

Institute Level AI and Green Tech Workshop Report

Organized by: Department of Information Technology, L.E. College, Morbi

In Collaboration With: Edunet Foundation

Workshop Duration: February 3rd to February 7th, 2025

Workshop Venue: IT Department, L.E. College, Morbi

1. Introduction

The Department of Information Technology at L.E. College, Morbi, successfully organized an **Institute Level one-week workshop on AI and Green Technologies** from **3rd February to 7th February 2025**. This workshop was conducted in collaboration with **Edunet Foundation** as part of the **Skills4Future program**, aimed at equipping students with knowledge and hands-on skills in Artificial Intelligence (AI) and Green Technologies.

The program was initiated under the **Gujarat Knowledge Society's initiative (Reference: GKS/IMPACT/Edunet Foundation/272, Dated 10.12.2024)**, emphasizing the importance of AI-driven sustainable practices.



2. Objectives of the Workshop

- To introduce students to **fundamental AI concepts** and **sustainable green technologies**.
- To provide hands-on training on **Python programming, machine learning, data visualization, and computer vision**.

- To explore AI applications in **sustainable urban planning, smart grids, renewable energy, and waste management**.
- To integrate **green skilling concepts** with AI-based innovations.
- To train students in **ethical AI principles** ensuring sustainability in AI applications.
- To prepare students for future careers in AI-driven **green technology industries**.

3. Participants

The workshop was attended by **62 registered students** from various branches, including:

- Information Technology
- Electrical Engineering
- Mechanical Engineering

Upon successful completion, participants were awarded **certificates of participation**.

4. Course Content Overview

The workshop was structured as a **50-hour intensive training module**, covering both theoretical concepts and hands-on practicals. The core areas included:

Day 1: Introduction to AI and Green Skills

- Basics of Artificial Intelligence and its impact on sustainability.
- Overview of Green Technologies and their role in environmental conservation.

Day 2: Python for AI and Sustainability

- Python programming fundamentals.
- Data handling using Pandas and NumPy.
- Implementing AI-driven energy efficiency models.

Day 3: Machine Learning for Green Innovation

- Supervised and Unsupervised learning models.
- AI-powered smart grid and energy distribution optimization.
- Carbon footprint estimation using machine learning.

Day 4: Computer Vision for Environmental Monitoring

- Introduction to OpenCV for AI applications.
- Object detection for waste management.
- AI-based forest fire detection using satellite imagery.

Day 5: Generative AI & Ethical AI Practices

- Implementing Generative AI for climate modeling.
- AI fairness, sustainability, and responsible AI deployment.
- Capstone project presentations.

5. Expert Trainers

The workshop featured training sessions led by experienced experts:

- **Mr. Hiren Modha** – Conducted training sessions from **February 3rd to February 5th, 2025**.
- **Mr. Utkarsh Sharma** – Conducted training sessions from **February 6th to February 7th, 2025**.

6. Faculty Coordinators

The workshop was coordinated by esteemed faculty members:

- **Prof. Rahul R. Keshwala** - Program Coordinator
- **Prof. Tejas M. Vasavada** - Co-Coordinator
- **Prof. Rakesh A. Parmar** - Co-Coordinator
- **Prof. Anita A. Parmar** - Co-Coordinator
- **Prof. Hitesh T. Loriya** - Co-Coordinator

7. Impact and Outcomes

The AI and Green Tech workshop provided students with invaluable exposure to **cutting-edge AI tools and sustainability-driven applications**. Key takeaways included:

- Enhanced understanding of **AI's role in environmental sustainability**.
- Practical implementation of **AI-driven smart city solutions**.
- Hands-on experience in **building AI models for energy optimization**.
- Development of **critical problem-solving skills** in AI and sustainability.

8. Conclusion and Future Scope

The successful completion of the workshop marks an important step towards integrating **AI and Green Tech education** into mainstream engineering curricula. Based on the overwhelming response from students, the department aims to:

- Conduct **advanced AI sustainability training modules**.
- Encourage **collaborative projects with industry partners**.

- **Establish a research hub for AI-driven environmental innovation.**

9. Attachments

1. **Photographs from the Workshop**
2. **Letter from Principal (Approval Letter)**
3. **Attendance Sheet**





LEC/IT/13
1/2/25

Date: 1/2/25

To,
The Principal,
L.E. College, Morbi

Subject: Request for Permission to Organize AI and Green Skills Program

Respected Sir,

With due respect, I, on behalf of the Department of Information Technology, kindly request permission to organize the **AI and Green Skills Program** in collaboration with **Edunet Foundation**. The program is scheduled to take place from **February 3rd to February 7th, 2025**, in the **IT Department** at **10:30 AM to 5:30 PM** as per the college schedule.

This initiative is in line with the circular issued by **Gujarat Knowledge Society (Reference: GKS/IMPACT/Edunet Foundation/272, Dated 10.12.2024)**, announcing a partnership between **Edunet Foundation and GKS** for the implementation of the **Skills4Future** program in Gujarat.

