations, and neutering services to stray and community animals, demonstrating care for animal well-being aligned with community health.
- Tree plantation drives, cleanliness campaigns, and plastic reduction initiatives within the campus contribute to creating healthier spaces for students and staff.

Partnerships and Collaborations

- IEM collaborates with numerous national and international institutions including universities (Iwate Prefectural University, Rennes School of Business), government agencies, and industries to advance health-related research, curriculum development, and sustainable outreach activities.
- MoUs with organizations such as Infosys, Wipro, IEEE, and CII expand opportunities for student internships, faculty exchanges, and joint research projects focusing on sustainability and health technologies.
- Community clubs like Lions Club Kolkata IEM, Rotary Club, and Inner Wheel Club collaborate with the institute to implement health check-up camps, mental health awareness rallies, vaccination drives, vocational training, and humanitarian aid projects benefiting local vulnerable populations.
- The Office of Sustainability at UEM collaborates on clean energy projects and environmental audits, supporting health through better environmental quality, waste management, and green campus initiatives, contributing to SDG 3 targets.
- Collaborations extend to government bodies like the Ministry of Environment and Forests, MoEFCC, and other research institutes ensuring alignment with national policy frameworks on health and environmental sustainability.

Data and Metrics

Indicator/Metric	Value/Description
Health Centre Services	Free medical check-ups, basic treatments, 24/7 ambulance
Mental Health Support	Qualified counselors, regular awareness rallies
Medical Insurance Coverage	Provided for students and staff; critical care schemes available
Fitness and Well-being Programs	Yoga, karate, gymnasium, fitness classes
Blood Donation	Regular camps organized by institute and clubs

Indicator/Metric	Value/Description
Health & Hygiene Workshops	Frequent, expert-led sessions
Outreach Beneficiaries	Underprivileged children, elderly, specially-abled persons
Vaccination Drives	Partnered with Lions, Rotary, Inner Wheel, Smile clubs
Community Aid Distribution	Food, clothing, sanitary napkins, educational kits
Campus Periodic Assessments	Physician-led, ongoing
Environmental Health Research	Ongoing projects and collaborations
Partnerships for Health Initiatives	NGOs, healthcare providers, local authorities
Impact Ranking Recognition	Listed in Times Higher Education Impact Rankings
Sustainable Nutrition Campaigns	Biannual, campus-wide
Insurance/Diagnostic Concession Schemes	Free diagnostic tests and healthcare services for staff members
Pet Society Health Drives	Vaccination/neutering services for community animals

Challenges

- Campus healthcare faces challenges in advanced care and emergencies.
- Mental health support is limited and stigma persists.
- Outreach struggles due to local socio-economic differences.
- Research limited by funding, staff, and technology.
- Coordination with partners needs improvement.
- Pollution and waste affect community health.
- Must adapt quickly to changing policies and threats.

Annual targets for 2025–2026

- Expand health and well-being services on campus, including better medical and mental health support.
- Strengthen health insurance and financial aid programs for students and staff.
- Increase community outreach focused on vulnerable groups with health and hygiene education.
- Integrate more sustainability and health topics into academic curriculum.

- Boost research projects on environmental health, pollution impact, and sustainable technologies.
- Promote faculty development and student participation in interdisciplinary health projects.
- Grow partnerships with industries, government, and NGOs for internships, funding, and collaborative programs.
- Improve campus sustainability infrastructure like renewable energy, waste management, and energy efficiency.
- Conduct awareness campaigns on wellness, sanitation, and environmental health.
- Facilitate student internships and workshops aligned with current industry needs.
- Enhance digital learning platforms for expanded skill development and certification.
- Monitor and reduce campus carbon footprint through audits and green initiatives.

Acknowledgement

The management, faculty, and staff of the Institute of Engineering Management are sincerely thanked for their invaluable support and guidance in compiling this report; special appreciation is given to the Office of the Sustainability and community organizations like Lions, Rotary, and Inner Wheel Clubs for their collaborative health and outreach efforts; research scholars, partner institutions, and volunteers whose dedication and cooperation have greatly enriched this documentation are also gratefully acknowledged.

Photo Gallery



Medical room in Management House Building IEM Kolkata



Club members distributing sewing machines and mosquito nets at the old age home



Mental Health Awareness Rally



Eye check-up camp at IEM



Helping the cancer patients at SSKM Hospital



Pulseinnovate: Project making on health care



Blood Donation Camp at Duttapukur, North 24 Paraganas



Virangana: Awareness on Yoga



Sahajya: Waterfilter distribution



International Conference on Advancing Science and Technologies in Health Science (IEM-HEALS 2024)

Sustainability Development Goal 4

Preamble

The Institute of Engineering and Management is dedicated to promoting inclusive and equitable quality education in alignment with SDG4. By fostering innovative curricula, advancing research, and strengthening community engagement, the institute empowers learners for lifelong success. Emphasizing skill development, digital learning, and sustainable practices, it prepares responsible global citizens. This report outlines strides made and strategic objectives aimed at enhancing educational quality and accessibility in the coming year.

Vision and Mission

- **Vision:** To establish IEM Kolkata as a premier institute delivering quality education that empowers students and communities with lifelong learning and sustainability awareness.
- **Mission:** To provide accessible, high-quality technical and managerial education enriched with sustainability principles, skill development, and innovative research.

Key Achievements

Accreditations & Rankings:

- NBA accreditation achieved for four engineering departments: MBA, ECE, CSE, EE.
- NAAC Grade 'A' accreditation
- Institution listed among the top-ranked engineering and management institutions in national rankings.

Research and Innovation:

- Published 1645 Scopus-indexed research papers and filed 144 patents
- Active research ecosystem with 124 PhD scholars and 176 recognized research guides.
- 44 in-house conferences and workshops conducted to promote research and innovation.
- 219 startups incubated, supported by Innovation and Entrepreneurship Development Centers.

Curriculum and Program Development:

- Revised syllabus in 25 programs reflecting industry and academic benchmarks from IITs, MIT, Stanford, and others.
- Introduced 186 new courses across programs.

- Continuous curriculum upgrade utilizing AI and Generative AI tools aligned to current technological trends.
- Student Output & Employability:
 - Over 9521 enrolled students with final-year graduation count of 1518.
 - Over 40,000 students benefitted from value-added courses and MOOCs through Coursera, LinkedIn Learning, NPTEL, and IEM Learning.
 - Robust career development with 12422 students receiving coaching for competitive exams and career counselling.

Curriculum and Skill Development

Curriculum Design & Integration:

- Curriculum continuously updated every semester via benchmarking against national/international programs and feedback from industry and alumni.
- Inclusion of crosscutting issues such as environmental sustainability, gender sensitivity, human values, ethics, and professional responsibility.
- Outcome-Based Education (OBE) fully implemented with clearly defined Course Outcomes (CO), Program Outcomes (PO), and Program Specific Outcomes (PSO).
- COs assessed through mid-semester exams, end-semester exams, assignments, lab reports, daily performance, and viva voce; mapped quantitatively to PO and PSO.

Skill Development Initiatives:

- Comprehensive soft skills training covering interpersonal communication, leadership, critical thinking, teamwork, quantitative and verbal aptitude.
- Mandatory professional ethics, constitution of India, yoga, physical fitness courses for holistic personality development.
- Collaboration with Accenture for foreign language training (French, Japanese).
- Study Abroad Programs conducted in 5 countries for faculty and student exposure to international academic environments.

Workshops and Training:

- 67 workshops/seminars organized on research methodology, intellectual property rights (IPR), entrepreneurship, and employment skills.
- Financial support for faculty and students to attend national/international conferences, patent filings, and skill-enhancement courses.

Indian Knowledge System (IKS) Integration:

- Established Centre of Excellence for Indian Knowledge Systems focused on interdisciplinary research blending traditional knowledge with modern science.
- Conducted online courses on Ancient Indian Astronomy and organized exhibitions on numismatics and other cultural subjects to promote heritage awareness.

Community Engagement and Outreach

Extension Activities:

- 48 structured outreach programs including blood donation camps, vaccination drives, tree plantation, sanitation, and education in slum areas.
- Supported by student clubs like Inner Wheel, Rotary, Lions Club, Smile Club, and Pet Society actively engaged in social welfare and animal care.

Holistic Student Involvement:

- Integration of social responsibility into curriculum through NSS, NCC, Red Cross, YRC activities focused on government initiatives like Swachh Bharat, AIDS awareness, and gender sensitization.
- Cultural and national events organized to promote patriotic values and holistic human development.

Infrastructure and Digital Learning

Physical Infrastructure:

- 114 ICT-enabled classrooms including smart boards, LCD projectors, and sound systems.
- 66 advanced laboratories with AI-based kits such as Raspberry Pi, Arduino for hands-on learning.
- 3132 computer systems with a 1:1 student-computer ratio and 3.4 Gbps internet bandwidth.
- 21 seminar halls and specialized language and AI research labs.


Library Facilities:

- Central library holding over 845,000 books, e-books, and access to multiple digital research databases including IEEE, Springer, Elsevier, EBSCO, and J-Gate.
- Partially automated integrated library systems (ILMS) including LSEase and KOHA.
- Daily usage by approximately 548 teachers and students with remote access to e-resources.
- INR 115.85 lakhs spent on books, subscriptions, and e-journals.

Digital and Online Learning:

- Collaboration with MOOC providers such as Coursera (5000+ courses), LinkedIn Learning (18,000+ courses), and NPTEL (2000+ courses).
- Production of e-content supported by dedicated media and audio-visual centers.

- Online classes conducted through Zoom, Google Meet, and MS Teams.

 Maintenance and Sustainability:

- Annual maintenance expenditure of INR 620,664,512 for infrastructure upkeep.
- Environmentally friendly campus initiatives include rainwater harvesting, wastewater recycling, solar energy utilization, banned use of plastics, and promotion of bicycles and pedestrian-friendly pathways.
- Comprehensive solid, liquid, and e-waste management practices implemented with partnership with recycling agencies.

Partnerships and Collaborations

 MoUs and Collaborative Networks:

- Established 27 functional MoUs with academic, industrial, and international institutions for joint research, faculty and student exchange, internships, and skill development.
- Active collaborations accounting for 2809 research and exchange activities during the academic year.

 Research and Innovation Centres

- 24 Centers of Excellence and 14 Innovation & Entrepreneurship Development Centres (IEDC) promoting Make in India innovation initiatives
- Seed funding worth INR 2.99 Crores granted to faculty and students for innovative projects.
- Supported 219 startups and facilitated 513 student-led innovation projects with mentorship and industry linkage.

 Career and Industry Linkages:

- Strong industry ties ensure curriculum relevance and provide students placement and internship opportunities
- Ongoing benchmarking with reputed institutions and industry experts to keep education aligned with technological advances and market needs.

 Faculty and Student Development:

- 548 faculty members supported financially for professional development including conference fees and membership of professional bodies.
- External internships, on-the-job training, and joint projects expanded through MoU collaborations.

Data and Metrics

Category and Metric/Indicator	Value/Number
Total Students Enrolled	9521
Final Year Graduates	1518
Total teaching faculties	548

Category and Metric/Indicator	Value/Number
NBA Accredited Engineering Departments	4
NAAC Accreditation Grade	A (CGPA 3.25)
Scopus-Indexed Research Publications	1645
Patents Filed	144
Research Funding (INR) (External and Seed)	57.37 Cr
New Courses Introduced	186
Digital Learning Reach (Coursera, LinkedIn, etc.)	40,000+ students
Number of Computers	3132
ICT-Enabled Classrooms	114
Advanced Laboratories	66
Library Holdings (Volumes and e-Resources)	855,000+
Community Outreach Participants	5,482
Community Programs Conducted	48
MoUs for Research and Student Exchange	27
Startups Incubated	219
BTech Students placed	864
MBA students placed	276
MTech students placed	24
Pass rate	99.9%
Student to Mentor Ratio	1:17.87 personalized guidance
Number of Academic Programs	20 programs (Engineering, Management, Applied Sciences)

Challenges

Keeping pace with fast-evolving technologies such as Artificial Intelligence and Industry 5.0 poses continuous curriculum revision challenges to align academic training with industry demands.

- ✚ Although substantial research funding is available, sustaining and expanding financial resources for cutting-edge interdisciplinary research and start-ups remains a critical challenge.
- ✚ Addressing disparities in student learning capabilities, especially in large classes, requires enhanced personalized learning plans and bridging slow and advanced learner gaps effectively.
- ✚ Increasing student enrolment and program expansion demand constant upgrading of ICT infrastructure, laboratory facilities, and digital resources to maintain quality education.

- ✚ Building deeper and more diversified partnerships for student internships, collaborative research, and job placement to match burgeoning market expectations is an ongoing challenge.
- ✚ Extending the impact and reach of community engagement programs requires additional coordination and resource mobilization.

Annual Goals for 2025–2026

- Achieve NBA accreditation for ME, IT and EEE departments and ensure continuous curriculum modernization integrating AI, IoT, and emerging technologies.
- Increase research funding to over INR 60 Crore and support filing of 200+ patents along with 2000+ Scopus-indexed papers.
- Upgrade ICT infrastructure, digital library automation, and expand blended/online learning, targeting 35,000 MOOC course enrolments.
- Enhance community outreach programs to engage 7,000+ students with deeper NGO collaborations and sustainability awareness.
- Forge new international MoUs and launch joint academic programs to boost global collaborations and student exchanges.
- Strengthen faculty development initiatives with 60+ FDPs and implement AI-driven personalized learning analytics.
- Prepare rigorously for NAAC cycle 2 accreditation and aim for top 100 ranking in NIRF nationally.

Acknowledgement

The successful preparation of this SDG4 report could not have been possible without the dedicated efforts and support of several individuals and teams. We extend our heartfelt gratitude to the faculty members, researchers, and administrative staff of the Institute of Engineering and Management who contributed valuable insights, data, and analysis. Special thanks to the IQAC and Research & Development Cell for their guidance and coordination throughout the process. We also acknowledge the institution's leadership for fostering a culture of quality education, innovation, and sustainability aligned with the Sustainable Development Goals. Finally, we thank all students, community partners, and collaborators whose engagement and feedback have enriched this report, reinforcing our shared commitment to advancing inclusive and equitable quality education.

Photo Gallery



IEM securing 1st prize in Innovation Challenge at Worlds Robotics Championship Noida



IEM and UEM group receiving felicitation with the Shiksha Samman Award 2024 – Outstanding Institute for Engineering and Management Placements



Zee 24 Ghanta awarding IEM-UEM group for Excellence in Placements – Engineering and Management category at the Education Excellence 2024 program



IEM – UEM organizing Study Abroad Programme at National University of Singapore (NUS)



IEM – UEM organizing Study Abroad Programme at University of Sydney



IEM receiving the best Engineering college in Eastern India- Time Power icon award from Times of India



Team from IEM-UEM visiting Google Office, San Francisco, USA



IEM- UEM honoured as the 'Star Incubator from India' by BCC&I at the Global Business Connect Summit 2024 in Bangkok



Team from IEM participated in NIDAR – National Innovation Challenge for Drone Application and Research, India's drone innovation challenge



The 15th IEEE Annual Computing and Communication Workshop and Conference (CCWC 2025), organized by IEM-UEM group, along with SMART SOCIETY USA and IEEE started at the University of Nevada, Las Vegas, USA



Convocation 2025 (Degree Conferment ceremony)



IEM and UEM team organized the very successful IEEE UEMCON 2023 conference in Columbia University in New York, US



International Conference On “Interdisciplinary Research in Technology & Management” held on 20th-22nd April 2023 at IIT, Delhi, India with Chief Guest Dr Akhilesh Gupta, Secretary- SERB , DST, Govt. of India



IEM in collaboration with Agile Network India hosted the 3rd edition of the Agile Kolkata 2023 Conference at IEM, Kolkata



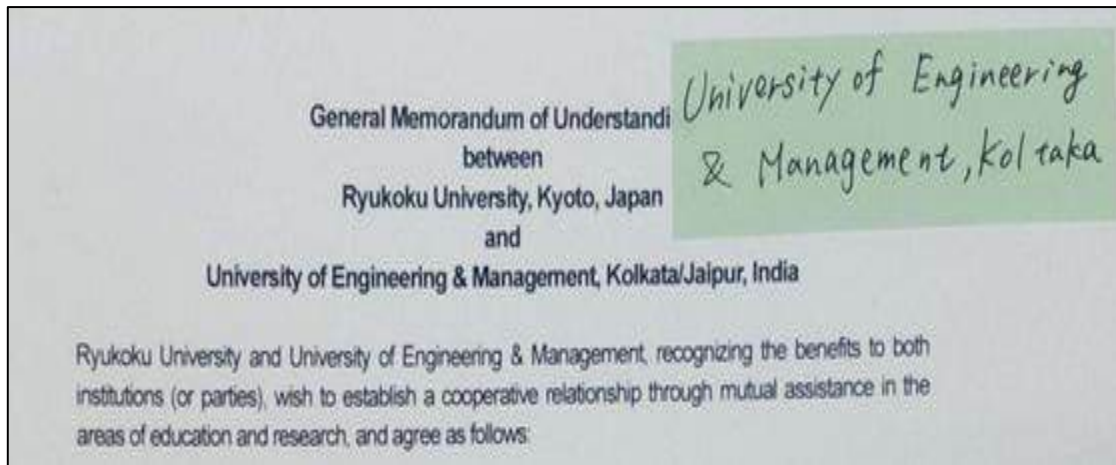
MOU with L&T Edutech with LTIMindtree as the knowledge partner for academic collaboration



IEM-UEM Group signed MOU with Pegasystems to Empower Students with Industry-Leading Skills at Kolkata, June 20, 2025 and became the first University in Eastern India to train all students in Pegasystems after a MOU with them



IEM signed a historic MOU with IBM to open the first IBM Center for Advanced Studies in India to enable students, faculty and researchers to work on the latest emerging technologies with IBM Cloud software



MOU has been signed between Ryukoku University, Kyoto, Japan and University of Engineering & Management, Kolkata/Jaipur, India



DIVERSION 2025, organized by the Department of Computer Science and Engineering at the Institute of Engineering & Management (IEM), Kolkata, in collaboration with the ACM-IEM Student Chapter



IEM-UEM group organized the collaborative global conference IEMCON 24 (Information Technology, Electronics and Mobile Communication) in collaboration with IEEE and the famous University of California Berkeley, USA



International Conference IEEE UEMCON 2024 at the esteemed IBM T.J. Watson Research Center, New York USA



The 4th International Conference on Interdisciplinary Research in Technical and Management (IRTM 2024) was organised from 5th-7th December, 2024 at NIT, Calicut by Institute of Engineering & Management (IEM), Kolkata and University of Engineering & Management (UEM), Kolkata and Jaipur, along with NIT, Calicut in association with Vijnana Bharati and supported by SMART Society, USA



Institute of Engineering & Management (IEM), University of Engineering and Management (UEM), Kolkata, India, organized the European Conference on Interdisciplinary Research in Technology & Management (EIRTM 2025) held in Paris, France, from April 9-11, 2025



IEEE World AI IoT Congress 2025 was successfully organized by the Institute of Engineering & Management (IEM) and the University of Engineering and Management (UEM) in Seattle, Washington, USA, from May 28 to May 30, 2025



The 3rd International Conference on Computational Intelligence, Data Science, and Cloud Computing (IEM-ICDC 2025)



IEMTRONICS 2024 (International IOT, Electronics and Mechatronics Conference) which was held on 3rd – 5th April 2024 at the prestigious Imperial College London, UK



Workshop on Robot Operating Systems (ROS) was conducted by Professor Dr. Uemura Wataru from Ryukoku University, Japan, at CII Auditorium, IEM Management House, Kolkata.



