

Compliance with Standard International Norms

IIT Mandi is committed to sustainable campus development by adopting environmentally responsible planning, resource conservation, and energy-efficient practices in line with nationally accepted standards and internationally recognized sustainability principles.

The Institute has implemented the following initiatives:

- Sustainable campus planning with emphasis on environmental conservation and ecological balance.
- Energy-efficient infrastructure, including LED lighting and rooftop solar power generation.
- Water conservation through rainwater harvesting, sewage treatment plants (STPs), and reuse of treated water for horticulture and landscaping.
- Scientific solid waste management through segregation, composting, recycling, and safe disposal of hazardous waste through authorized agencies.
- Conservation and enhancement of biodiversity through plantation drives, botanical gardens, butterfly gardens, and preservation of native vegetation.
- Promotion of renewable energy, energy conservation, and efficient electrical load management.
- Environment-friendly landscaping using native and drought-resistant plant species.
- Promotion of sustainable transportation through pedestrian-friendly campus planning and internal connectivity.
- Regular environmental monitoring of air, water, and soil quality to ensure compliance with prescribed standards.
- Adoption of resource-efficient practices for maintenance of green infrastructure and campus utilities.
- Compliance with applicable environmental regulations, CPWD guidelines, and statutory requirements of the Government of India and the Himachal Pradesh State Pollution Control Board.
- Periodic Green Campus initiatives, awareness programmes, and plantation campaigns involving students, faculty, staff, and the local community.

The Institute continuously strives to align its campus development and operational practices with internationally recognized sustainability principles while ensuring compliance with applicable national environmental standards and promoting a clean, green, and environmentally resilient campus.

Compliance with Standard International Norms – Green Campus Initiatives at IIT Mandi

IIT Mandi is committed to maintaining a sustainable and environmentally responsible campus through the adoption of Green Campus practices in line with national regulations and internationally recognized sustainability principles. Major initiatives undertaken are summarized below:

1. Solid Waste Management

- Source segregation of waste using green (biodegradable), blue (recyclable), and yellow (hazardous/sanitary) bins across the campus.

- Establishment of vermicomposting pits for processing biodegradable kitchen and horticultural waste into organic manure.
- Collection and recycling of paper, plastic, glass, and metal waste through authorized recyclers.
- Safe disposal of hazardous laboratory chemicals and biomedical waste through HP State Pollution Control Board-authorized agencies (e.g., Enviro Engineers, Shimla).
- Promotion of a plastic-free campus by minimizing single-use plastics and ensuring proper segregation of plastic waste.

2. Wastewater Management

- Operation of Sewage Treatment Plants (STPs) for treatment and recycling of wastewater generated from academic, residential, hostel, laboratory, and administrative buildings.
- Reuse of treated water for horticulture and landscaping, with discharge only after meeting prescribed environmental standards.

3. Environmental Monitoring and Research

- Active research on environmental sensing technologies for monitoring air quality, temperature, humidity, rainfall, atmospheric pressure, and cloud mapping.
- Research initiatives on early warning systems for natural hazards such as landslides and cloudbursts using advanced sensor technologies.

4. Energy Efficiency and Conservation

- Promotion of renewable energy through rooftop solar power installations.
- Research on solar energy, hydropower, energy-efficient devices, smart energy systems, and sustainable energy technologies.
- Adoption of energy-efficient lighting and electrical systems across the campus.

5. Green Landscaping and Biodiversity Conservation

- Development of Botanical Garden, Herbal Garden, Butterfly Garden, Navagraha Garden, and Nakshatra Garden.
- Regular plantation drives and conservation of native, medicinal, aromatic, and endangered plant species to enhance campus biodiversity.

6. Innovation for Sustainability

- Encouragement of student-led projects on environmental sustainability, including autonomous waste collection systems, energy-efficient technologies, dehumidification systems, and smart infrastructure solutions.

7. Environmental Awareness and Community Participation

- Organization of plantation drives, Swachh Bharat Abhiyan, Earth Day celebrations, cleanliness campaigns, and environmental awareness programmes with active participation of students, faculty, staff, NSS volunteers, and the campus community.

These initiatives collectively demonstrate IIT Mandi's commitment to sustainable campus management, environmental conservation, resource efficiency, and continual improvement in accordance with Green Campus objectives and internationally accepted sustainability practices.