Program Overview:

The **AI & Green Skills Program** is an offline, free-of-cost training aimed at students from **Computer, IT, EC, Electrical, Mechatronics, and Data Science** branches. It includes a **50-hour workshop-based module** designed for **2nd, 3rd, and 4th-year engineering students**, covering fundamental AI concepts and sustainable green skills. **62 students** have registered for the program and will receive **certificates** upon successful completion.

To ensure the smooth conduct of the event, we propose rescheduling the scheduled **lectures and labs** of **4th and 6th Semester students** to **non-holiday Saturdays**. The rescheduled lecture and lab plan will be structured as follows:

Original Date	Rescheduled Date
February 3rd	February 15 th
February 4th	March 1 st
February 5th	March 15 th
February 6th	March 29 th
February 7th	April 5 th

As **6th Semester students** have regular **labs** on non-holiday Saturdays, these labs will be rescheduled to **each working Friday from 8:30 AM to 10:30 AM**.

We assure you that no academic activities will be hampered, and the students will greatly benefit from this program.

For the seamless execution of the event, the following faculty members will be coordinating various arrangements:

- Prof. Rahul R. Keshwala – Program Coordinator
- Prof. Tejas Vasavada – Co-Coordinator
- Prof. Rakesh Parmar – Co-Coordinator
- Prof. Anita Parmar – Co-Coordinator
- Prof. Hitesh Loriya – Co-Coordinator

We kindly seek your approval for organizing this event in the department. Your support in granting permission will contribute significantly to enhancing the students' knowledge in **AI and Green Skills**, aligning with modern technological advancements and sustainability initiatives.

Looking forward to your positive response.

Thank you.

Yours sincerely,

T.M. / 11/2/25

Head of Department
Department of Information Technology
L.E. College, Morbi

Yes

[Signature]
01/02/2025

IF COLLEGE MORBI
INFORMATION TECHNOLOGY
AI AND GREEN TECHNOLOGY PROGRAM ATTENDANCE

DATE: 03/02/2025 To 07/02/2025

Sr.No.	Name	3/2/2025	04/2/2025	05/2/2025	6/2/2025	07/02/25
1	Kirtan Thumar	At	-AB-	-AB-	-AB-	-AB-
2	Munish Kumar	-AB-	-AB-	-AB-	-AB-	-AB-
3	Chauhan Mahamadarch	-AB-	-AB-	-AB-	-AB-	-AB-
4	Jay Varma	Jay Varma	Jay Varma	Jay Varma	Jay Varma	Jay Varma
5	Jenish Chauhan	Jitil Chauhan	Jitil Chauhan	Jitil Chauhan	Jitil Chauhan	Jitil Chauhan
6	Aayush Pandita	-AB-	-AB-	-AB-	-AB-	-AB-
7	Jadeja Harshrajsinh	H.D. Jadeja	H.D. Jadeja	H.D. Jadeja	H.D. Jadeja	H.D. Jadeja
8	Joshi Harshil Sureshbhai	H.S. Joshi	H.S. Joshi	H.S. Joshi	H.S. Joshi	H.S. Joshi
9	JADEJA DIVYARAJISINH MANSANGII	Divy	Divy	Divy	Divy	Divy
10	Krishna Pathar	Rishnu	Rishnu	Rishnu	Rishnu	-AB-
11	Ayush Patel	AB	Ayush	Ayush	Ayush	Ayush
12	RATHOD DIVYESH	Divy	Divy	Divy	Divy	Divy
13	ANAND MULIYA	A. MULIYA	A. MULIYA	A. MULIYA	A. MULIYA	A. MULIYA
14	Harsh Sonagara	Harsh	Harsh	-AB-	-AB-	-AB-
15	Mohit Pithiya	-AB-	P. M. Pithiya	P. M. Pithiya	-AB-	P. M. Pithiya
16	Hem Bhatt	Bhutto	Bhutto	Bhutto	Bhutto	Bhutto
17	Vegad Rushit	Vegad	Vegad	-AB-	-AB-	Vegad
18	Bhimani Deval	Deval	Deval	Deval	Deval	Deval
19	Shehal Dharodiya	-AB-	Shehal	Shehal	Shehal	Shehal
20	AYUSH CHOSLA	Ayush	-AB-	Ayush	-AB-	-AB-
21	Bhedela kishan Jeshabhai	-AB-	-AB-	-AB-	-AB-	-AB-
22	Priyanshi Raiput	-AB-	-AB-	-AB-	-AB-	-AB-
23	Vora Henish	H.M. Vora	H.M. Vora	H.M. Vora	H.M. Vora	H.M. Vora
24	Patel Tej	Patel T.S	Patel T.S	Patel T.S	-AB-	Patel T.S
25	Viraj Ranpara	V. Ranpara	V. Ranpara	V. Ranpara	V. Ranpara	V. Ranpara
26	Jigneshnath Nathbava	Jignesh	Jignesh	Jignesh	-AB-	Jignesh
27	Ujjval Karangiya	-AB-	-AB-	-AB-	-AB-	-AB-
28	Bhakti Nakum	Bhakti	Bhakti	Bhakti	Bhakti	Bhakti
29	Shruvi Vaghastya	Shruvi	Shruvi	Shruvi	Shruvi	Shruvi
30	GOPI KACHHAD	Gopi	Gopi	Gopi	Gopi	Gopi
31	Shivangi Godhat	Godhat	Godhat	Godhat	Godhat	Godhat
32	Famani Prince Hareshbhai	Prince	Prince	Prince	Prince	Prince
33	Parth Radadiya	Parth	Parth	Parth	Parth	Parth
34	Bhargav vadhiya	-AB-	-AB-	-AB-	-AB-	-AB-
35	Jaymin Kumbhani	Jaymin	Jaymin	-AB-	Jaymin	Jaymin
36	Panchasara Bhavesh	B.J. Panchasara	B.J. Panchasara	H.J. Panchasara	B.J. Panchasara	B.J. Panchasara
37	NIRAV VANSADADIYA	Nirav	Nirav	Nirav	Nirav	Nirav
38	Om Patel	-AB-	-AB-	-AB-	-AB-	-AB-
39	Thummar Mayank	Thummar M.H	Thummar M.H	Thummar M.H	Thummar M.H	Thummar M.H
40	Pratik Pardava	P.N. Pardava	P.N. Pardava	P.N. Pardava	P.N. Pardava	P.N. Pardava