Panel discussion titled "Generative AI in Industry: Hope, Hype, or Reality?" was conducted by IEM-UEM Generative AI CoE



The Entrepreneurship Development and Incubation Cell of IEM



Indian Society of Heating, Refrigerating, and Air Conditioning Engineers (ISHRAE) IEM Student Branch



IEEE (Institute of Electrical and Electronics Engineers) IEM Student Branch



IEM Coding Club



The Magazine Club of IEM



The IEM Dance Club



IEM Music Club



The Drama Club of IEM



The Art and Craft Club of IEM



The Quizzard Club of IEM



The IEM Pet Society



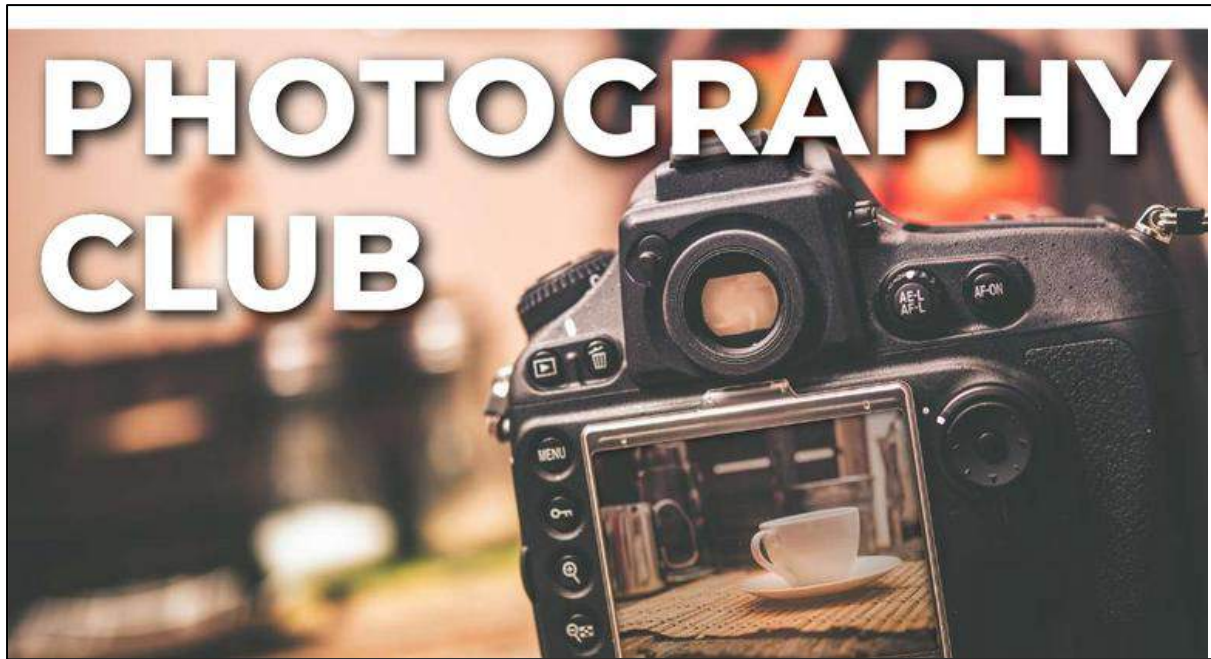
The Rotary Club of IEM



Lions Club of IEM



Toastmasters Club of IEM



The Photography Club of IEM

Sustainability Development Goal 5

Preamble

IEM Kolkata is firmly committed to promoting gender equality and empowering all women and girls on campus and in the wider community. Our efforts respond to the global imperative of SDG 5, aiming to create an inclusive, safe, and equitable environment that supports women's academic, professional, and personal growth.

Vision and Mission

- **Vision:** To foster a campus culture where gender equality is fully realized, ensuring equal access, opportunities, and representation for all genders.
- **Mission:** To implement comprehensive policies, infrastructure, education, and outreach programs that empower women and promote gender sensitivity at all institutional levels.

Key Achievements

- Development and enforcement of strong gender-sensitization policies and committees to ensure safe, harassment-free learning and working environments.
- Implementation of safety measures including CCTV surveillance, women-only hostels with security during night hours, and accessible health services with female medical professionals.
- Launch of mentoring initiatives and counselling support tailored to address academic, personal, and mental health needs of female students.
- Scholarship and financial assistance programs specifically aimed at increasing female enrolment, especially first-generation college women.
- Organization of gender equality awareness events, workshops, and collaborations with NGOs for sensitization at the community level.
- Inclusion of gender-related topics in curriculum and extracurricular activities fostering understanding of women's rights and gender issues.

Gender Equality Initiatives

✚ **Safety and Security:**

- The campus is highly secured with 987 CCTV cameras and 35 dedicated security personnel, including monitored visitor and alumni registrations to ensure safety.
- The college timing has been revised to 9:20 AM to 4:00 PM to allow female students to return home safely.
- An Internal Complaints Committee (ICC), compliant with Vishakha guidelines, is actively functional with female faculty members to promptly address complaints related to sexual harassment with confidentiality and sensitivity.
- Anti-ragging committee is armed with members from diverse stakeholder categories including police and media, ensuring a ragging-free campus.

- Apart from security guards on all floors, fire safety infrastructure and emergency medical facilities including 24/7 ambulance services are available.
- Self-defense training programs for female students have been organized in collaboration with NSS units, enhancing their physical safety awareness.

✚ **Counselling and Mentoring**

- The institute has academic counsellors and dedicated faculty mentors who provide personalized guidance for academic, personal, and career development.
- Psychological support is available through a professional psychologist appointed on campus.
- Career counselling sessions help students navigate higher studies, competitive exams preparation, and placement readiness.
- Soft skills training, including communication, group discussions, and mock interviews, are regularly conducted.
- Partnerships with corporate training initiatives like TCS Campus Commune and Infosys enhance employability skills.
- Dedicated sessions are held to sensitize students on gender issues and equality through workshops, seminars, and awareness campaigns.
- The Alumni Association volunteers contribute through mentoring and guidance talks focused on career and entrepreneurship development for women students.

✚ **Academic and Leadership Opportunities**

- Women are prominently placed in top leadership roles such as Registrar, Deans, and Heads of Departments.
- Gender-neutral uniforms have been introduced to promote an inclusive culture.
- The academic curriculum includes gender sensitization topics, professional ethics, human values, and social responsibility integrated through courses and co-curricular activities.
- Workshops such as the International Women's Day Virangana workshops focus on women's education and holistic well-being.
- Equal admission policies ensure women's participation with scholarships and fee waivers, including five full freeships and five half-freeship scholarships for B.Tech women students annually.
- Research and innovation centers encourage women's participation in projects and leadership roles in scientific and entrepreneurial domains.

✚ **Community Engagement and Outreach**

- Active partnerships with Rotary Club, Lions Club, and Innerwheel Club promote gender equality and women empowerment through joint initiatives.
- Lions Club of Kolkata IEM organized numerous events including educational kit distribution, free health camps, vocational training for women and specially abled children, donation drives to old age homes, and mental health awareness rallies.
- Icchepakha Children's Day Celebration (Nov 2024) distributing food and gifts to underprivileged children.
- Faridpur humanitarian outreach (July 2025) aiding orphans and elderly with supplies.
- Vocational Computer Training Center inauguration (July 2025) empowering local women and youth.

- Mental Health Awareness Rally (Oct 2025) awarded for excellence in public health promotion.
- Rakhi Bandhan Utsav, Saradh Samman, Kali Puja Samman, and Jagatdhatri Puja Samman events fostering social bonding and cultural recognition.
- Community service involving students through NSS includes cleanliness drives, tree planting, education, and health awareness in local areas.
- Alumni actively support student entrepreneurship, organize motivational talks, and provide funding and mentorship for women’s start-ups.

✚ **Infrastructure and Facilities**

- Separate hostels for girls with modern amenities and 24-hour security measures.
- Medical facilities are robust with on-site doctors, nurses, ambulances, and special medical awareness programs for women including gynecological support.
- Disabled-friendly infrastructure with ramps, lifts, and accessible washrooms.
- High-speed internet, digital libraries, well-equipped computer and language labs support academic excellence.
- Safety infrastructure regularly audited and maintained aligned with best practices.
- Provision of grievance redressal cells and Women’s Cells on campus providing support, counselling, and intervention.

Partnerships and Collaborations

- Collaborations with Rotary Club, Lions Club, and Innerwheel Club strengthen outreach and training on gender equality, women empowerment, and health awareness.
- Memorandums of Understanding (MOUs) with leading IT companies like TCS and Infosys provide skill enhancement and placement support.
- Alumni association contributes financial aid, mentorship, startup incubation guidance, and organizes career guidance sessions, particularly supporting female students.
- Joint organization of women-centric workshops including self-defense training, mental health awareness, and educational seminars.
- Participation in national and international conferences enhances visibility and influence of gender equity initiatives.

Data and Metrics

Category and Metric/Indicator	Value/Number
CCTV Cameras Installed	987
Security Personnel	35
Women-Only Hostels	Yes
Internal Complaints Committee for Harassment	Active and Functional
Scholarship Programs for Female Students	Multiple
Female Leadership Positions (Principal, Department Heads)	Yes
Gender-Neutral Uniform Policy	Implemented
Women Safety Services (Security, Female Medical Staff)	Available
Gender Sensitization Workshops and Events	Conducted Regularly

Community Impact (Outreach via Lions, Innerwheel Clubs)	Rotary, Educational and Vocational Support for Women and Girls
Female Student Mentorship and Alumni Support	Active
Challenges Mentioned	Infrastructure Limits, Funding
Future Plans	Scholarship Expansion, Self-Defense Training, Leadership Development

Challenges

- IEM faces limitations in horizontal campus expansion due to its location in the IT hub of Kolkata, which restricts physical infrastructure growth primarily to vertical expansion. This poses challenges in accommodating growing student populations and new facilities.
- There is an ongoing need for increased financial assistance to conduct extensive staff development programs, faculty research initiatives, and student scholarships to further enhance gender equality and inclusivity.
- Drawing students from broader geographical regions and diverse backgrounds remains a focus challenge, requiring targeted outreach and broadened access schemes.
- Motivating students, particularly women, towards pursuing higher education opportunities and increasing participation in social development activities continues to require strategic encouragement.
- Opportunities exist to upscale consultancy and industry engagement, offering practical learning and outreach through gender-responsive projects but need more promotion.

Future Plans

- Preparing for the upcoming NAAC cycle-2 visit, aiming for NBA accreditations for programs like IT and EEE, and seeking global accreditations such as ABET, AACSB, EQUIS, and AMBA to enhance academic credibility.
- Establishing more international partnerships and student/faculty exchange programs with reputed foreign universities to enrich gender-equal academic exposure.
- Upgrading campus network, IT infrastructure, and safety systems to support inclusive and secure educational and research environments.
- Plans for establishing new campuses abroad (Canada, Singapore) and additional placement coordination centers in major Indian cities to widen academic and employment opportunities.
- Boosting incubation facilities and financial support for women-led startups and innovation projects to promote economic empowerment.
- Emphasizing collaborative research on sustainability, social equity, and gender studies aligned with SDG targets.
- Expanding scholarships, free ships, and financial support schemes specifically targeting female and socially disadvantaged students to improve access and retention.
- Continuing and broadening workshops on gender equality, self-defence training, mental health, and employability skills tailored for women.
- Augmenting outreach initiatives with Rotary, Lions, and other partners, focusing on empowerment of underprivileged women, especially abled children, and local communities.
- Institutional efforts for embedding values of diversity, inclusion, tolerance, and gender sensitivity across all institutional functions and culture.

Photo Gallery



VIRANGANA WORKSHOP: Empowering Women



Virangana: Motivational Talk



Underprivileged women given talk on menstrual hygiene and distribution of sanitary napkins

Sustainability Development Goal 6

Preamble

The Institute of Engineering and Management is committed to advancing sustainable water and sanitation practices. We recognize clean water and sanitation as vital to health, education, and environmental sustainability. Through research, education, community engagement, and infrastructure development, IEM strives to contribute meaningfully to achieving SDG 6 targets. Our efforts focus on innovation, conservation, and inclusive access to safe water for all.

Vision and Mission

- **Vision:** To be a leading institution advancing clean water access and sustainable sanitation through education, research, and community engagement.
- **Mission:** To equip students and researchers with knowledge and skills to develop innovative water management solutions that ensure safe, affordable, and sustainable water and sanitation for all.

Key Achievements

- IEM treats wastewater on campus and reuses it for gardening. This saves fresh water.
- Rainwater harvesting stores 64,750 liters underground. It recharges bore wells and wells to boost groundwater.
- IEM uses 1278203 kWh energy annually, emitting ~894.74 tonnes CO₂ from electricity. Rooftop solar panels generate 320+ kWh daily.
- IEM has 27 MoUs for joint water sustainability projects with universities and industries.

Water Management and Conservation Practices

- IEM has implemented comprehensive water management strategies focusing on wastewater treatment, rainwater harvesting, water-efficient technologies, and water quality assurance. The institute operates an aerobic sewage treatment plant that processes wastewater generated on campus. The treated wastewater is recycled and predominantly used for gardening and landscaping purposes, contributing significantly to water conservation efforts.
- Rainwater harvesting systems have been established, including underground storage tanks with a collective capacity of approximately 64,750 L to capture and utilize rainwater effectively. The harvested rainwater is channelled through specialized piping networks to recharge bore wells and open wells across the campus area, thereby reducing dependency on municipal water supplies.
- The campus is equipped with water-efficient fixtures and advanced technologies such as sensor-based water flow control, which help minimize wastage. In addition, the use of UV-RO purification systems ensures that drinking water quality meets stringent safety standards.

- Continuous water quality monitoring and maintenance of water bodies and distribution infrastructure are carried out regularly, ensuring the health and safety of the campus community.

Research and Education on Water Sustainability

- IEM fosters a strong research culture with established Centers of Excellence that include sustainability-focused domains. In the academic year, 124 PhD candidates are registered under recognized guides, reflecting the institute's dedication to advanced research.
- The institute has integrated subjects such as 'Sustainability, Climate Action, and Environmental Science' into the core curriculum for all 4th semester B.Tech. students. This integration enables practical understanding through living labs on campus, where students conduct pilot projects related to sustainable water use and environmental impact.
- Research projects supported by government bodies and university grants involve greenhouse gas emission monitoring, water resource management, and renewable energy integration.

Community Engagement and Outreach

IEM actively engages with the local community through various outreach programs designed to promote awareness of water conservation and sanitation. During the year, 5,482 students participated in approximately 48 extension activities, including campaigns under the Swachh Bharat mission and gender sensitization programs run in collaboration with NGOs and government organizations

Infrastructure and Policy Support

- Water conservation infrastructure at IEM includes rainwater harvesting, borewell and open well recharge facilities, construction of tanks and bunds, wastewater recycling systems, and systematic campus water body maintenance.
- The water supply involves purified water from Nabadiganta Water Management Ltd. stored in underground tanks with a capacity of 64,750 L to serve the academic and residential premises.
- In alignment with green campus initiatives, the institute has implemented policies restricting automobile entry, promoting pedestrian-friendly pathways, bicycle-sharing programs, and using electric vehicles on campus.
- Quality assurance is backed by regular water and energy audits. Environmental audits include annual assessment of carbon footprints, energy consumption (1278203 kWh annually), and water usage monitoring to identify conservation opportunities.

Partnerships and Collaborations

- IEM maintains 27 active MoUs with national and international universities, government agencies, and industry partners that foster collaborative research and knowledge exchange on sustainable water management.

- A notable collaboration with S.N. Bose National Centre for Basic Sciences focuses on green building technology and renewable energy projects aimed at reducing operational carbon footprints.
- IEM has been involved in government-funded projects such as those by ICSSR and the Ministry of Environment, Forest and Climate Change, supporting research in sustainability and environmental impact assessment.
- The institute also conducts capacity building through ‘Train the Trainers’ workshops on zero waste and circular economy models, expanding outreach to schools and community organizations.

Data and Metrics

Category and Metric/Indicator	Value/Number
Rainwater Harvesting Storage Capacity	64,750 liters
Sewage Treatment Plant Capacity	Aerobic system recycling water for gardening
Annual Energy Consumption	1278203 kWh
Annual CO ₂ -Equivalent Emissions from Electricity Use	894.74 tonnes
Rooftop Solar Panel Capacity	40 kW
Daily Solar Energy Generation	320 kWh
Water Quality Systems Implemented (UV-RO, Smart Monitoring)	Yes

Challenges and Opportunities

- Rising campus water demand due to institutional growth and changing consumption patterns.
- Variability in water availability, worsened by climate change, unpredictable rainfall, and periods of water scarcity.
- Aging and capacity-constrained water infrastructure that requires frequent maintenance and upgrades.
- Need for rigorous, ongoing testing and preventive measures to avoid contamination risks.
- Challenges in sustaining long-term community awareness and behaviour change for conservation and hygiene.

Annual Goals (2025-26)

- Expand and enhance wastewater-recycling systems to increase capacity and efficiency, reducing freshwater demand on campus.
- Install and upgrade water-efficient fixtures, along with greywater harvesting technologies, to promote conservation.
- Upgrade infrastructure with smart, real-time water quality monitoring systems using IoT devices and AI-driven analytics to pre-empt contamination and optimize usage.
- Promote green infrastructure such as expanded rainwater harvesting, wastewater reuse, and solar-powered water treatment in line with SDG 6.
- Integrate sustainability themes more deeply into curricula to make education application-oriented on water and environmental issues.

- Increase research projects and publications focused on sustainable water use and sanitation technologies.
- Deepen industry-academia collaborations for pilot testing innovative sustainable water technologies.
- Strengthen partnerships with government, industry, and international bodies for funding, innovation, and knowledge exchange in water sustainability.
- Scale up community awareness campaigns on water conservation and hygiene practices.
- Enhance training programs for local schools and residents on sustainable water management and sanitation.
- Implement more participatory water governance models to build resilient, inclusive local water systems.

Photo Gallery for Goal 6



Water efficient fixtures in bathrooms of Management House, IEM Campus



Drinking water purification system



Rainwater harvesting in open bore wells

Sustainability Development Goal 7

Preamble

The Institute of Engineering Management (IEM), Kolkata, is committed to ensuring access to affordable, reliable, sustainable, and modern energy for all, in alignment with Sustainable Development Goal 7 (SDG 7). The institute drives energy transition through on-campus renewable energy installations, energy conservation measures, research, and community engagement.

Vision and Mission

- **Vision:** To establish IEM Kolkata as a benchmark for energy sustainability in higher education, promoting clean energy technologies and efficient resource use.
- **Mission:** To implement renewable energy solutions, optimize energy efficiency, undertake impactful research, and foster awareness leading to reduced carbon footprint.

