TERRAQUEST 2025

Hackathon for a Sustainable Future

Why this Hackathon :

TERRAQUEST 2K25 is an innovation-driven hackathon focused on solving real-world sustainability challenges aligned with the United Nations Sustainable Development Goals (SDGs).

SDG Goals focused :

Participants can choose from curated problem statements or propose their own ideas, subject to mentor approval.

PROBLEM STATEMENT

Choose from the example problem statements below, or Propose your own problem within these SDGs

SDG 3: Good health and well-being

- Develop low-cost wearable or IoT devices for real-time monitoring of vital signs (heart rate, oxygen, glucose, etc.) for rural and underserved communities
- Design a data-driven mobile app to track local health trends, report disease outbreaks, and send preventive health alerts to communities.
- A mobile/web app that reminds users to take medicines on time, drink enough water, and schedule regular health checkups.

SDG 6: Clean water and sanitation

- Develop affordable, IoT-based real-time water quality monitoring for rural localities.
- Design a data-driven mobile app to report and alert communities on local water wastage or leaks.
- Innovate low-cost rainwater harvesting solutions tailored for campus or urban use.

SDG 7: affordable and clean energy

- Create a platform for peer-to-peer energy trading using solar microgrids.
- Build an application that analyzes campus energy consumption and recommends efficiency improvements.
- Prototype a cost-effective portable solar device for off-grid use.

SDG 13: Climate Action

- Devise a crowdsourced tool for real-time tracking of local air quality or GHG emissions.
- Design an open-data dashboard that visualizes climate impacts for local policymakers.
- Develop AI-based early warning systems for extreme weather events.

SDG 15: Life on Land

- Design a drone-based system to monitor forest cover and detect illegal logging.
- Create educational AR/VR content to raise awareness on biodiversity conservation.
- Develop a smart reporting platform for documenting urban pollution affecting terrestrial flora and fauna.

Guidelines

Custom Problem Statement Submission and Approval

Participants may propose their own problem statements for the hackathon, provided they follow the process outlined below. All custom statements must receive organizer approval for relevance and feasibility before the hackathon begins.

Submission Guidelines

- The proposed problem must clearly relate to one of the official SDG tracks: SDG 6, SDG 7, SDG 13, SDG 14, or SDG 15.
- Submit a problem statement including:
- Problem description, including current situation and the desired impact
- Justification explaining why this problem is important
- A brief outline of your proposed solution approach

Approval Process

- Mentors and/or organizers will review each proposed statement for:
- Relevance: Does it address a real issue falling under the chosen SDG theme?
- Feasibility: Is it achievable within the hackathon timeframe and resources?
- If approved, participants may proceed to work on the project.
- If not approved, teams will receive feedback and may resubmit a refined statement

Example Statement Format

- SDG Track:
- Problem Title:
- Description:
- Justification/Impact:
- Proposed Solution Overview:

Note:

Your PPT should strictly follow the above format. Once completed, kindly submit it through the provided Google Form.

AGENDA

Day 1: Kickoff & Ideation

09:00 AM – 10:00 AM	Registration & Welcome Kit Distribution
09:30 AM – 10:30 AM	Inauguration
10:30 AM – 11:00 AM	Introduction to the Hackathon Theme and Rules
12:00 PM	Sprint Beings
1:00 PM - 2:00 PM	Lunch Break
02:00 PM	Coding Begins – Sprint 1
04:00 PM	1st Judging Round
07:30 PM – 08:30 PM	Dinner
09:00 PM	2nd Judging Round

Day 2: Development & Presentation

07:30 AM – 08:30 AM	Breakfast
08:30 AM	Coding – Sprint 2
10:00 AM	Final Judging Round
12:00 PM	Coding – Sprint End
12:00 PM – 01:00 PM	Lunch Break
02:00 PM – 03:30 PM	Award Ceremony
04:00 PM	Networking & Wrap-up

Venue: Seminar Hall