07/02/24

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7/2/25
slc HOD LAD

41	Hardik Sarvaiya	-AB-	-AB-	-AB-	-AB-	-AB-
42	Gautamkumar Chudasama	-AB-	-AB-	-AB-	-AB-	-AB-
43	Prashant Dagra	Prashant	Prashant	Prashant	Prashant	Prashant
44	Hetu Unjiya	Hetu	-AB-	-AB-	-AD-	-AB-
45	Manasvi Nagar	Manasvi	Manasvi	Manasvi	Manasvi	Manasvi
46	Megha Nandaniya	Megha	Megha	Megha	Megha	Megha
47	Prince Karmur	Prince	Prince	Prince	Prince	Prince
48	Rushik Ashvinbhai	Rushik	Rushik	Rushik	Rushik	Rushik
49	Neha Bhimani	Neha	Neha	Neha	Neha	-AB-
50	Yash Godavaria	Yash	Yash	Yash	Yash	Yash
51	Bhargavi Karangiya	Bhargavi	Bhargavi	Bhargavi	Bhargavi	Bhargavi
52	MIRAL GAJJAR	Miral	Miral	Miral	Miral	Miral
53	Sagar Chudasama	Sagar	Sagar	Sagar	-AB-	-AB-
54	Mukesh Dharsanda	Mukesh	Mukesh	Mukesh	Mukesh	Mukesh
55	Ganesh Solanki	Ganesh	Ganesh	Ganesh	Ganesh	Ganesh
56	Jaydeep Zala	J.M Zala	J.M Zala	J.M Zala	J.M Zala	J.M Zala
58	Rathod Hardip Bharatbhai	-AB-	Rathod	-AB-	-AD-	-AB-
59	NIRAV VANSADADIYA	-AB-	-AB-	-AB-	-AD-	-AD-
60	GOPI KACHHAD	-AB-	-AB-	-AB-	-AD-	-AB-
61	Mayank Zankat	Mayank	Mayank	Mayank	-AB-	-AB-
62	Hardik Kanzariya	-AB-	-AB-	-AB-	-AB-	-AD-
64	Prinsi Sanariya	Prinsi	Prinsi	Prinsi	Prinsi	Prinsi
65	Kanwarpreet Singh	Kanwar	Kanwar	Kanwar	Kanwar	Kanwar
66	Rohan Himali	Rohan	Rohan	Rohan	Rohan	Rohan
67	Bhargavi Karangiya	Bhargavi	Bhargavi	Bhargavi	-AB-	Bhargavi
68	Bhargavi Karangiya Prathi	Pratham	Pratham	Pratham	-AB-	Pratham
69	Ram Pratik P	Ram	Ram	Ram	Ram	Ram

PRESENT STUDENTS: 49

70. Visoj-Solonki - 5/2/25

	3/2/25	4/2/25	5/2/25	6/2/25	7/2/25
91 Dave Niyati	-	Niyati	Niyati	Niyati	Niyati
92 Dhawadiya Shruuti	-	Shruuti	Shruuti.B.	Shruuti.B.	Shruuti.B.

[Signature]
07/02/24

Trn
7/2/25
SLC-HUD GPD