Key Achievements

- Increasing the capacity and efficiency of grid-connected rooftop solar PV systems with smart metering and energy monitoring to maximize clean energy generation and reduce carbon footprint.
- Establishing biogas facilities utilizing campus organic waste to produce renewable energy, reducing dependency on traditional fossil fuels and promoting waste-to-energy conversion.
- Installing and optimizing timer circuits, occupancy sensors, LED lighting, and LDR-based automation systems across campus buildings to minimize wastage and enhance energy efficiency.
- Promoting electric vehicle use, bicycle-sharing schemes, and restricting conventional vehicles within campus to reduce emissions and foster clean mobility.
- Embedding sustainability-related courses like “Sustainability, Climate Action, and Environmental Science” into academic programs and advancing research in renewable energy, micro-grids, and emissions monitoring through collaborations with industry and academia.
- Conducting awareness programs, training, and partnerships to educate and engage students, faculty, and the wider community on clean energy practices and sustainability goals, including “Train the Trainers” workshops.

Renewable Energy and Energy Efficiency Initiatives

Solar Power:

- IEM has implemented a 40 kW grid-connected rooftop solar photovoltaic system generating approximately 320 kWh of clean energy daily, monitored via smart meters.

- Regular electricity audits cover load and consumption patterns to identify saving opportunities, including smart timer circuits and LDR-based automation to reduce wastage.
- ✚ **Biogas Energy:**
 - Plans for a biogas plant featuring a 1000lit digester and 1000-liter gas storage are underway to generate renewable energy from organic waste.
- ✚ **Energy Conservation Technologies:**
 - Energy-efficient LED lighting and sensor-based smart lighting systems have been installed across campus to optimize electricity use.
 - Electric appliance timers and smart automation further conserve electricity, especially in classrooms and air-conditioned spaces.
 - Waste segregation including organic, inorganic, and e-waste disposal supports sustainability goals.
- ✚ **Sustainable Transport:**
 - Sustainable mobility is encouraged via bicycle sharing programs and electric vehicle charging infrastructure on campus.
 - Initiatives are in place to reduce vehicular emissions by promoting electric and hybrid vehicles.
 - An internal campus-wide energy audit was conducted analysing energy consumption of lighting, fans, ACs, and auxiliary electrical appliances across buildings and laboratories with detailed load measurements supporting informed energy savings planning.
 - Carbon footprint assessment estimated a total of approximately 917.89 tonnes CO₂ equivalent emission annually, divided between electricity consumption (Scope 2) and vehicular emissions (Scope 1).

Thermal Power Plant Visits and Emission Auditing

- Technical visits to Sagardighi, Raghunathpur, and Koderma thermal power stations were conducted by faculty from UEM and Jadavpur University to measure and analyze flue gas emissions, including CO₂, CO, SO₂, NO_x, and O₂ concentrations using portable flue gas analyzers.
- The measurements highlighted the significant GHG emissions from coal-fired power plants and underscored the need for cleaner combustion technologies and emission reduction strategies.
- These visits provided real-world exposure for students and researchers and helped in calibrating models to estimate emissions and develop mitigation approaches.

Research and Curriculum Integration

- The Office of Sustainability spearheads energy sustainability research including microgrid systems, GHG monitoring, and energy footprint analysis.
- Collaborative research projects with academic and government institutions explore new-age energy technologies.
- The institute offers a mandatory course, “Sustainability, Climate Action, and Environmental Science,” for 4th semester B.Tech students to embed sustainability concepts.
- Sustainable development pilot projects and workshops provide experiential learning, encouraging innovation aligned with SDG 7.

- Real-time online measurement of GHG emissions in thermal power plants supported by Ministry of Environment and UNFCCC.
- Estimation of energy and environmental footprints with economic assessment of micro-grids in India.

Community Engagement and Partnerships

- Sustainability awareness programs, including “Train the Trainers” workshops for schoolteachers, promote clean energy and zero waste principles in surrounding communities.
- Student-led initiatives foster environmental education and community outreach aligned with SDG goals.
- Memoranda of Understanding with government bodies, industry leaders, and academic partners drive research, consultancy, and internships focused on clean energy.
- Collaboration with industrial players facilitates technology transfer and scaling of renewable energy projects.

Environmental Impact and Sustainability Metrics

- Campus energy consumption from Feb 2024 to Jan 2025 totalled 1278203 kWh.
- Scope 1 emissions (campus vehicles) estimated at 23.15 tonnes CO₂ equivalent annually.
- Scope 2 emissions (electricity use) contribute about 894.74 tonnes CO₂ equivalent annually.
- Campus green and plantation area cover approximately 3,173 m², contributing to promoting ecological balance.

Data and Metrics

Metric	Value & Units
Solar PV System Capacity	40 kW
Daily Solar Energy Generation	320 kWh/day
Biogas Digester Volume	1000 liters (planned)
Biogas Storage Capacity	1000 liters (planned)
Annual Campus Energy Consumption	1278203 kWh
Scope 1 Emissions (Campus Vehicles)	23.15 tonnes CO ₂ -equivalent/year
Scope 2 Emissions (Electricity Use)	894.74 tonnes CO ₂ -equivalent/year
Total Annual Carbon Footprint	917.89 tonnes CO ₂ -equivalent/year
Campus Green & Plantation Area	3,173 m ²
Smart Energy Systems Implementation Target	75% of buildings

Challenges

- Integrating renewable energy sources such as rooftop solar into the existing campus grid poses challenges in maintaining voltage stability, demand-supply balance, and system

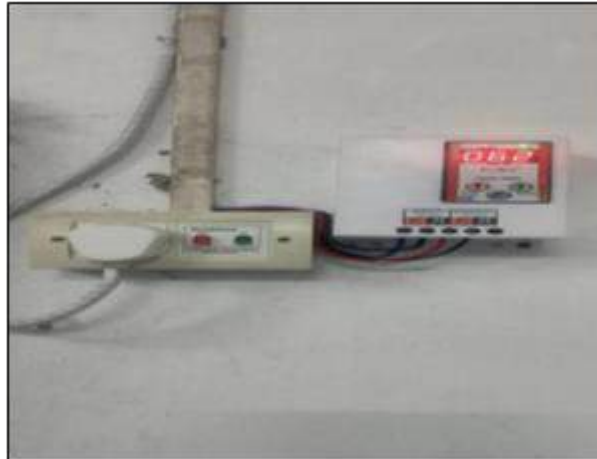
flexibility. This requires advanced grid management and smart energy solutions to prevent curtailment and ensure reliable power supply.

- Initial investments and maintenance costs for renewable infrastructure, including solar panels, biogas plants, and smart devices, can be substantial. Budget constraints and technological upgrades need strategic planning.
- Renewable sources like solar and biogas suffer from intermittency and dependence on geographic and climatic conditions leading to variability in power generation. Achieving sustained energy conservation requires continuous awareness and behavioural change among campus users. Ensuring compliance with energy-saving practices is an ongoing challenge.
- Accurate quantification of carbon footprints and emissions across direct and indirect sources requires technical expertise and sophisticated monitoring tools.

Future Plans

- Initiatives to increase capacity and efficiency of solar PV systems and operationalize biogas plants to diversify campus energy supply.
- Implementing integrated smart energy management solutions for load balancing, scheduling, and demand response to enhance grid stability and reduce operational costs.
- Promote electric vehicles and bicycle sharing with expanded infrastructure and incentives to reduce transportation emissions.
- Employ rainwater harvesting, greywater recycling, and comprehensive waste composting as part of campus-wide resource conservation efforts.
- Pursue further inter-institutional and industry partnerships for research commercialization, faculty and student development, and consultancy projects.
- Deploy improved techniques and tools for accurate carbon emission monitoring and aim for certified reduction targets.

Photo Gallery



3-Phase timer circuits for the Classrooms and Single-Phase timer circuits for the ACs have been connected in the classrooms so that the lights and ACs are not kept switched on even when there is no class going on and the electricity wastage is reduced thus saving electricity bills.



*40 kW Grid-Connected Rooftop Solar Panels installed in IEM Newtown campus
generating 320 kWh/day*



Installation of Smart Meters

Sustainability Development Goal 8

Preamble

The Institute of Engineering Management (IEM), Kolkata commits to fostering inclusive and sustainable economic growth, productive employment, and decent work for all, in line with Sustainable Development Goal 8 (SDG 8). IEM integrates sustainable economic development with environmental stewardship and social well-being by promoting innovation, entrepreneurship, skill development, and ethical work practices.

Vision and Mission

- **Vision:** To emerge as a leading institution that nurtures innovative, skilled professionals contributing to sustainable economic growth and socially responsible employment.
- **Mission:** To provide high-quality education and training to empower students and staff with skills, ethics, and opportunities needed for decent work and economic prosperity.

Key Achievements

- ✚ **Entrepreneurship and Innovation:**
 - Supported over 219 student start-ups through incubation programs providing mentorship, financial assistance, and infrastructure.
 - Hosted intensive hackathons, ideathons, and business plan competitions to foster innovation and entrepreneurial mind-set.
 - Active Institution Innovation Council facilitating start up culture and idea commercialization.
- ✚ **Employability and Skill Development:**
 - Corporate Resource Centre (CRC) enabled internship and placement opportunities, achieving over 95% placement rate.
 - Organized career counselling, workshops, and industry talks to bridge skill gaps.
 - Mentor-mentee schemes provide holistic development including professional and personal guidance.
- ✚ **Research and Consultancy for Economic Growth:**
 - Secured research grants totalling over Rs. 54.38 Crore from government and industry sources.
 - Published over 5,700+ research outputs including patents, journal articles, and books contributing to knowledge-driven economy.
 - Engaged in projects on sustainable energy, carbon footprint analysis, and green technologies enhancing economic resilience.
- ✚ **Sustainable Work Environment and Ethical Practices:**
 - Instituted non-discriminatory, transparent grievance redressal mechanisms ensuring supportive workplace.
 - Promoted gender equality and diversity in hiring and academic engagement.
 - Adoption of fair remuneration and adherence to international labour standards.

Economic and Employment Impact of Energy Initiatives

- IEM promotes decent work and economic growth by fostering sustainable work ethics through the Office of Sustainability. This includes consultancy projects, student internships, and funded research that contribute to economic development.
- The university has established multiple funded research projects related to energy sustainability, generating economic value and enabling skill development for faculty and students. Five national-level grant-in-aid research projects have been successfully completed or are ongoing.
- The Office of Sustainability actively promotes energy audits, environmental assessments, and consultancy services. An internal electrical energy audit for UEM campus was conducted to analyse consumption patterns and identify savings, leading to effective cost management through technologies like smart timers and automated LDR-based lighting systems.
- Technical visits to thermal power plants and emission auditing have not only provided academic exposure but also contributed to environmental compliance assessments and policy inputs, enhancing institutional competencies and creating consultancy opportunities.
- The institution incentivizes innovation with seed grants (~Rs.2.99 crore disbursed), enabling 219 student start-ups and 44 patents, contributing to employment generation and entrepreneurship.

Community Engagement and Social Entrepreneurship

- Various student and faculty groups, including provision of free education to underprivileged students, food and medical aid, environmental awareness, and disaster relief efforts, undertake multiple community outreach activities.
- The student society "OPTICA" promotes educational support to marginalized groups, advancing social inclusion and aligning with different SDG.
- Workshops such as "Train the Trainers" for school teachers on zero waste and circular economy underscore IEM's role in fostering social entrepreneurship and sustainability awareness.
- The Pet Society cares for stray animals around the campus, providing medical treatments and fostering compassionate social responsibility.
- Regular cultural and national event celebrations foster social cohesion and promote citizenship values in alignment with SDG 16.

Collaboration and Partnerships

- IEM has formed over 27 functional MoUs with national and international universities, industries, and government agencies supporting research, faculty/student exchange, internships, and project collaborations.
- Notable partnerships include a consultancy and internship engagement with Reliance Industries, enhancing linkages between academia and industry for real-world impact.
- Collaborative projects with bodies such as the Ministry of Environment, Forest, and Climate Change, Jadavpur University, and the S.N. Bose National Centre for Basic Sciences underpin innovation in renewable energy and environmental sustainability.
- The institution actively participates in key regional forums such as Confederation of Indian Industry (CII) and organizes international seminars to facilitate knowledge exchange on sustainable technologies.

- IEM offers generous financial support for faculty and student participation in international conferences, patent filing, and research dissemination, fostering a vibrant research and innovation ecosystem.

Data and Metrics

Category and Metric/Indicator	Value/Number
Rooftop Solar Panel Capacity (Infrastructure)	40 kWh
EV Charging Stations (Infrastructure)	Installed (2 number)
MoUs with Global Platforms (Entrepreneurship and Startups)	Multiple
Innovation Events/Hackathons (Entrepreneurship and Startups)	Several per year
Financial Support for Startups & Research (Entrepreneurship and Startups)	Rs. 130+ lakh (estimated total)
Partnerships (Lions Club, Rotary Club, NGOs) (Community Engagement)	Active
Outreach Programs Conducted (Community Engagement)	Numerous
Corporate Resource Center Placement Rate in 2024-25 (Sustainable Economic Growth)	Over 95%
Research & Consultancy Grants (Rs.) (Sustainable Economic Growth)	Rs. 53.59 crore
Total Research Outputs (Patents, Articles, etc.) (Sustainable Economic Growth)	5700+
Hackathons & Innovation Programs (Sustainable Economic Growth)	Numerous
National Hackathon Win (Team “DarkSwag”) (Awards & Recognition)	Winner at Nasscom 10k Startup Hackathon

Challenges

- Limited financial and infrastructural resources can constrain the scaling up of energy initiatives, research projects, and community engagement activities. Investment in cutting-edge technology and skill development remains a challenge.
- Monitoring and auditing emissions, executing energy audits, and integrating renewable energy systems require sophisticated tools and specialized expertise.
- Maintaining consistent sustainable work ethics and community participation demands continuous awareness, motivation, and cultural change management.
- Ensuring that economic growth through energy projects translates to decent work with adequate pay, safety, and equitable opportunities remains complex.
- Managing diverse partnerships across academia, industry, government, and community stakeholders requires effective communication and aligned interests.

Future Plans

- Ramp up rooftop solar and biogas installations with enhanced monitoring systems.
- Expand community programs linking education, healthcare, and sustainable livelihood with energy initiatives.
- Formalize additional MoUs with government bodies, industry, and international academic partners for joint research, consultancy, and training.

- Foster equitable, safe, and sustainable job opportunities through capacity building and skill development aligned with SDG 8 targets.
- Continue and diversify sustainability trainings, seminars, and green campus campaigns to reinforce behavioural change.

Photo Gallery

PLACEMENT
RECORDS



2024 - 2025

Total 797 jobs offered
for 2025 passout
batch by 44
companies

IEM CREATIONS

PLACEMENT

RECORDS 2024-25



PLACED-6



PLACED-4



PLACED-24



SASKEN

PLACED-10



PLACED-6



PLACED-1



PLACED-226



PLACED-3



PLACED-3



PLACED-1



PLACED-3



PLACED-1

PLACEMENT

RECORDS 2024-25



PLACED-47



PLACED-1



PLACED-7



PLACED-3



PLACED-1



PLACED-1



PLACED-3



PLACED-6



PLACED-1



VIKRAN
ENGINEERING & EXIM PVT.LTD
(A Reliance Retail Venture Company)

PLACED-2

PLACEMENT

RECORDS 2024-25



PLACED-16



PLACED-30



PLACED-3



PLACED-3



PLACED-1



PLACED-6



PLACED-2

PLACEMENT

RECORDS 2024-25

SL NO	COMPANY NAME	PAY PACKAGE (LPA)	TOTAL OFFERS
1	MAERSK	10.83	4
2	SMS GROUP	5.5	4
3	AMI	6	13
4	Godrej Infotech	4	2
5	ORACLE	19.18	6
6	GREYB	7	6
7	Infosys Specialist Programmer	9.5	2
8	RSMUSI	7.7	3
9	VISTEON	7	10
10	MICROSOFT	50	1
11	COGNIZANT GENC	4	71

SL NO	COMPANY NAME	PAY PACKAGE (LPA)	TOTAL OFFERS
12	COGNIZANT GENC NEXT	6.75	8
13	PWC	4.99	7
14	EXIDE	6	6
15	SASKEN	5	6
16	INFOSYS SE	4.6	76
17	TCS NINJA	3.3	207
18	TCS DIGITAL	7	76
19	TCS PRIME	9	47
20	LTI MINDTREE	4.05	95
21	CAPGEMINI	7.5	5
22	CAPGEMINI	6.75	15

SL NO	COMPANY NAME	PAY PACKAGE (LPA)	TOTAL OFFERS
23	CAPGEMINI	4.25	83
24	LEXMARK	10.5	5
25	Titagarh Rail Systems	5.5	6
26	EY GDS	4.83	3
27	IEMA	3.64	2
29	Skipper Limited	5.5	4
30	UST GLOBAL	10	1
31	Control Print Limited	3	1
32	Keyence India	5.9	1
33	DREAMWORLD PACKAGING	3.2	2

SL NO	COMPANY NAME	PAY PACKAGE (LPA)	TOTAL OFFERS
34	NEXTGEN PLASMA	3	1
35	PAHARPUR COOLING TOWERS	3	3
36	ALGO ENERGY TECH VENTURES	6	1
37	VIKRANT ENGINEERING	3	2
38	KSB LIMITED	3.6	2
39	RELIANCE INDUSTRIES	7.5	1
40	Deloitte USI	4.5	4
41	IBM	4.5	2
42	ARC DOCUMENT	5	1
43	Surelia Infosystems	2.4	1
44	Hashedin	8.1	1

PLACEMENT

RECORDS 2024-25

SL NO	COMPANY NAME	TOTAL OFFERS
1	eQ Technologic	2
2	ORACLE	6
3	PWC	47
4	IBM	44
5	PharmaQuant Insights Private Limited (PPO - Internship)	1
6	ACCENTURE - ADV ASE	6
7	ACCENTURE - ASE	143
8	Tismo Technology	2
9	JMAN	6
10	Nevaeh Technology	3
11	SMS GROUP	6
12	CESC LTD	1
13	WORLEY	3
14	ITC INFOTECH	30
15	KEYENCE	1
16	GREYB	15
17	GREYB	1
18	Incture	3
19	Celebal Technologies (PPO)	1
20	221B Baker Street	1
21	IEM LABS	6

SL NO	COMPANY NAME	TOTAL OFFERS
22	VIKRANT ENGINEERING	2
23	Telaverge Communications	3
24	VODAFONE IDEA	6
25	RSM US LLP	3
26	Reliance Retail	7
27	JUSPAY	1
28	TCS PRIME	27
29	TCS DIGITAL	83
30	TCS NINJA	116
31	SASKEN	10
32	CALSOFT	3
33	WORKZ	1
34	DXCORR	2
35	HashedIn	1
36	rtCamp Solutions	1
37	Deloitte USI	8
38	ZINFI	6
39	CAPGEMINI	24
40	CAPGEMINI	2
41	Futures First (Internship)	4
42	Cognizant	24

Sustainability Development Goal 9

Preamble

The Institute of Engineering Management (IEM) Kolkata is committed to fostering resilient infrastructure, promoting inclusive and sustainable industrialization, and encouraging innovation as integral components of sustainable development. Recognizing the critical role of advanced technology and robust infrastructures, IEM actively develops research, partnerships, and academic initiatives addressing current economic, environmental, and societal challenges.

Vision and Mission

- **Vision:** To develop cutting-edge infrastructure that supports advanced teaching, research, innovation, and sustainable industrial growth in alignment with global sustainability principles.
- **Mission:** To catalyse innovation-driven entrepreneurship, synergize industry-academia linkages, and nurture technology development for sustainable solutions.

Key achievements

- Established 24 research centers and 14 innovation hubs with strong government funding support.
- Helped incubate around 219 start-ups by faculty and students, fostering entrepreneurship.
- Provided advanced digital infrastructure including high-speed internet, smart classrooms, and modern labs.
- Led sustainability projects like CO₂ capture, solar-powered devices, and microbial fuel cells for waste treatment.
- Implemented green campus features such as solar panels, biogas electricity, EV charging, and waste composting.

Research and Innovation Ecosystem

- IEM has 24 Centers of Excellence and 14 Innovation and Entrepreneurship Development Centers (IEDCs) funded by government agencies like DST, AICTE and practicing interdisciplinary research.
- The Research and Development Cell manages projects with over Rs. 54.38 crore in grants and encourages patents, having published 144 patents recently.
- Faculty and students have incubated approximately 219 startups, strengthening innovation culture on campus.
- The Office of Sustainability focuses on sustainable technologies and energy research, securing grants for projects on CO₂ capture, micro-wind turbines, solar-powered robotic fish, solar-powered desalination and microbial fuel cells for waste treatment.
- Regular workshops, webinars, sustainability seminars, hackathons, ideathons, and patent awareness programs are conducted.

Infrastructure and Facilities

- The campus offers high-speed 3.4 GBPS internet, 84 modern classrooms with ICT facilities, 15 seminar halls, and 52 advanced laboratories.
- The central library provides access to 20,000+ e-journals including IEEE, Springer, ACM, and SAGE, along with 400 computers.
- Specialized software for virtual/physical labs include Matlab, LTSpice, CST Studio, Weka, and PSpice.
- Energy efficiency is promoted through 40 kWh rooftop solar panels, motion sensor lighting, energy audits, and plans for a 3kVA biogas electricity system.
- Facilities include hostels, sports complexes, EV charging stations, bicycle sharing, green campus initiatives, and infrastructure for waste segregation and composting.

Entrepreneurial and Start-up Support

- The campus offers high-speed 3.4 GBPS internet, 84 modern classrooms with ICT facilities, 15 seminar halls, and 52 advanced laboratories.
- The central library provides access to 20,000+ e-journals including IEEE, Springer, ACM, and SAGE, along with 400 computers.
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- Facilities include hostels, sports complexes, EV charging stations, bicycle sharing, green campus initiatives, and infrastructure for waste segregation and composting.

Community Engagement and Collaborations

- The campus offers high-speed 3.4 GBPS internet, 84 modern classrooms with ICT facilities, 15 seminar halls, and 52 advanced laboratories.
- The central library provides access to 20,000+ e-journals including IEEE, Springer, ACM, and SAGE, along with 400 computers.
- Specialized software for virtual/physical labs include Matlab, LTSpice, CST Studio, Weka, and PSpice.
- Energy efficiency is promoted through 40 kWh rooftop solar panels, motion sensor lighting, energy audits, and plans for a 3kVA biogas electricity system.
- Facilities include hostels, sports complexes, EV charging stations, bicycle sharing, green campus initiatives, and infrastructure for waste segregation and composting.

Data and Metrics

Category and Metric/Indicator	Value/Number
Centers of Excellence (Research & Innovation)	24
Innovation & Entrepreneurship Development Centers (Research & Innovation)	14
Research Grants Secured (Rs.) (Research & Innovation)	54.38 Crore
Patents Published (Research & Innovation)	144

Start-ups Incubated (Research & Innovation)	219
Scopus-Indexed Publications (Research & Innovation)	1645
Active Ph.D. Scholars (Research & Innovation)	124
Internet Bandwidth (Infrastructure)	3.4 GBPS
Classrooms with ICT (Infrastructure)	84
Laboratories (Infrastructure)	52
E-Journals Access (Infrastructure)	20,000+
Rooftop Solar Panel Capacity (Infrastructure)	40 kWh
EV Charging Stations (Infrastructure)	Installed (2 number)
MoUs with Global Platforms (Entrepreneurship & Start-ups)	Multiple
Innovation Events/Hackathons (Entrepreneurship & Start-ups)	Several per year
Financial Support for Start-ups & Research (Entrepreneurship & Start-ups)	Rs. 3.8 crore (estimated total)
Partnerships (Lions Club, Rotary Club, NGOs) (Community Engagement)	Active
Outreach Programs Conducted (Community Engagement)	Numerous
National Hackathon Win (Team “DarkSwag”) (Awards & Recognition)	Winner at Nasscom 10k Startup Hackathon

Challenges

- Despite significant research achievements, securing continuous and larger-scale funding remains challenging in a highly competitive grant environment.
- Translating research innovations into commercially viable start-ups requires strengthening industry linkages and business incubation expertise.
- Infrastructure upgrades are needed to keep pace with rapidly evolving technology and software requirements, especially for emerging fields such as artificial intelligence and green energy.
- There is a need to increase interdisciplinary collaboration across different departments to solve complex real-world problems.
- Effective waste management and sustainable resource utilization on campus require further development to fully realize sustainability goals.
- Community engagement efforts, while impactful, face challenges in scaling outreach sustainably and ensuring broader participation.
- Limited awareness and reach of MoUs and industry partnerships among the wider student body sometimes restrict access to collaborative opportunities for all.

Future Plans

- To further increase research funding and diversify sources, including international agencies and private sector co-sponsorships.
- Upgrade laboratory infrastructure with advanced simulation and experimental tools focusing on AI, IoT, clean energy, and smart technologies.
- Strengthen entrepreneurship support with dedicated incubation centers, innovation challenges, and startup accelerators.

- Launch cross-departmental interdisciplinary research programs tackling climate change, sustainable agriculture, and urban infrastructure.
- Implement campus-wide waste reduction, recycling, and green energy projects as part of the Office of Sustainability's strategic roadmap.
- Expand digital learning offerings by developing joint certificates and specialized courses with MOOC platforms and industry partners.
- Scale community initiatives through volunteer networks, capacity building workshops, and awareness campaigns with local stakeholders.
- Establish transparent communication channels and engagement strategies to make MoUs and partnership benefits accessible to all students and faculty.

Acknowledgement

Gratitude is expressed to the Office of Sustainability and all contributing faculty, researchers, and students whose efforts have been fundamental in compiling this SDG 9 report. Support and collaboration from industry partners, government agencies, and academic institutions have been invaluable. Appreciation is extended to the administrative and technical staff for maintaining state-of-the-art infrastructure supporting innovation and entrepreneurship. This work has been made possible through the collective dedication towards fostering sustainable industrialization, innovation, and resilient infrastructure.

Photo Gallery



Wealthy wise, a start up by Students of IEM, was established with a mission to reduce plastic consumption



Sconto. India's biggest student lifestyle community, was established by IEM alumni.



ZeroDollar Security, a cybersecurity startup by alumni of IEM



Mentor, India's first upskilling platform were founded by IEM alumni



Entrepreneur | Founder, Director at Darkish Red Ventures Pvt. Ltd®, Techtora Consultancy Pvt. Ltd. And Upraised®



Executive Director | I Educate Myself Daily Foundation & deSolXperts Research & Development Private Limited | Social Entrepreneur



Founder @ Veryze Technologies Pvt. Ltd. | IEM alumnus (Dept. of ECE, Batch 2019)



Team "DarkSwag" from IEM developed "The God's EYE," a citizen journalism app that enables users to report and prioritize local issues for government action while combating hoaxes through community validation

Sustainability Development Goal 10

Preamble

In 2024-25, Institute of Engineering & Management, Kolkata is committed to reducing inequalities within and among communities by ensuring equal opportunity and inclusive growth aligned with Sustainable Development Goal 10. The institute fosters diversity, social inclusion, and equitable access to education and resources through focused policies, programs, and collaborations.

Mission and Vision

- **Vision:** To create an inclusive learning environment that empowers all individuals regardless of socio-economic background, gender, ethnicity, or disability.
- **Mission:** To deliver equitable education, implement inclusive policies, and promote social justice through awareness, capacity building, and community outreach.

Programs and Initiatives

- Humanitarian outreach at Faridpur on 4th July 2025: Distributed educational kits, lunch, sweets, and medicines to 103 especially abled children, orphans, and 48 elderly people, showing direct support to vulnerable populations.
- Inauguration of Vocational Computer Training Center at Contai on 17th July 2025: Provided digital literacy and employability skills training to local youth and women, fostering self-reliance and sustainable livelihood.
- Ongoing empowerment project for underprivileged women and specially-abled children: Over one year, enabling skill development in computer literacy, robotics, stitching, cooking, and jam/jelly making to boost confidence and job readiness.
- Donation drive on 18th July 2025: Provided sewing machines and mosquito nets to an old age home in Contai, enhancing residents' comfort and self-sufficiency.
- Free Health Check-Up Camp held on 1st July 2025: Organized in collaboration with IEM, around 50 persons benefited from health check-ups promoting health awareness among underserved communities.
- Children's Day celebration on 14th November 2024: Distributed 300 food packets and sweets to deserving children at Sucheta Nagar Balika Vidyalaya Nalanda Vidyapeeth, supporting child nutrition and well-being.
- Cloth and food distribution on 3rd October 2025 at Duttapukur: Delivered clothes to 250 people and food to over 500 individuals, coupled with felicitations for students excelling in Class X and XII board exams.
- Mental Health Awareness Rally on 10th October 2025: Organized a rally to promote emotional well-being and reduce stigma around mental illness, recognized with an award from Lions Club International.
- Curriculum integration at Institute of Engineering and Management (IEM): Courses incorporate gender sensitivity, human values, ethics, and sustainability topics, promoting inclusivity and responsible citizenship among 8185 students.
- Social programs by IEM in collaboration with NGOs and clubs: Activities include health check-up camps, hygiene and health workshops, outreach to childcare and old age

homes, embedding constitutional and citizenship values to foster harmony and reduce societal inequalities.

- IEM CSR Club and Inner Wheel Club, IEM celebrated SDG 10 by donating diapers, planting trees, and sharing refreshments with cerebral palsy patients at Cheshire House, Tollygunge, on Children's Day 2025. Ongoing visits since 2018 foster inclusion, joy, and well-being, echoing the SDG 10 pledge to reduce inequality

Inclusive Education and Social Justice Initiatives

- Institute of Engineering and Management (IEM), Kolkata, integrates crosscutting topics such as gender sensitivity, human values, professional ethics, and sustainability into the curriculum, with over 5366 value-added courses offered during the year to 32,192 enrolled students to foster inclusivity and social responsibility.
- The Internal Complaints Committee (ICC) at IEM conducts practical gender sensitivity activities including fieldwork, community outreach, and awareness campaigns, providing students real-world engagement in social justice.
- IEM supports diverse learners by assessing learning levels and organizing special programs for slow and advanced learners, offering bridge courses, GATE coaching, and access to approximately 25,000 free online courses from platforms like Coursera, LinkedIn Learning, and NPTEL to ensure equitable academic support.
- The institute promotes regional, cultural, and socio-economic inclusivity by honouring regional celebrations such as Chhath festival for Bihar and Jharkhand students, encouraging vernacular language use in classrooms, and organizing impactful socio-economic awareness events like IEM-Model United Nations and tree plantation drives.
- Social development activities at IEM and its collaborating clubs (Lions, Rotary, Inner Wheel) include health check-up camps, hygiene workshops, cleanliness drives, and visits to child care and old age homes, fostering community engagement and compassion among students and faculty.

Infrastructure and Accessibility

- The Institute of Engineering and Management (IEM), Kolkata, has well-equipped infrastructure featuring 114 classrooms, 66 laboratories, 21 seminar halls, and 3132 computer systems. Classrooms are ICT-enabled with LCD projectors, Wi-Fi, and IPV6 LAN connectivity to enhance learning experiences for 8,185 students.
- Accessibility provisions at IEM include disabled-friendly infrastructure such as ramps and lifts for easy access to classrooms and centers, disabled-friendly washrooms, tactile path lights, assistive technologies like screen-reading software, and available human assistance (reader, scribe) to ensure barrier-free education.
- The campus is equipped with fast internet (3.4 Gbps), secure Wi-Fi coverage throughout, and nearly 1000 CCTV cameras ensuring safety and connectivity. Facilities also include digital libraries with more than 845,000 books and multiple e-resources supporting equitable access to learning materials.

Partnerships and Collaborations

- Institute of Engineering and Management (IEM), Kolkata has signed MoUs with global e-learning platforms Coursera, Microsoft, and LinkedIn Learning to provide free licenses to all students for online skill development courses.
- IEM collaborates with government bodies like the Department of Science and Technology (DST), Ministry of MSME, West Bengal government, and academic institutions such as Jadavpur University to support innovation, research, and entrepreneurship.
- The Institute partners with NGOs and social clubs like Lions Club of Kolkata IEM, Rotary Club, Inner Wheel Club, and Kolkata Nivedita Shakti for community outreach activities that include health camps, charity events, literacy drives, and social welfare programs, supported through formal collaboration frameworks.

Data and Metrics

Metric / Activity with Value	Notes / Events / Details
Number of value-added courses for transferable and life skills	Over 5400 value-added courses offered during the year to 32,192 enrolled students
Number of students undertaking field work, projects, internships	Over 5000 students involved in fieldwork, projects, internships enhancing practical skills
Pass percentage of final year students	Over 1400 students successfully passed final year examinations
Number of workshops/seminars on entrepreneurship, research methodology, IPR during the year	Over 65 workshops/seminars organized to build entrepreneurial, research and innovation capacities
Number of start-ups and student-led innovations supported	Over 200 student start-ups nurtured and over 500 innovations incubated with mentorship and seed funding support
Number of beneficiaries in humanitarian outreach programs	Over 100 specially abled children and orphans, 48 elderly people supported at Faridpur outreach; 300 children fed on Children's Day
Research Funding (INR)	Over INR 56.18 Cr
Student to Mentor Ratio	1:17.87 personalized guidance

Challenges

- Keeping curriculum updated to match rapid changes in industry and technology while ensuring faculty training remains a significant task.
- Securing adequate external financial support for research, innovation, and social outreach activities.
- Catering to diverse learning aptitudes including slow and advanced learners requires sustained support and differentiated instruction.
- Addressing stigma associated with mental health and socio-economic disparities in the community.
- Balancing socio-cultural diversity with academic excellence while fostering harmony within a diverse student body;

Opportunities

- Continuous benchmarking, industrial collaboration, and inclusion of trending technologies like AI and generative AI across disciplines.
- Internal funding schemes including grant-in-aid and seed money totalling over INR 5 crores foster research and development, innovation, and community service.
- Extensive access to thousands of free online courses from Coursera, LinkedIn, and NPTEL, alongside bridge courses and special coaching, promote inclusive education.
- Successfully conducted mental health awareness rallies and broad community welfare initiatives have been internationally recognized and continue to reduce social stigma.
- Inclusive policies such as regional festival observance, use of vernacular languages in teaching, and socio-economic awareness events enrich the educational environment and strengthen societal cohesion.

Annual Goals (2025-2026)

- Expand vocational training programs, including computer literacy and skill development, targeting underprivileged youth and specially-abled individuals to boost employability and self-reliance in marginalized communities.
- Increase outreach and humanitarian support activities such as food and essential material distribution, health camps, and educational support for orphans, elderly, and vulnerable groups in collaboration with social clubs and NGOs.
- Strengthen partnerships with educational institutions, NGOs, and government bodies to enhance technology access, scholarship opportunities, and sustainable livelihood initiatives aligned with inclusive growth goals.
- Promote cultural inclusivity and social justice through community events, awareness campaigns, student felicitation programs, and mental health initiatives to foster unity and reduce social stigma.
- Enhance digital and online learning platforms via collaborations with providers like LinkedIn Learning and Coursera to reach diverse learners with flexible education resources, contributing to reducing inequalities in education access.

Acknowledgements

The achievements under Sustainable Development Goal 10 (Reduce Inequalities) would not have been possible without the collaborative efforts and unwavering support of multiple stakeholders. Grateful acknowledgment is extended to the Institute of Engineering and Management, Kolkata, and its faculty and students for their dedicated involvement in educational and outreach initiatives. The Lions Club of Kolkata IEM and its members played a pivotal role in community service programs targeting vulnerable groups. Appreciation is also due to NGOs, government bodies, and industry partners, including Coursera and LinkedIn Learning, whose partnerships enabled access to vital resources and digital learning platforms. Their collective commitment advances social inclusivity and equity.

Photo Gallery



Joyful faces of children and faculties distributing gifts during the Faridpur outreach



Children's Day celebration at Cheshire House, Tollygunge on 15th November 2025



Free Health Check-Up Camp organized by Lions Club of Kolkata IEM and IEM, Kolkata on National Doctors' Day, 1st July 2025, at IEM Management House.



Inauguration of Vocational Computer Training Center at Contai by Lions Club of Kolkata IEM on 17th July 2025, empowering youth and women through digital literacy and skill development

IEM
INSTITUTE OF ENGINEERING & MANAGEMENT
Good Education, Good Jobs

Rotary
Calcutta Renaissance
RID 3291

UEM
UNIVERSITY OF ENGINEERING & MANAGEMENT
Good Education, Good Jobs

CSR Club, IEM
in collaboration with Rotary Club of Calcutta Renaissance
partnering with Treasures of Innocence organizes a
Computer Literacy & STEM Education Program

Date: 23rd August, 2025
Venue: 21/2, Pranabananda Road , Garia

Supported By:
Laureates Learning Foundation

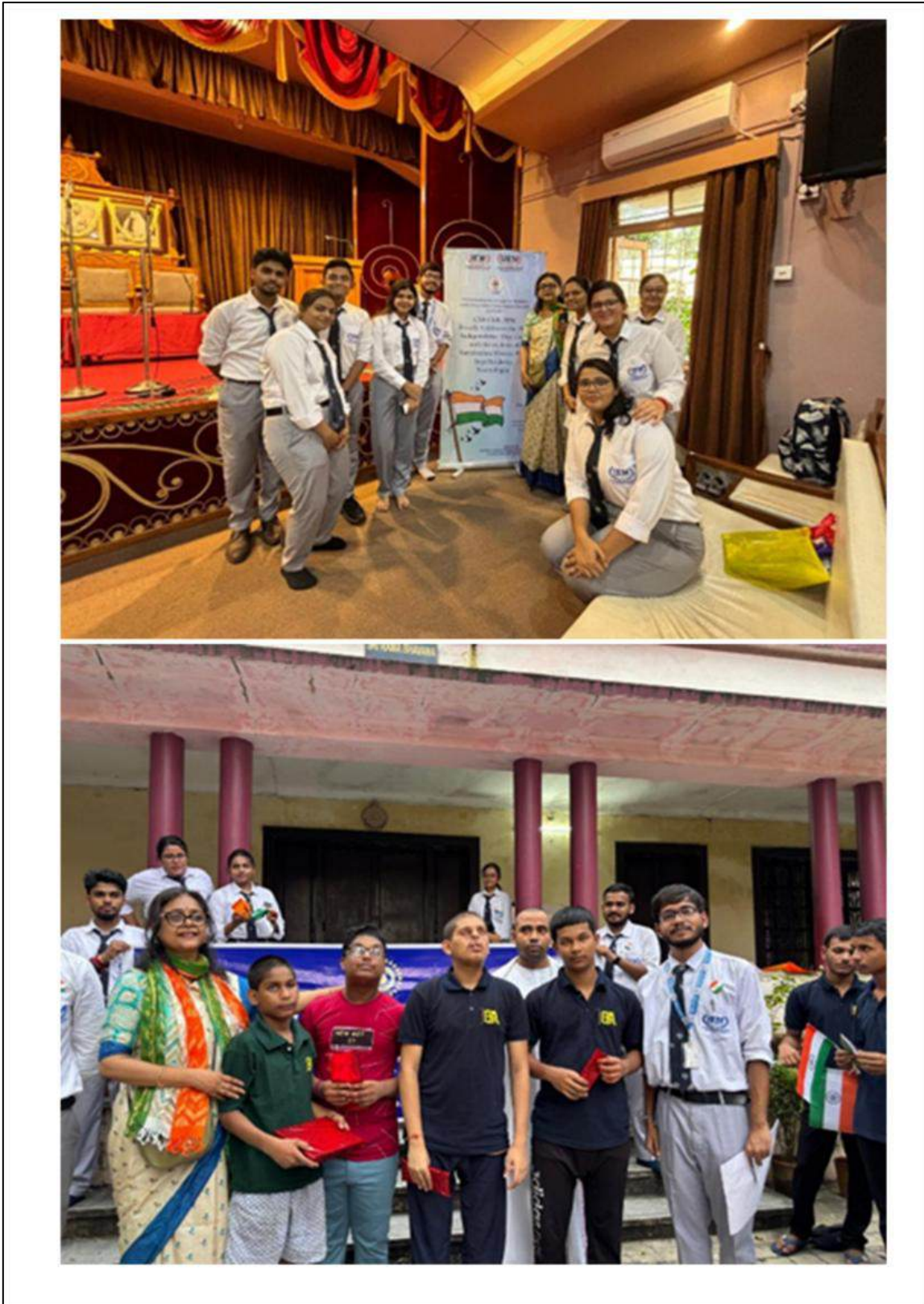
UNITE FOR GOOD



Computer Literacy & STEM Education Program held on 23rd August 2025 at 21/2, Pranabananda Road, Garia



Empowering Underprivileged Women and Specially-Abled Children – an ongoing Lions Club of Kolkata IEM initiative providing skill training in computer literacy, robotics, stitching, cooking, and jam/jelly making to enhance confidence and employability



Independence Day Celebration with Blind Students – CSR Club IEM celebrated the 79th Independence Day with the students of Ramakrishna Mission Blind Boys' Academy, Narendrapur



Student Society "OPTICA" promotes SDG 10 by providing education to underprivileged students.

Sustainability Development Goal 11

Preamble

The Institute of Engineering & Management (IEM), Kolkata, founded in 1989 in the IT hub of Sector V, Salt Lake, stands as the leading private engineering college in West Bengal. With a steadfast commitment to holistic education and sustainable development, IEM has integrated the United Nations' Sustainable Development Goals (SDGs) into its institutional framework. This report focuses on SDG 11, Sustainable Cities and Communities, showcasing IEM's initiatives, achievements, and contributions toward creating inclusive, safe, resilient, and sustainable urban environments during the academic year 2024-2025.

Mission and Vision

- **Vision:** To be a globally recognized educational institution known for outcome-based education and application-oriented research that contributes to sustainable development and community well-being.
- **Mission:** To assist students to understand and enjoy the seamless nature of knowledge and encourage them to apply acquired knowledge to practical use, so that they become worthy, socially responsible good human beings sought after for their leadership qualities. To foster creativity, innovation, and excellence through example-based teaching-learning processes while addressing societal challenges including sustainable urbanization.

Programs and Initiatives

- IEM/UEM published measurable progress toward SDG 11 and secured ranking in THE Impact Rankings 2024 for sustainability SDGs
- Total campus area of 12,141.03 sq.m with green area of over 3,200 sq.m, featuring sustainable buildings with LED lighting and IGBC-aligned practices
- Completed comprehensive energy usage audit documenting 1278203 kWh annual consumption with smart lighting, timer circuits, and LDR-based automation systems
- Installed 2 EV charging stations and implemented bicycle sharing system to promote clean transportation on campus
- Recognized as "Best Engineering college in Eastern India" by Times of India with Times Power Icon Award 2024
- Implemented 40 kW grid-connected rooftop solar PV system generating 320 kWh of clean energy daily, monitored via smart meters for sustainable energy production
- Established biogas energy infrastructure plans featuring a 1000-liter digester and 1000-liter gas storage for renewable energy generation from organic waste

Academic Integration and Curriculum

- Environmental Studies offered across all undergraduate programs to increase understanding of environmental and sustainability issues
- 17 Sustainable Development Goals and field project work related to SDGs included in curriculum across all programs with specific focus on urban sustainability

- Mandatory course "Sustainability, Climate Action, and Environmental Science" offered to 4th semester B.Tech students embedding sustainability concepts across the institution
- Program Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs) framed incorporating sustainable development principles and urban planning concepts
- Courses on Constitution of India, Economics, Organizational Behavior, Principles of Management integrate socio-cultural and urban governance topics
- Over 5,400 value-added courses offered during 2024-25 imparting transferable and life skills including sustainable urban practices, with over 32,000 students enrolled
- Sustainable development pilot projects and workshops provide experiential learning, encouraging innovation aligned with sustainability goals

Research Contributions

- 1645 Scopus-indexed research publications during 2024-25 including significant contributions to sustainable infrastructure, green technologies, and urban planning
- Energy sustainability research including microgrid systems, greenhouse gas (GHG) monitoring, and energy footprint analysis conducted by Office of Sustainability
- Over INR 2.99 cr. provided as seed money to over 150 teachers for research projects, with 94 out of 144 proposals approved (total funding: Rs. 2.99 crores)
- INR 54.38 Cr in grants received from government and non-governmental agencies for research projects related to sustainability and environmental conservation
- Nearly 14 Innovation and Entrepreneurship Development Centers (IEDCs) and 24 Centers of Excellence established supporting sustainable innovation including IEM Institute of Fundamental Research and Center of Excellence for Innovation in AI
- 144 patents filed through IPR Cell with institutional support for patent filing related to sustainable technologies and environmental solutions
- Real-time online measurement of GHG emissions in thermal power plants supported by Ministry of Environment and UNFCCC
- Estimation of energy and environmental footprints with economic assessment of micro-grids in India
- Technical visits to thermal power stations (Sagardighi, Raghunathpur, and Koderma) conducted by faculty to measure and analyze flue gas emissions, providing real-world exposure for students and researchers on cleaner combustion technologies and emission reduction strategies

Renewable Energy and Energy Efficiency Initiatives

Solar Power

- IEM has implemented a 40 kW grid-connected rooftop solar photovoltaic system generating approximately 320 kWh of clean energy daily, monitored via smart meters
- Regular electricity audits cover load and consumption patterns to identify saving opportunities, including smart timer circuits and LDR-based automation to reduce wastage

Biogas Energy

- Plans for a biogas plant featuring a 1000-liter digester and 1000-liter gas storage are underway to generate renewable energy from organic waste, reducing dependency on traditional fossil fuels and promoting waste-to-energy conversion

Energy Conservation Technologies

- Energy-efficient LED lighting and sensor-based smart lighting systems have been installed across campus to optimize electricity use
- Electric appliance timers and smart automation further conserve electricity, especially in classrooms and air-conditioned spaces
- 3-Phase timer circuits for classrooms and Single-Phase timer circuits for ACs prevent unnecessary power consumption when spaces are unoccupied, reducing electricity wastage and operational costs
- Occupancy sensors and LDR-based automation systems installed across campus buildings to minimize wastage and enhance energy efficiency
- Campus-wide energy audit conducted analyzing energy consumption of lighting, fans, ACs, and auxiliary electrical appliances across buildings and laboratories with detailed load measurements supporting informed energy savings planning

Sustainable Transport

- Sustainable mobility is encouraged via bicycle sharing programs and electric vehicle charging infrastructure on campus
- 2 EV charging stations installed on campus promoting electric vehicle adoption and clean mobility
- Initiatives are in place to reduce vehicular emissions by promoting electric and hybrid vehicles
- Bicycle sharing system implemented for sustainable campus transportation
- Restrictions on conventional vehicles within campus to reduce emissions and foster clean mobility

Community Engagement and Outreach

- Organized multiple community outreach initiatives including health check-up camps, educational material distribution to 103 specially-abled children and 48 elderly people at Faridpur, and vocational computer training center inauguration at Contai
- Conducted blood donation camps, tree plantation programs (Mega Tree Plantation at campus), eye check-up camps at SSKM hospital, distribution of water filters, and empowerment programs for underprivileged communities
- 39 extension and outreach programs conducted through NSS/NCC including Swachh Bharat initiatives, AIDS awareness, gender sensitization programs with 5,482 students participating
- Free Health Check-Up Camp organized on National Doctors Day (July 1, 2025) serving approximately 50 persons; PulseInnovate project on healthcare; Fight against Cancer awareness programs
- Distribution of 300 food packets and sweets to children at Sucheta Nagar Balika Vidyalaya; felicitation of meritorious students; scholarships provided to 985 students through government schemes and 592 through institutional support
- Sustainability awareness programs, including "Train the Trainers" workshops for school teachers, promote clean energy, zero waste principles, and sustainable urban practices in surrounding communities
- Student-led initiatives foster environmental education and community outreach aligned with SDG goals

Infrastructure for Sustainability

Smart Campus Systems

- 158 LCD projectors and screens, 1278203 kWh annual energy with smart lighting, timer circuits, LDR-based automation, and efficient load scheduling implemented across campus
- 3,202 computer systems for academic purposes, fast internet connectivity of 3.4 GBPS, 24 TVs installed at prominent locations, 130 sound systems, 196 microphones supporting paperless operations
- Campus integrates sustainable infrastructure including LED lighting throughout, 4 smart boards, energy-efficient equipment, and IGBC-aligned sustainable building practices
- Smart energy management systems implemented with plans to expand to 75% of buildings for load balancing, scheduling, and demand response to enhance grid stability

Water and Waste Management

- Rainwater harvesting systems, bore well and open well recharge facilities, waste water recycling for gardening, maintenance of water bodies and distribution systems
- Waste segregation including organic, inorganic, and e-waste disposal supports sustainability goals
- E-waste recycling partnership with Hulladek Recycling Pvt. Ltd. with documented progress (2024-25: 2,169.90 kg e-waste recycled)
- Segregated waste collection with NKDA for daily disposal
- Aerobic sewage treatment with treated water reused for gardening
- Comprehensive waste composting and rainwater harvesting as part of campus-wide resource conservation efforts

Green Infrastructure

- Total campus area of 12,141.03 sq.m with green area of over 3,200 sq.m, featuring sustainable buildings with LED lighting and IGBC-aligned practices
- Campus green and plantation area cover approximately 3,173 m², contributing to promoting ecological balance and biodiversity
- Mega Tree Plantation Program conducted to expand green cover across campus

Collaborations and Partnerships

- 27 functional MoUs with institutions of national and international importance including Harvard Business School, IBM Center for Advanced Studies, University of Manchester, Columbia University, National University of Singapore, University of Sydney
- MoUs signed with LTIMindtree, Capgemini, Pegasystems, Microsoft, Coursera, LinkedIn Learning for academic collaboration, curriculum development, and student training
- CSIR-NEERI partnership for environment and sustainability work at national level
- Participation in National Innovation Challenge for Drone Application Research (NIDAR) by MeitY
- Foreign collaborations with universities in Japan (Iwate Prefectural University, Ryukoku University), France (ESC Rennes School of Business), UK (Brunel University, University of Manchester), USA (University of Nevada Las Vegas, University of British Columbia, Columbia University)
- Partnerships with IEEE, ISHRAE, Institution of Engineers India (IEI), Toastmasters International for knowledge exchange and professional development supporting sustainable practices

- Memoranda of Understanding with government bodies, industry leaders, and academic partners drive research, consultancy, and internships focused on clean energy and sustainability
- Collaboration with industrial players facilitates technology transfer and scaling of renewable energy and sustainable urban development projects

Events and Awareness Programs

- 44 in-house conferences organized, including IEEE IEMCON 2024 at UC Berkeley, IEEE UEMCON 2024 at IBM T.J. Watson Research Center, IRTM 2024 at NIT Calicut, IEEE CCWC 2025 at University of Nevada, Las Vegas, EIRTM 2025 in Paris, focusing on sustainability and interdisciplinary research
- World Environment Day celebration (June 5), highlighting environmental sustainability with eco-friendly practice activities
- Mega Tree Plantation Program (August 6, 2024) at Maya Chakraborty Memorial Playground, Newtown, promoting green urban infrastructure
- Swachh Bharat Abhiyan participation on Gandhi Jayanti with cleanliness initiatives and plastic waste reduction awareness
- National Day Celebrations including Republic Day, Independence Day with patriotic programs and sustainability messaging
- INNOVACION 2025 (March 7-9, 2025) techno-management fest
- SMART Maker Festival 2024 (September 21-22, 2025) with international participation promoting sustainable solutions
- Innovare innovative project competition promoting sustainable solutions
- IEM-UEM Marathon (February 16, 2025) with 1,500 participants promoting fitness, community unity, and environmental awareness
- IEMPACT 2025 cultural festival (February 22-23)
- Basanta Utsav celebrating cultural heritage and community bonding

Data and Metrics

Metric / Activity with Value	Notes / Events / Details
Sustainable Campus Area (sq.m)	12,141.03 total, with 3,173.03 sq.m green area promoting biodiversity and open spaces
Energy Efficiency	Annual energy usage audit completed (1278203 kWh); smart lighting, timer circuits, and efficient load management implemented
Solar Energy Generation	40 kW grid-connected system generating 320 kWh/day; monitored via smart meters
Biogas System	1000-litre digester and 1000-litre storage capacity (planned) for waste-to-energy conversion
EV Charging Stations	2 EV charging points installed to promote electric mobility on campus
Scope 1 Emissions (Campus Vehicles)	23.15 tonnes CO ₂ -equivalent/year
Scope 2 Emissions (Electricity Use)	894.74 tonnes CO ₂ -equivalent/year
Total Annual Carbon Footprint	917.89 tonnes CO ₂ -equivalent/year
E-Waste Recycled	2,169.90 kg e-waste recycled in 2024-25

Waste Management	Recycling and composting initiatives implemented; solid waste managed through controlled facilities
Research Outputs on Sustainability	Over 1645 Scopus-indexed research articles published; faculty engaged in interdisciplinary sustainability research
Community Engagement Projects	Multiple outreach programs focused on environmental awareness, disaster resilience, and education
Academic Curriculum Coverage	Environmental studies and SDG-related projects integrated across undergraduate and postgraduate programs
Collaborations and MOUs	Strategic partnerships with industry and academic institutions supporting sustainable development initiatives
Events Supporting Awareness	Annual cultural, technical, and social events that include themes on sustainability, disaster management, and environmental stewardship
National SDG Rankings	UEM (including IEM) awarded A+ grade in Sustainable Institutional Ranking 2023; scored 75 on SDG 11 India Index 2024-25
Smart Energy Systems Implementation	Target: 75% of buildings by planned completion date

Challenges and Opportunities

Current Challenges

- Managing sustainable growth while maintaining green spaces and environmental quality as campus expands requires continuous planning and resource allocation
- Integrating renewable energy sources such as rooftop solar into the existing campus grid poses challenges in maintaining voltage stability, demand-supply balance, and system flexibility
- Moving toward 100% renewable energy sources requires ongoing technological advancement and infrastructure development
- Renewable sources like solar and biogas suffer from intermittency and dependence on geographic and climatic conditions leading to variability in power generation
- Increasing e-waste from technology upgrades requires enhanced recycling partnerships and circular economy approaches
- Climate change impacts necessitate advanced water conservation technologies, greywater treatment systems, and rainwater harvesting optimization
- Expanding community engagement programs to address broader urban challenges in surrounding areas including pollution, sanitation, and public health
- Ensuring equitable access to digital infrastructure and technology for all students and surrounding communities remains an ongoing challenge and opportunity
- Achieving sustained energy conservation requires continuous awareness and behavioral change among campus users
- Ensuring compliance with energy-saving practices is an ongoing challenge

Opportunities

- Advanced water conservation technologies, greywater treatment systems, and rainwater harvesting optimization can enhance campus water sustainability
- Organic waste composting can be further strengthened to complement biogas production
- Expanding public transport connectivity, increasing EV charging infrastructure, and promoting car-pooling systems for students and staff
- Opportunity to establish dedicated research centers for smart city technologies, sustainable materials, renewable energy, and climate resilience solutions
- Potential to contribute to municipal and state-level urban planning policies through research outputs, pilot projects, and expert consultations
- Initial investments and maintenance costs for renewable infrastructure can be strategically planned with budget optimization and phased upgrades
- Improved techniques and tools for accurate carbon emission monitoring and certified reduction targets

Annual Goals (2025-26)

Carbon Neutrality Target

Achieve carbon-neutral campus status by 2030 through comprehensive renewable energy adoption (expansion of solar PV capacity), energy efficiency improvements, and carbon offset programs

Enhanced Green Infrastructure

Increase green cover to 35% of the total campus area through strategic tree plantation, vertical gardens, green roofs, and biodiversity conservation zones

Smart Campus Development

Implement IoT-based campus management systems for energy monitoring, waste tracking, water quality assessment, and air quality monitoring with real-time data analytics. Expand smart energy management solutions to 75% of buildings with integrated load balancing and demand response systems.

Zero Waste Initiative

Achieve 90% waste diversion from landfills through comprehensive recycling, composting programs, e-waste management, and waste-to-energy projects by 2027

Renewable Energy Expansion

- Increase solar PV system capacity and efficiency to maximize clean energy generation
- Operationalize biogas plants to diversify campus energy supply
- Explore wind energy and advanced energy storage systems
- Implement integrated smart energy management solutions

Sustainable Research Hub

Establish a dedicated SDG 11 Research Centre focusing on urban sustainability, smart cities, green buildings, sustainable transportation, renewable energy integration, and climate resilience with good investment

Community Extension

Expand community outreach to 50 nearby villages and urban settlements with programs on sanitation, waste management, renewable energy awareness, sustainable livelihoods, and urban planning

Water Positive Campus

Achieve water-positive status through advanced rainwater harvesting, 100% wastewater treatment and reuse, groundwater recharge, and water-efficient fixtures across campus

Sustainable Mobility

- Install 10 additional EV charging stations on campus
- Establish an electric shuttle service within the campus
- Create dedicated cycling lanes and promote a car-pooling app for students and staff
- Expand bicycle sharing system infrastructure

Green Technology Incubation

Launch a dedicated incubator for sustainable urban technology startups, supporting 50 ventures in areas like waste management, water purification, renewable energy, smart city solutions, and sustainable transportation

Photo Gallery



EV charging points installed to promote electric mobility on campus



Installation of smart meters



Green Campuses



UEM Kolkata leads sustainable innovation with extensive solar panels harnessing renewable energy across its campus rooftops and facilities.



Mega Tree Plantation Program at Maya Chakraborty Memorial Play Ground, Newtown, Kolkata



Distribution of Water Purification System, under Green Technology Incubation

Sustainability Development Goal 12

Preamble

The Institute of Engineering Management (IEM) Kolkata prioritizes responsible consumption and production patterns among its core sustainability commitments, aligning with Sustainable Development Goal 12 (SDG 12). The institute fosters sustainable resource management across campus operations, academics, research, and community outreach to minimize environmental impact and promote a circular economy. Through integrated energy efficiency, waste management, water conservation, and sustainable transportation initiatives, IEM Kolkata demonstrates comprehensive commitment to responsible resource stewardship.

Vision and Mission

- **Vision:** To develop IEM Kolkata as a benchmark institution for sustainable consumption and production practices within higher education, advancing circular economy principles and resource efficiency.
- **Mission:** To implement waste reduction, energy and water efficiency, sustainable procurement, and awareness initiatives while integrating sustainability into education and research, supported by data-driven monitoring and continuous improvement.

Programs and Initiatives

Energy Efficiency and Renewable Energy

- **Solar Power System:** IEM has implemented a 40 kW grid-connected rooftop solar photovoltaic (PV) system generating approximately 320 kWh of clean energy daily, monitored via smart meters, contributing to responsible energy consumption patterns.
- **Energy Conservation Technologies:**
 - Installation of timer circuits and Light Dependent Resistor (LDR)-based automation systems to prevent unnecessary electricity usage across campus buildings.
 - Energy-efficient LED lighting and sensor-based smart lighting systems installed across campus to optimize electricity use.
 - Electric appliance timers and smart automation further conserve electricity, especially in classrooms and air-conditioned spaces.
- **Energy Consumption Data:** Campus annual energy consumption amounted to 1278203kWh, reflecting the impact of energy-saving automation measures and conservation initiatives in place.
- **Renewable Energy Expansion:** Plans for a biogas plant featuring a 1000-liter digester and 1000-liter gas storage are underway to generate renewable energy from organic waste, supporting waste-to-energy conversion aligned with SDG 12.
- **Ongoing Energy Audits:** Regular electricity audits cover load and consumption patterns to identify saving opportunities. Internal campus-wide energy audits have

analyzed energy consumption of lighting, fans, ACs, and auxiliary electrical appliances across buildings and laboratories with detailed load measurements.

- **Green Audits:** Promotion and use of solar energy facilities and alternate energy sources like biogas plants, complemented by ongoing energy audits and green audits to monitor and improve energy utilization.

Carbon Footprint and Environmental Impact

- **Total Annual Carbon Footprint:** Campus operations generate approximately 917.89 tonnes CO₂-equivalent annually, comprising:
 - Scope 1 Emissions (Campus Vehicles): 23.15 tonnes CO₂-equivalent/year
 - Scope 2 Emissions (Electricity Use): 894.74 tonnes CO₂-equivalent/year
- **Campus Green & Plantation Area:** Approximately 3,173 m² of campus green and plantation area contribute to ecological balance and biodiversity promotion.
- **Carbon Footprint Assessment:** Comprehensive carbon footprint assessment supports informed strategies for reducing consumption-related emissions and aligns with SDG 12's focus on minimizing environmental impact.

Waste Management and Recycling

- **Waste Segregation:** Campus practices include separate collection and responsible disposal of organic and inorganic waste, supporting circular economy principles.
- **E-Waste Management:** Scheduled and documented disposal of e-waste with records showing increasing quantities recycled annually (e.g., 4,201.90 kg in 2024–2025).
 - Repair and reuse of defective electronic devices to extend lifespan and promote circular consumption patterns.
 - Environmentally safe disposal in partnership with certified e-waste recyclers ensures responsible end-of-life management.
- **Organic Waste Conversion:** Waste segregation including organic, inorganic, and e-waste disposal supports sustainability goals and feeds into biogas production for renewable energy generation.
- **Circular Economy Awareness:** Awareness programs on circular economy and zero waste conducted through initiatives like the "Train the Trainers Program" involving 70 teachers from 65 schools, disseminating zero waste and sustainable consumption principles in surrounding communities.
- **Wastewater Treatment:** Wastewater and sewage treated via aerobic sewage treatment methods, with treated water reused for gardening and other purposes, exemplifying water and resource efficiency.

Water Conservation and Sustainable Water Management

- **Rainwater Harvesting:** Rainwater harvesting systems and artificial groundwater recharge implemented on campus to augment water resources sustainably.
- **Water Infrastructure:** Use of bore wells and open wells with recharge facilities supports sustainable groundwater management. Separate piping systems for rainwater distribution reduce costs and improve efficiency.

- **Water Recycling:** Wastewater recycling and maintenance of water bodies for sustainable water management within the campus, reducing freshwater demand.
- **Water Conservation Structures:** Construction of tanks and bunds aid in water conservation efforts and provide infrastructure for water reuse across campus operations.
- **Sustainable Water Use:** Integration of water-efficient technologies and responsible consumption practices reduce campus water footprint and support SDG 12 goals.

Sustainable Transportation

- **Vehicle Restrictions and Clean Mobility:** Promotion of restricted entry for automobiles on campus, encouraging use of bicycles and battery-powered vehicles reduces transportation-related emissions and promotes responsible consumption patterns.
- **Electric Vehicle Infrastructure:** EV charging stations established on campus to support electric and hybrid vehicle adoption, reducing fossil fuel dependence.
- **Bicycle-Sharing Schemes:** Sustainable mobility is encouraged via bicycle-sharing programs, providing emission-free transportation alternatives.
- **Sustainable Transport Innovation:** Development and innovation in sustainable transportation with student projects such as solar-electric hybrid motorcycles that utilize solar power for charging, demonstrating responsible resource utilization.
- **Pedestrian-Friendly Infrastructure:** Implementation of pedestrian-friendly pathways enhances environmentally friendly mobility options on campus.
- **Emissions Reduction:** Awareness campaigns reduce pollution and dependence on fossil fuels within the campus community, promoting behavioral change toward responsible consumption.
- **Research & Development:** Research and development collaborations focusing on advancing electric vehicle technologies and sustainable transportation solutions support innovation in responsible consumption.

Food, Green Buildings, and Smart Technologies

- **Smart Resource Management:** Integration of smart resource management technologies such as automation for energy efficiency and waste management optimizes resource consumption.
- **Greening Initiatives:** Landscaping and greening initiatives on campus promote biodiversity, enhance aesthetic value, and support ecological balance, reducing environmental impact.
- **Plastic Ban:** Ban on the use of plastic at campus to promote a cleaner, more sustainable environment and eliminate single-use consumption patterns.
- **Smart Technologies:** Incorporation of smart technologies in resource-efficient facilities optimizes water, energy, and waste management through automated monitoring and control systems.

- **Awareness and Engagement:** Regular environmental and sustainability-related events and programs build awareness and cultivate eco-friendly practices among students and staff, fostering responsible consumption behaviors.

Research and Education

- **International Conferences:** Organized and hosted multiple international conferences including IEEE UEMCON 2024, IEMCON 2024, and European Conference on Interdisciplinary Research in Technology Management (EIRTM) 2025, promoting research discourse in technology, energy, and sustainability aligned with responsible consumption principles.
- **Curriculum Integration:** Mandatory course "Sustainability, Climate Action, and Environmental Science" for 4th semester B.Tech students embeds sustainability concepts, including responsible consumption and production practices.
- **Train the Trainers Program:** Conducted awareness and training programs with 70 teachers from 65 schools to disseminate knowledge on responsible consumption, circular economy, and zero waste principles.
- **Student Engagement:** Established active student chapters such as IEEE and ISHRAE, which engage students in research, workshops, competitions, and sustainability-focused projects including national hackathons and design competitions aligned with SDG 12.
- **Global Partnerships:** Implemented study abroad programs and numerous academic collaborations with top global institutions including Harvard Business School, University of Melbourne, and universities in Japan, France, USA, and Canada, broadening academic and cultural exposure related to sustainability and responsible consumption.
- **Innovation and Entrepreneurship:** Supported innovation and entrepreneurship through incubation cells and start-up support, fostering student-led projects such as sustainable waste recycling technologies and solar-powered mobility solutions, embodying applied research toward sustainable consumption and production.
- **Research Focus Areas:** Collaborative research projects with academic and government institutions explore new-age energy technologies, resource efficiency, and circular economy solutions. Office of Sustainability spearheads energy sustainability research including microgrid systems, GHG monitoring, and energy footprint analysis.

Community Engagement and Outreach

- **Train the Trainers Program:** Conducted comprehensive "Train the Trainers" Program on circular economy awareness, training 70 teachers from 65 schools to spread zero waste and sustainable consumption practices in surrounding communities.
- **Social Welfare Initiatives:** Lions Club of Kolkata IEM actively organized multiple community service events:
 - Distribution of 300 food packets and sweets to underprivileged children on Children's Day (14 November 2024)

- Humanitarian outreach programs supporting 103 specially-abled children, orphans, and 48 elderly people
- Organized free health check-up camps attended by approximately 50 persons to promote health awareness
- **Vocational Empowerment:** Inaugurated vocational computer training centers for youth and women to empower them with digital literacy and employability skills, emphasizing sustainable livelihood generation and responsible resource use.
- **Philanthropy and Community Welfare:** Arranged philanthropy events including:
 - Donation of sewing machines and mosquito nets to old age homes (18 July 2025)
 - Mental health awareness rallies
 - Recognition events fostering social cohesion and community well-being
- **Community Education:** Student-led initiatives foster environmental education and community outreach aligned with SDG goals, promoting awareness of responsible consumption practices.

Partnerships and Collaborations

- **Waste Management Partnership:** MoU with NKDA (Newtown Kolkata Development Authority) for waste management and recycling initiatives.
- **Academic Collaborations:** Signed multiple MoUs with renowned global academic institutions including:
 - Harvard Business School
 - University of Melbourne
 - Ryukoku University (Japan)
 - IBM
 - Fostering academic collaboration, joint research, and skill development in sustainability
- **Industry Partnerships:** Collaborative engagements with reputed industry partners including:
 - LTIMindtree
 - Capgemini
 - Pegasystems
 - IBM
 - For academic-integrated curriculum development, industry exposure, student placements, and sustainability research projects
- **Government and Research Organizations:** Partnership with government and research organizations such as CSIR-NEERI for environment and sustainability research focusing on regional and national impact, including emissions monitoring and waste-to-energy solutions.
- **International Conference Partnerships:** Hosted and organized international conferences in partnership with global organizations including:
 - IEEE
 - SMART Society USA
 - The Photovoltaic Institute of Île-de-France (IPVF)

- Promoting interdisciplinary research and innovation in energy and sustainability
- **Startup Ecosystem:** Supported startup incubation and entrepreneurship development through Innovation and Entrepreneurship Development Centres in collaboration with industry mentors and government schemes, fostering sustainable products and circular economy initiatives.
- **E-Waste Management Partnership:** Certified e-waste recycler partnerships ensure environmentally safe disposal and responsible end-of-life management of electronic waste.

Data and Metrics

Metric / Activity with Value	Notes / Events / Details
Solar PV System Capacity	40 kW
Daily Solar Energy Generation	320 kWh/day
Biogas Digester Volume (Planned)	1000 liters
Biogas Storage Capacity (Planned)	1000 liters
Annual Campus Energy Consumption (Feb 2024–Jan 2025)	1278203 kWh
Scope 1 Emissions (Campus Vehicles)	23.15 tonnes CO ₂ -equivalent/year
Scope 2 Emissions (Electricity Use)	894.74 tonnes CO ₂ -equivalent/year
Total Annual Carbon Footprint	917.89 tonnes CO ₂ -equivalent/year
Campus Green & Plantation Area	Nearly 3,200 m ²
E-waste Recycled (2024–2025)	2169.90 kg
Smart Energy Systems Implementation Target	75% of buildings
Proposed Additional Solar Capacity (Future)	40 kW
Teachers Trained (Train the Trainers Program)	70 teachers from 65 schools
Underprivileged Children Supported (Children's Day 2024)	300+
Special Individuals Supported (Community Programs)	151 (103 children + 48 elderly)

Challenges and Opportunities

Challenges

- **External Funding Constraints:** More external funds from government bodies are needed to be obtained. However, internal funding schemes like grant-in-aid offering up to ₹10 lakhs per project provide alternative support, with 94 out of 144 proposals funded last year totaling ₹1.8 crores. Monitoring and managing this funding effectively remains critical.
- **Curriculum-Industry Alignment:** Keeping curriculum and teaching aligned with rapidly evolving industry demands is challenging and requires continuous faculty training, technology integration, and strong industry partnerships to ensure student employability and relevance to SDG 12 initiatives.

- **Resource Management Complexity:** Efficient management of energy, water, and waste resources is both a challenge and an opportunity. Smart systems and audits (energy, environment, green audits) help optimize resource use and promote sustainability, but require ongoing investment and technical expertise.
- **Grid Integration of Renewables:** Integrating renewable energy sources such as rooftop solar into the existing campus grid poses challenges in maintaining voltage stability, demand-supply balance, and system flexibility. This requires advanced grid management and smart energy solutions to prevent curtailment and ensure reliable power supply.
- **Renewable Energy Intermittency:** Renewable sources like solar and biogas suffer from intermittency and dependence on geographic and climatic conditions, leading to variability in power generation. Achieving sustained energy conservation requires continuous awareness and behavioral change among campus users; compliance with energy-saving practices is an ongoing challenge.
- **Carbon Footprint Quantification:** Accurate quantification of carbon footprints and emissions across direct and indirect sources requires technical expertise and sophisticated monitoring tools to ensure data accuracy and support informed decision-making.
- **Behavioral Change:** Ensuring campus-wide adoption of responsible consumption practices and sustained compliance with sustainability initiatives requires ongoing engagement and cultural transformation.

Opportunities

- **Resource Optimization:** Efficient management of energy, water, and waste resources through smart systems and comprehensive audits presents opportunities to significantly reduce consumption and operational costs while promoting sustainability on campus.
- **Student Skills Development:** Opportunity to enhance student skills through experiential learning, interdisciplinary projects, and global exposure via study abroad programs and international collaborations to prepare them for sustainable innovations and careers in circular economy sectors.
- **Sustainable Technology Innovation:** The rise of student-led startups and innovation cells (e.g., Waste Oil Recycler, solar-powered products) presents opportunities to develop sustainable technologies and products aligned with circular economy principles, supported by incubation and mentorship programs.
- **Green Building Expansion:** Opportunity to scale green building practices and smart technologies across more campus facilities, reducing resource consumption and demonstrating best practices in responsible consumption to external stakeholders.
- **Community Multiplier Effect:** Train the Trainers programs and community engagement create multiplier effects, extending responsible consumption practices beyond campus to schools and communities, amplifying institutional impact.
- **Carbon Certification and Recognition:** Participation in international sustainability benchmarking such as AASHE STARS and Times Higher Education Impact Rankings provides opportunities to measure, improve, and gain recognition for institutional sustainability performance, attracting socially conscious stakeholders.

Annual Goals (2025-2026)

- **Renewable Energy Expansion:** Increase rooftop solar capacity by an additional 40 kW through installation of new solar panels to enhance renewable energy utilization and reduce grid dependence.
- **Biogas Commissioning:** Operationalize the planned biogas plant with 500-liter digester and 200-liter gas storage to convert campus organic waste into renewable energy, supporting waste-to-energy conversion and circular economy.
- **Smart Energy Systems:** Implement integrated smart energy management solutions for load balancing, scheduling, and demand response in 75% of campus buildings to enhance grid stability and reduce operational costs.
- **Electric Vehicle Infrastructure:** Expand EV charging infrastructure and incentivize electric and hybrid vehicle adoption to further reduce transportation emissions.
- **Water Resource Management:** Deploy rainwater-harvesting expansion, greywater recycling systems, and comprehensive waste composting as part of campus-wide resource conservation efforts.
- **Sustainability Degree Program:** Launch a Master of Science (MS) program focused on Sustainability and Environment to cultivate advanced knowledge and skills in sustainable development and responsible consumption practices.
- **Internship Programs:** Start internship programs emphasizing sustainable technology innovations, providing students hands-on experience with green technologies and industry collaboration in circular economy sectors.
- **Community Outreach Expansion:** Increase outreach activities targeting local schools to educate and raise awareness about responsible consumption and sustainable living practices, amplifying community impact.
- **International Benchmarking:** Participate actively in international sustainability benchmarking such as AASHE STARS and Times Higher Education Impact Rankings to measure and improve institutional sustainability performance.
- **Energy Efficiency Enhancement:** Enhance energy efficiency further by deploying sensor-based energy control systems and expanding energy audits for continuous optimization of consumption patterns.
- **Circular Economy Promotion:** Promote circular economy principles through expanded zero waste outreach and resource efficiency programs across campus and in the community, supported by enhanced data collection and monitoring systems.
- **Carbon Footprint Reduction Targets:** Deploy improved techniques and tools for accurate carbon emission monitoring across Scope 1 and Scope 2 emissions, aiming for certified reduction targets aligned with climate action goals.

Photo Gallery



IEM Newtown Campus implements 3-phase timer circuits for classrooms and single-phase timers for ACs to prevent lights and ACs from running unnecessarily, reducing electricity wastage and costs.



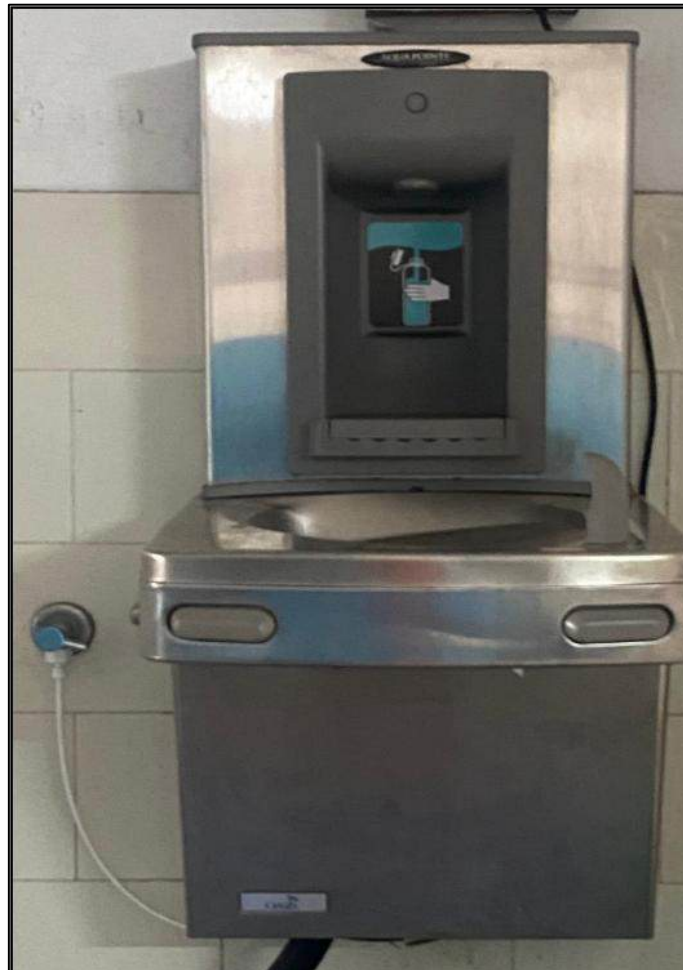
Joyful faces of children and faculties distributing gifts during the event



Club members distributing sewing machines and mosquito nets at the old age home.



Water efficient fixtures in bathrooms of Management House, IEM Campus



Drinking water purification system

Sustainability Development Goal 13

Preamble

IEM Kolkata recognizes the critical urgency of addressing climate change and is committed to integrating climate action into its educational, research, operational, and community outreach programs. The institute aligns with Sustainable Development Goal 13 by fostering climate resilience through sustainable energy solutions, carbon footprint reduction, environmental education, and collaborative climate research.

Vision and Mission

- **Vision:** To lead as a climate-responsive institution pioneering sustainable practices that mitigate environmental impacts and build adaptive capacity across stakeholders.
- **Mission:** To embed climate action across campus policies, curriculum, research, and community engagement initiatives aiming for carbon neutrality and enhanced ecosystem resilience.

Programs and Initiatives

Renewable Energy and Carbon Reduction

- Installed a 40 kW rooftop solar photovoltaic system generating approximately 320 kWh daily, contributing to reduced dependence on fossil-fuel electricity and lowering carbon emissions.
- Continuous monitoring of campus greenhouse gas emissions for Scope 1 and Scope 2, with total annual carbon emissions recorded at approximately 917.89 tonnes CO₂-equivalent.
- Annual campus energy consumption from February 2024 to January 2025 totalled approximately 1278203 kWh.
- Scope 1 emissions from campus vehicles estimated at 23.15 tonnes CO₂-equivalent annually; Scope 2 emissions from electricity use about 894.74 tonnes CO₂-equivalent annually.
- Energy efficiency measures implemented across the campus include LED lighting, sensor-based automation, occupancy sensors, electric appliance timers, and smart metering systems to minimize wastage.
- Plans for a 1000-liter biogas plant and a 1000-liter gas storage facility are underway to generate renewable energy from organic waste, further reducing fossil fuel dependency.
- Promotion of sustainable transport via electric vehicle charging infrastructure and bicycle-sharing schemes contributes to lowering overall emissions.
- Integration of smart energy systems with a target coverage of 75% of campus buildings supports efficient load management and energy conservation.

Environmental Monitoring and Research

- Collaboration with national programs for active greenhouse gas emission monitoring, including real-time measurements at thermal power plants using portable analysers.
- Ongoing research projects focusing on climate monitoring, emissions auditing, and carbon footprint assessments aligned with institutional climate goals.
- Documentation and public reporting of sustainability performance through recognized global platforms, such as Times Higher Education Impact Rankings.
- Hosting workshops, seminars, and conferences to raise awareness and foster capacity building in climate science and resilience.

Academic Integration and Capacity Building

- Mandatory inclusion of sustainability, climate action, and environmental science courses across undergraduate programs to build awareness and expertise.
- Promotion of interdisciplinary research and innovation aligned with climate action objectives.
- Facilitation of student participation in sustainability clubs, workshops, and national/international events fostering climate action enthusiasm and activism.

Climate Resilient Infrastructure

- Adoption of green building standards including LEED certification to ensure sustainable design and operation of campus infrastructure.
- Passive building design optimizes thermal comfort and reduces heat load, contributing to energy savings.
- Integration of rainwater harvesting and wastewater recycling systems minimizes water consumption and supports ecological sustainability.
- Extensive tree plantation drives and green campus initiatives enhance carbon sequestration and environmental quality.
- Infrastructure planning incorporates renewable energy sources, energy efficiency, and comprehensive waste management strategies to boost resilience against climate-related impacts.

Community and Stakeholder Engagement

- Active student clubs such as Rotary, Lions, Inner Wheel, and Pet Society organise community service, health camps, awareness drives, and environmental sustainability projects.
- Large-scale public events like the IEM-UEM Kolkata Marathon, IEMPACT cultural fest, and Bengal E-Summit promote community participation and awareness on environmental and social issues.
- Alumni engagement through associations provides financial and mentorship support for student innovation, projects, and academic development.
- Strategic Memorandums of Understanding (MoUs) with academic and industry partners locally and internationally foster inclusive education, research, skill development, and climate action outreach.

Data and Metrics

Metric / Activity with Value	Notes / Events / Details
Rooftop Solar PV Capacity	40 kW
Daily Solar Energy Generation	320 kWh/day
Biogas Digester Volume (planned)	1000 litres
Biogas Storage Capacity (planned)	1000 litres
Annual Campus Energy Consumption (Feb 2024 - Jan 2025)	1278203kWh
Scope 1 Emissions (Campus Vehicles)	23.15 tonnes CO ₂ -equivalent/year
Scope 2 Emissions (Electricity Use)	894.74 tonnes CO ₂ -equivalent/year
Total Annual Carbon Footprint	917.89 tonnes CO ₂ -equivalent/year
Campus Green Plantation Area	3,173 m ²
Smart Energy Systems Implementation Target	75% of buildings

Challenges and Opportunities

- Challenges include securing consistent external funding for climate action research and sustainability projects, as well as keeping pace with rapidly evolving technology and industry standards.
- Integration of renewable energy sources like rooftop solar into existing campus grids faces technical issues in voltage stability and demand-supply balancing, requiring advanced smart energy management solutions.
- Intermittency of renewable sources and behavioural change for energy conservation remain ongoing operational challenges.
- Opportunities exist in leveraging multidisciplinary research and international collaboration to foster climate innovations.
- Growing potential in skill development, entrepreneurship, and start-up support in clean technology sectors via incubation centers and student programs.

Annual Goals (2025-2026)

- Expand rooftop solar PV capacity beyond the existing 40 kW installation and operationalize the biogas plant to increase the share of clean energy and reduce carbon footprint further.
- Implement integrated smart energy management systems across 75% of campus buildings to improve load balancing, demand response, and grid stability.
- Enhance interdisciplinary climate research and innovation through increased funding, seed grants, and collaborations with national and international institutions.
- Strengthen academic curricula by embedding advanced climate science, sustainability management, and environmental studies across all educational programs.
- Expand skill development initiatives focusing on green technologies, entrepreneurship, and sustainable business models with industry and government partnerships.
- Commit to achieving global sustainability certifications, program accreditations, and participation in international rankings to consolidate institutional leadership in climate action.

- *Photo Gallery for Goal 13*



EV charging points installed to promote electric mobility on campus

Sustainability Development Goal 14

Preamble

IEM Kolkata recognizes the vital importance of conserving and sustainably using the oceans, seas, and marine resources, aligning with Sustainable Development Goal 14 (SDG 14). The institute is committed to raising awareness, conducting impactful research, and engaging in practices that enhance marine ecosystem health, reduce pollution, and promote sustainable management of aquatic resources.

Vision, and Mission

- **Vision:** To contribute to the protection and sustainable use of marine environments through education, research, and community engagement.
- **Mission:** To create interdisciplinary knowledge and solutions addressing marine pollution, biodiversity conservation, and sustainable aquatic resource management.

Key Achievements

- Initiated innovative research projects including the development of underwater solar-powered fish for aquatic pollution control. Collaborations with research institutions like SN Bose Centre enhance sustainability innovations.
- Launched extensive educational sessions and awareness campaigns focusing on marine ecosystem conservation, involving students and local communities to reduce plastic usage, conduct beach clean-ups, and preserve water quality.
- Organized workshops, webinars, and interdisciplinary academic programs on marine ecology, pollution control, and sustainable aquaculture to engage students and faculty in marine conservation and the global ocean sustainability agenda.
- Developed and revised interdisciplinary courses integrated with Sustainable Development Goals (SDGs) that address marine biodiversity, ecosystem protection, pollution mitigation, and sustainable resource management, fostering holistic understanding among students.
- Established partnerships and collaborative initiatives with environmental organizations for joint efforts in aquatic biodiversity preservation, wastewater treatment technologies, and monitoring of aquatic pollutants, advancing impact through shared expertise and resources.

Research and Innovation

- Active research projects focus on advanced filtration methods and nanotechnology aimed at the efficient removal of microplastics and chemical contaminants from wastewater prior to discharge, contributing to cleaner aquatic environments.
- Studies are being conducted on capturing and mitigating the impact of heavy metals and persistent organic pollutants to prevent contamination and degradation of marine ecosystems.

- Student theses and doctoral research extensively contribute to understanding the ecological impacts of water pollution as well as assessing the efficacy of treatment solutions, enriching scientific knowledge and practical applications.
- Indoor and outdoor experimental work on bioremediation techniques is advancing sustainable approaches to detoxify polluted water bodies and support ecosystem restoration.
- Innovative models of sustainable aquaculture are being developed and tested, integrating ecological balance with economic viability to promote responsible marine resource management.

Community Engagement and Outreach

- Facilitated active participation in international Ocean Day and World Water Day events, highlighting local marine conservation efforts and raising awareness about sustainable water management practices.
- Supported student clubs and societies in organizing beach clean-up drives, plastic waste reduction campaigns, and awareness programs on sustainable seafood consumption, fostering youth-led environmental action.
- Conducted educational outreach programs for local schools and communities, emphasizing the importance of marine biodiversity and promoting practical pollution reduction strategies.
- Established partnerships with coastal authorities and non-governmental organizations (NGOs) to support ecosystem restoration projects and implement pollution monitoring activities, enhancing collaborative impact.
- Integrated community-based research and innovation, encouraging local stakeholders to contribute to marine conservation and pollution control initiatives, thereby strengthening the link between research and real-world application.

Data and Metrics

Category and Metric/Indicator	Value/Number
Marine Ecosystem Conservation Awareness	Conducted multiple educational sessions and initiatives increasing awareness of marine ecosystem health among students and community.
Underwater Drone Project for Marine Litter Monitoring	Successfully developed and implemented underwater drones to monitor marine litter, supported by grant funding to aid marine life protection.
Research Collaborations and Publications	Collaborated with institutions like SN Bose Centre; published 20 research publication advancing marine sustainability; participated in THE Impact Rankings 2024.
PhD Student Engagement and Research Output	124 PhD students registered contributing to research on aquatic pollution and ecosystem conservation, enhancing knowledge and innovation.
Progress Reporting and SDG Ranking	Publicly reported measurable progress toward SDG14; University ranked in Times Higher Education Impact Rankings for SDG contributions.

Challenges and Opportunities

Challenges

- Balancing rapid technological advancements with the need for sustainable marine ecosystem protection remains complex, requiring continuous innovation and effective monitoring systems such as underwater drones.
- Securing consistent external funding for research and sustainability initiatives is difficult, impacting the scale and continuity of marine conservation projects.
- Keeping educational curricula and research aligned with fast-changing industry and environmental demands poses academic and operational challenges.
- Managing interdisciplinary collaboration across departments and external partners requires effective governance and resource allocation
- Increasing awareness and community engagement on marine conservation among diverse local and student populations requires sustained outreach efforts.

Opportunities

- Leveraging innovative technologies and grant-funded projects to enhance marine litter detection and pollution control efforts.
- Implementation of internal grant-in-aid schemes encouraging faculty and student research, fostering a culture of innovation and scholarly output.
- Agile curriculum updates based on real-time industry feedback and collaboration with global institutions improve relevance and student employability.
- Establishment of multiple Centers of Excellence and Innovation Development Centers to foster cross-disciplinary research and entrepreneurial initiatives.
- Expanding educational programs, awareness campaigns, and partnerships with NGOs and government agencies to promote marine biodiversity and pollution reduction effectively.

Annual Goals (2025-26)

- Expand research and development in innovative technologies such as underwater drones and advanced filtration for microplastic and pollutant removal to bolster marine ecosystem conservation.
- Strengthen collaborations and partnerships with national and international research institutions, industry, and environmental organizations to amplify impact and resource mobilization for SDG 14-related projects.
- Enhance interdisciplinary curriculum offerings incorporating sustainability, marine ecology, pollution control, and aquaculture to equip students with cutting-edge knowledge and practical skills.
- Increase student and community engagement through awareness campaigns, workshops, and participation in global events like World Ocean Day, aiming to build a strong conservation culture.
- Develop and implement scalable models for sustainable aquaculture and bioremediation techniques, integrating them into continuous field trials and pilot projects to promote sustainable livelihoods and ecosystem restoration.

Sustainability Development Goal 15

Preamble

The Institute of Engineering & Management (IEM), Kolkata, located in Salt Lake, Sector-V, Electronics Complex, has established itself as a globally recognized educational institution committed to outcome-based education and application-oriented research. As part of its unwavering commitment to sustainable development, IEM Kolkata has actively embraced Sustainable Development Goal 15 (SDG 15) - Life on Land, which focuses on protecting, restoring, and promoting sustainable use of terrestrial ecosystems, sustainably managing forests, combating desertification, halting and reversing land degradation, and halting biodiversity loss.

Vision and Mission

- **Vision:** To be a globally recognized educational institution known for outcome-based education and application-oriented research, with sustainability and environmental stewardship at its core.
- **Mission:** IEM Kolkata's mission is to empower students with seamless knowledge, fostering creativity, innovation, and excellence through practical learning. Continuous knowledge upgrades, advanced infrastructure, and sustainable practices are prioritized while integrating biodiversity conservation and environmental protection in curriculum, research, and community initiatives for socially responsible development. To promote biodiversity conservation and environmental protection through curriculum integration, research initiatives, and community engagement.

Program and Initiatives

Green Campus Development

- **Campus Green Coverage:** IEM Kolkata maintains a green area of 3,173.03 m² out of the total campus area of 12,141.03 m², representing approximately 26% green coverage dedicated to promoting biodiversity and ecological balance.
- **Integrated Sustainability Infrastructure:** Campus features include:
 - 40 kW grid-connected rooftop solar photovoltaic system generating approximately 320 kWh of clean energy daily
 - Planned biogas plant with 1000-liter digester and 1000-liter gas storage to convert organic waste to renewable energy
 - Smart meters and energy monitoring systems to minimize environmental impact
 - LED lighting and sensor-based automation systems to reduce energy wastage
 - Occupancy sensors and LDR-based automation across campus buildings
- **THE Impact Rankings Recognition:** The University has been ranked in the Times Higher Education (THE) Impact Rankings 2025 for SDGs, demonstrating measurable progress in sustainability initiatives and environmental stewardship.

Comprehensive Environmental Management

- Implementation of multiple environmental audits including Green Audit, Energy Audit, and Environment Audit, with recognition through clean and green campus awards
- Regular electricity audits covering load and consumption patterns to identify saving opportunities
- Waste management initiatives including composting and recycling programs
- Carbon footprint monitoring with quantified emissions data:
 - Campus vehicle emissions: 23.15 tones CO₂-equivalent
 - Electricity usage emissions: 894.74 tones CO₂-equivalent
 - Annual energy consumption: approximately 1278203 kWh

Student Engagement in Conservation

- Over 5,482 students participated in extension and outreach programs during 2023-2024, including environmental protection activities, tree plantation drives, and sustainability awareness campaigns
- Student participation in sustainability-focused research and innovation projects
- Active student clubs including Rotary Club, Lions Club, Inner Wheel Club, and Pet Society engaged in environmental initiatives

Research and Innovation

- Establishment of 5 Centers of Excellence and 4 Innovation and Entrepreneurship Development Centers (IEDCs) focused on sustainability research
- Over 1645 Scopus-indexed publications contributing to environmental knowledge
- Research focus areas include:
 - Ecosystem conservation and sustainable land management
 - Biodiversity protection strategies
 - Renewable energy systems and microgrids
 - Greenhouse gas monitoring and emissions analysis
 - Energy footprint analysis and carbon sequestration
 - Environmental monitoring technologies and eco-friendly solutions
- 124 research scholars registered under 176 recognized research guides conducting advanced research on environmental challenges
- 144 published patents with 2 granted patents, including innovations related to environmental monitoring and sustainable technologies
- External research funding: Rs. 54.38 Cr received from government and non-governmental agencies for sustainability-focused initiatives
- Seed grant program: Rs. 2.99 crore allocated for 94 research proposals during 2023-2024

Academic Integration and Curriculum

Environmental Studies Course

- Mandatory Environmental Studies courses offered across all undergraduate programs, covering environmental sustainability, ecosystem conservation, and biodiversity protection
- Integration of sustainability, climate action, and environmental science topics into academic programs

Sustainable Development Goals Integration

- All 17 Sustainable Development Goals, including SDG 15, are incorporated into the curriculum through field projects, case studies, and research assignments
- SDG 15-specific focus on terrestrial ecosystems, biodiversity conservation, and land degradation reversal

Cross-Cutting Issues Integration

- Professional Ethics, Gender Sensitivity, Human Values, Environment and Sustainability are integrated throughout the curriculum
- Specific emphasis on environmental conservation and terrestrial ecosystem protection
- Outcome-Based Education approach with Course Outcomes (COs), Program Outcomes (POs), and Program Specific Outcomes (PSOs) mapped to include:
 - Environmental awareness competencies
 - Sustainability knowledge and practices
 - Biodiversity conservation understanding
 - Land management principles

Interdisciplinary Approach

- International Conference on Interdisciplinary Research in Technology & Management (IRTM) promotes cross-disciplinary collaboration on environmental challenges
- Brings together engineering, management, and environmental science perspectives
- Collaboration with industry and academic partners on sustainability research

Community Engagement and Outreach

Environmental Initiatives

- **Rotary Club of Salt Lake Silicon Valley:** Organized multiple environmental initiatives including:
 - Mega tree plantation program (August 6, 2024) at Maya Chakraborty Memorial Play Ground, Newtown, Kolkata
 - Waste recycling workshops through "Artisan Arcade" (March 28, 2025)
 - Environmental awareness campaigns and community engagement programs
 - Children's Day environmental education programs (November 15, 2025) at Cheshire House, Tollygunge
- **Awareness and Training Programs:**
 - Train the Trainers workshops engaging community stakeholders on clean energy and environmental practices
 - Environmental protection activities and sustainability awareness campaigns
 - Regular community outreach programs reaching diverse stakeholder groups

Partnership Development

- Active partnerships with environmental organizations, government bodies, and academic institutions
- Collaborative conservation efforts with community partners
- Industry and government collaborations for sustainability research and technology transfer

Research Contributions

Seed Grant Program

- Over Rs. 2.99 crore allocated for 94 research proposals during 2024-25.
- Several projects focusing on environmental sustainability, ecosystem conservation, and biodiversity protection
- Research areas include renewable energy, sustainable technologies, and conservation strategies

Research Publications and Innovation

- Over 1645 Scopus-indexed publications during the academic year, including research on environmental sciences, sustainable technologies, and conservation strategies
- Publications covering biodiversity protection, ecosystem management, carbon sequestration, and sustainable resource management
- Interdisciplinary research bridging engineering, environmental science, and management domains

Patent Portfolio

- 44 patents filed, including innovations related to:
 - Environmental monitoring systems and technologies
 - Sustainable technologies and eco-friendly solutions
 - Energy efficiency and renewable energy innovations
 - Green infrastructure development

PhD Research Programs

- 124 research scholars registered under 176 recognized research guides
- Advanced research programs focused on:
 - Environmental challenges and conservation strategies
 - Biodiversity conservation and ecosystem management
 - Sustainable development and land management
 - Carbon footprint analysis and emissions monitoring

External Research Funding

- Over Rs. 54.38 crore received from government and non-governmental agencies for research projects
- Funding includes environmental and sustainability-focused initiatives
- Collaborations with government agencies and international research institutions

Environmental Impact and Sustainability Metrics

Carbon Footprint Analysis

- **Institutional Carbon Emissions:**
 - Campus vehicle emissions: 23.15 tonnes CO₂-equivalent
 - Electricity usage emissions: 894.74 tonnes CO₂-equivalent
 - Total quantified emissions providing baseline for carbon neutrality targets
 - Ongoing carbon footprint monitoring through improved techniques and tools
- **Energy Efficiency Measures:**
 - Annual energy consumption: approximately 1278203 kWh
 - Energy savings achieved through LED lighting, smart timer circuits, and occupancy sensors
 - Regular electricity audits identifying optimization opportunities

Green Infrastructure Development

- Solar power generation: 320 kWh per day from 40 kW rooftop system
- Biogas production: Planned facility to convert organic waste to renewable energy
- Smart metering and monitoring enabling real-time energy management
- LDR-based automation and sensor systems reducing wastage

Biodiversity and Land Management

- 26% green campus coverage (3,173.03 sq.m of 12,141.03 sq.m total area)
- Green area dedicated to promoting ecological balance and biodiversity
- Environmental audits ensuring compliance with green campus standards
- Recognition through clean and green campus awards

Data and Metrics

Category and Metric/Indicator	Value/Number
Campus green cover area	26% (current), target 35% by 2027
Solar PV system capacity	40 kW
Solar energy generation	320 kWh/day
Annual energy consumption (electricity)	1278203 kWh/year
Carbon emissions from electricity usage	894.74 tonnes CO ₂ /year
Carbon emissions from vehicles	23.15 tonnes CO ₂ /year
Community outreach reach	10,000+ people/year
Waste diversion target	Zero landfill by 2028
Target for carbon-neutral campus status	Achieve by 2030
Number of partnerships with environmental orgs	10+ by 2026

Challenges

- Increasing urbanization and development pressures in the Sector V area pose ongoing challenges to maintaining and expanding green spaces on campus. To address this, there is an opportunity to leverage academic expertise and student enthusiasm to develop innovative urban biodiversity conservation models that can be applied in similar institutional settings.
- Limited availability of native plant species for landscaping and biodiversity enhancement programs presents a challenge. Establishing an on-campus native plant nursery and seed bank can serve as a solution, contributing to regional biodiversity conservation while supporting campus greening initiatives.
- Sustaining student and faculty engagement in environmental initiatives is difficult amidst demanding academic schedules. Integrating environmental activities into the curriculum through academic credit for participation in conservation projects and sustainability initiatives can help ensure continued involvement.
- Measuring and monitoring biodiversity indicators and ecosystem health on campus systematically remains a challenge. Developing student-led biodiversity monitoring

programs that utilize technology, citizen science approaches, and collaboration with environmental research institutions offers a promising opportunity.

- Coordinating environmental initiatives across multiple departments, student clubs, and administrative units can be complex. Establishing a centralized Sustainability Office with dedicated resources, a clear mandate, and cross-functional coordination mechanisms will enhance impact and streamline efforts.

Annual Goals (2025-26)

Increase Green Cover

- Target expansion of green area from current 26% to 35% of total campus area by 2027 through systematic plantation drives, rooftop gardens, and vertical greening initiatives
- Development of native species inventory and habitat creation for local fauna
- Establishment of pollinator gardens and ecological corridors

Biodiversity Enhancement

- Develop comprehensive campus biodiversity plan including:
 - Native species inventory and diversity assessment
 - Habitat creation for local fauna
 - Pollinator gardens and ecological corridors
 - Biodiversity monitoring and assessment protocols
 - Species conservation programs

Research Excellence

- Establish dedicated Centre of Excellence for Biodiversity Conservation and Sustainable Land Management
- Attract national and international research funding
- Expand research collaboration on ecosystem conservation and sustainable practices
- Advance greenhouse gas monitoring and emissions analysis capabilities

Enhanced Renewable Energy Integration

- Increase capacity and efficiency of solar PV systems
- Operationalize biogas plant to diversify campus energy supply
- Implement integrated smart energy management solutions for load balancing and demand response
- Deploy improved renewable energy integration techniques ensuring grid stability
- Target increased renewable energy generation reaching 75% of building smart energy systems by 2027

Curriculum Innovation

- Develop specialized programs and courses on:
 - Environmental Sciences and Conservation Biology
 - Sustainable Development and Ecological Engineering
 - Sustainable Land Management
 - Biodiversity Conservation
 - Climate Action and Environmental Protection
- Undergraduate and postgraduate level program development
- Field-based learning and experiential education in environmental sciences

Community Impact Expansion

- Expand environmental outreach to reach 10,000+ community members annually through:
 - Awareness campaigns on biodiversity and ecosystem conservation
 - Training programs on sustainable practices
 - Collaborative conservation projects with local communities
 - Environmental education initiatives for schools and NGOs

Carbon Neutrality Target

- Achieve carbon-neutral campus status by 2030 through:
 - Renewable energy adoption (solar, biogas, and alternative sources)
 - Energy efficiency improvements (75% smart energy systems in buildings)
 - Carbon sequestration through afforestation and tree plantation
 - Sustainable transportation expansion (EV infrastructure and bicycle-sharing)
 - Accurate carbon footprint monitoring with certified reduction targets

Water Sustainability

- Implement zero liquid discharge system
- Expand rainwater harvesting capacity
- Achieve complete campus water self-sufficiency through conservation and recycling
- Greywater recycling and wastewater management systems

Circular Economy Transition

- Transition to circular economy model with zero waste to landfill target by 2028
- Comprehensive waste segregation systems
- Composting and recycling infrastructure enhancement
- Upcycling initiatives and organic waste conversion (biogas production)
- Waste-to-energy conversion programs

Global Rankings and Recognition

- Continue improvement in THE Impact Rankings for SDG 15
- Target top 200 globally and top 20 in India by 2030
- Achievement of certified sustainability recognition and awards
- International collaboration and best practice adoption

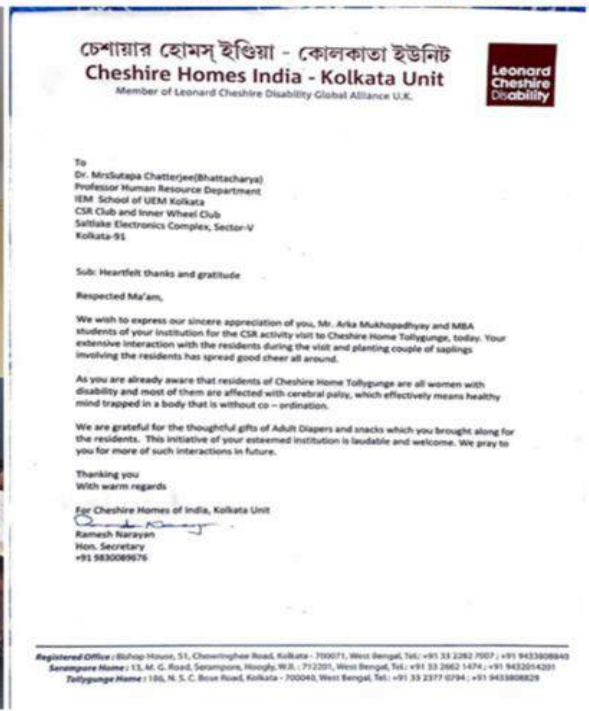
Partnership Expansion

- Establish 10+ new partnerships with:
 - Environmental organizations and conservation agencies
 - Research institutions and academic collaborators
 - Government bodies and regulatory agencies
 - Industry partners for sustainability innovation
- Collaborative research, capacity building, and knowledge exchange initiatives
- Joint conservation projects and sustainability advocacy

Photo Gallery



Mega Tree Plantation Program held at Maya Chakraborty Memorial Playground, Newtown, Kolkata on August 6, 2024



Children's Day celebrated at Cheshire House, Tollygunge on November 15, 2025

Sustainability Development Goal 16

Preamble

IEM Kolkata demonstrates a robust commitment to SDG 16 by embedding practices geared towards peaceful co-existence, justice, and the cultivation of strong institutions. The institute implements governance, legal literacy, safety protocols, transparent ethics, and wide-ranging community engagement into its academic and operational processes, aligning closely with best practices evidenced in institutional audits and external impact rankings.

Vision and Mission

- **Vision:** Foster a culture of fairness, transparency, accountability, and safety, modelling exemplary governance.
- **Mission:** Enact just, non-discriminatory policies; accessible grievance redressal, campus security; and rights awareness.

Program and Initiatives

- Multiple statutory committees fulfilling justice, equity, and ethical campus management.
- Women's Safety and ICC: Active, year-round Internal Complaints Committee addressing harassment/grievance.
- Legal literacy and rights workshops in partnership with the Department of Law; extensive awareness campaigns.
- Campus-wide CCTV (987 cameras), 35 security officers, and stringent emergency protocols.
- Seminars, digital portals, and newsletters promoting ethical codes and legal information.
- Active peace, advocacy, and justice student groups, including Model United Nations, leadership workshops, and interdisciplinary clubs.
- Engagement in national dialogue and compliance workshops.
- Transparent governance: Biannual audits, feedback systems, participatory decision-making.
- Numerous accolades, including national awards for best practices in governance, innovation, and ethics.

Institutional Governance and Policy Framework

- Comprehensive anti-harassment, non-discrimination, and inclusivity policies; statute-driven governance.
- Democratic and participatory decision-making involving students, staff, and faculty.
- Regular training for security, campus safety drills, and awareness programs on rights/responsibilities.
- Periodic review and capacity-building for governance responsiveness to emerging needs.

- Legal department support for policy, mediation, and rights education, referencing the institutional linkage with UEM Law as a resource hub.

Community Engagement and Social Outreach

- Consistent legal literacy camps, Train-the-Trainer programs, and school outreach (e.g., 70 teachers from 65 schools engaged in 2024).
- Peace building and conflict resolution initiatives integrated into seminars and co-curricular activities.
- Collaboration with governmental, non-governmental, and advocacy organizations.
- Student-led volunteer initiatives, including annual marathons, panel discussions on justice, and technology support for underprivileged children.

Data and Metrics

Category and Metric/Indicator	Value/Number
Grievance cases resolved	Timely, committee-based redressal
Safety infrastructure	987 CCTV cameras, regular security training
Legal literacy/awareness	500+ student/staff in workshops; joint programs with UEM Law
Institutional audits	Biannual, participatory with stakeholder feedback
Ethical conduct training	100% faculty and staff coverage
Community outreach	Over 50 institutions/NGOs engaged, including vocational training

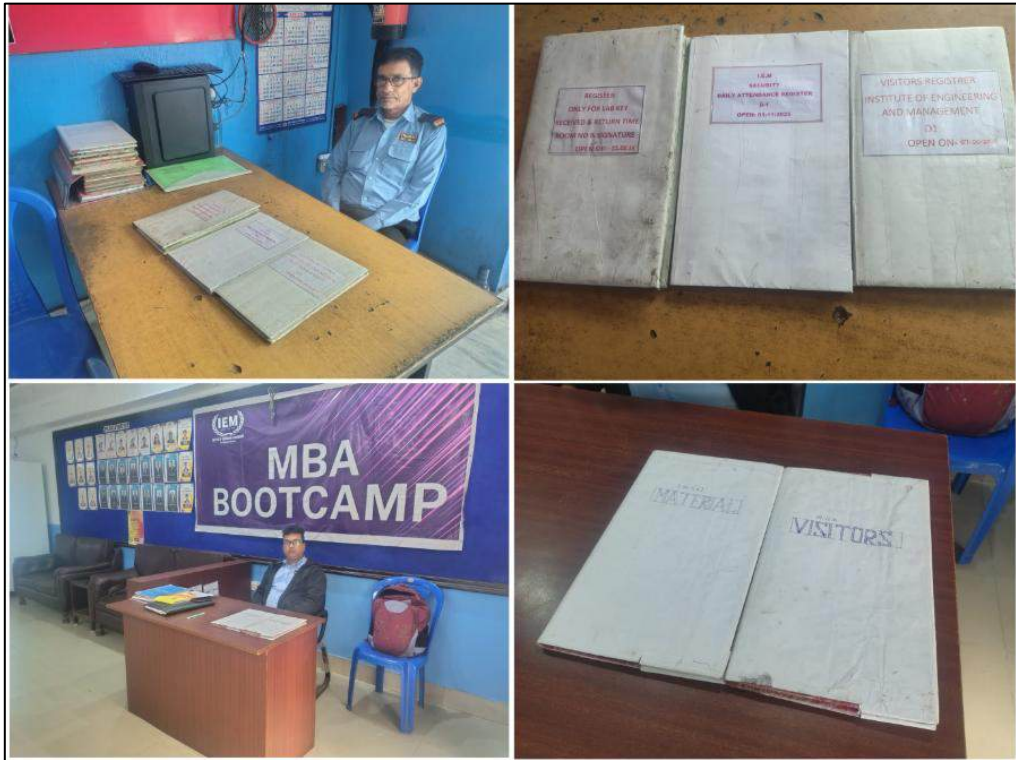
Challenges and Opportunities

- Deepening awareness and cultural sensitivity across diverse campus populations.
- Leveraging digital governance for transparency and access.
- Expanding community justice programs and sector partnerships.
- Enhancing conflict mediation and preventative governance frameworks.

Annual Goals (2025-26)

- Further, empower statutory committees and widen grievance support.
- Broaden rights-based and legal literacy programs, utilizing emerging frameworks from UEM Law.
- Invest in advanced ICT tools for governance and transparent reporting.
- Promote and fund research on law, governance, and institutional accountability, closely tied to SDG 16 targets.
- Foster stakeholder forums and participatory governance models.
- Integrate peace building, ethics, and citizenship deeply into curricula and student life.

Photo Gallery



Security Personnel with Visitor Registration system at the front gate of our Campuses



CCTV Cameras in all the classrooms



Campus Surveillance through CCTV Cameras



Bus service for all the students

Sustainability Development Goal 17

Preamble

IEM Kolkata fully embraces Sustainable Development Goal 17 by strengthening the means of implementation and revitalizing global partnerships for sustainable development. The institute actively fosters collaborations across academia, government, industry, and civil society to accelerate transformative action, innovation, and capacity building for all SDGs.

Vision and Mission

- **Vision:** To be a hub for multi-sectoral partnerships advancing research, education, and sustainable development outcomes.
- **Mission:** To build strong domestic and international linkages that catalyse innovation, knowledge exchange, resource mobilization, and social impact.

Program and Initiatives

- Collaborated with Reliance Industries, Confederation of Indian Industry (CII), Akashvani, LTIMindtree, Capgemini, IBM, CSIR-NEERI, and global universities for internships, consultancy, research, teaching, and incubation programs.
- Supported 219 startups incubated through Innovation and Entrepreneurship Development Centers.
- Signed multiple MoUs including with S.N. Bose Centre and international universities for joint sustainability research, curriculum development, and conferences.
- Secured national and international sustainability research grants (ICSSR, UNFCCC funding).
- Published SDG 17 progress in global rankings, achieving position 1001 globally and 1st in West Bengal.
- Engaged students and faculty through Rotary, Lions, IEEE, Entrepreneurship Cell, and student clubs in outreach, innovation projects, and community welfare.
- Enabled multi-institutional study-abroad programs and international academic exchanges.
- Strengthened community health, environment, and social welfare projects through partnerships and student outreach (482 students engaged in community programs).

Research and Innovation Partnerships

- MoUs signed with Harvard Business School, Columbia University, University of British Columbia, and Iwate Prefectural University for joint research and exchanges.
- IBM Centre for Advanced Studies was established for fostering innovation and technology transfer.
- 219 student ventures launched and more than 144 patents filed recently, indicating strong entrepreneurship development.
- Hosted and participated in global conferences, including IEEE IEMCON, UEMCON, and EIRTM.

Capacity Building and Community Engagement

- Frequent community outreach programs organized via student clubs such as Lions, Rotary, and Inner Wheel involving food distribution, vaccination, blood donation, tree plantation, and educational support for underprivileged groups.
- Students actively participate in leadership and awareness activities through platforms like Model United Nations, Toastmasters, and international conferences.
- Wide range of workshops, training, and skill development programs including LaTeX paper writing, robotics, cybersecurity, and entrepreneurship.
- Study abroad programs and international collaborations provide cross-cultural learning and research exposure tied to SDG challenges.

Data and Metrics

Category and Metric/Indicator	Value/Number
Partnerships (MoUs)	27 functional MoUs with academic, industrial, international partners
Research & Exchange Activities	2809 research and exchange activities during the year
Startups Incubated	219 startups supported through incubation
Funded Research Projects	Funded projects via ICSSR, UNFCCC, and Ministry of Environment and different government and private bodies
Student Community Outreach Participants	Over 5500 participants through nearly 50 outreach programs
Global Ranking (Times Higher Education)	Ranked 1001 worldwide for SDG 17, 1st in West Bengal

Challenges and Opportunities

- Securing adequate external funding for sustainability projects remains a challenge; internal grant management ensures fund efficiency.
- Rapid industry changes require continuous faculty training and curriculum updates to align with evolving sustainability and professional demands.
- Expanding deeper collaborations and joint initiatives with varied sectors enhance the knowledge transfer and AI-driven innovation impact.
- Increasing scale and diversity of community outreach and inclusive partnerships demand more resource mobilization and coordination.

Annual Goals (2025-26)

- Expand joint research projects with global and local partners to develop innovative, sustainable solutions aligned with SDG targets.
- Launch additional international academic exchange fellowships and joint degree programs to enhance global knowledge exchange and capacity-building.
- Extend rural development and sustainability incubation initiatives focused on underserved communities.
- Foster public-private partnerships dedicated to innovations in energy, water, climate, and digital technologies addressing environmental and societal challenges.

- Develop digital repositories and collaborative platforms for open access to SDG-related research and multi-stakeholder dialogue enhancing transparency and impact.

Photo Gallery



MoU signed between CSIR-NEERI and IEM-UEM Group to advance collaborative research and sustainable development across Eastern and North-Eastern India



IEM partners with IBM to establish India's first IBM Centre for Advanced Studies (CAS), fostering innovation and research in emerging technologies through IBM Cloud



Digital Campus 2.0 on Google Cloud

IEM-UEM partners with Google for Google Campus 2.0, onboarding 12,500 users to advance cloud, AI, and analytics skills.