



AICTE Training and Learning (ATAL) Academy Sponsored

Six Days Offline Faculty Development Program (FDP)

on

**“Artificial Intelligence Integrated Solar
Energy Systems for Smart and Sustainable
Power Generation”**

7th – 12th September, 2026

Organized by:

**Department of Mechanical Engineering
(NBA Accredited)**



**Chhattisgarh Institute of Technology,
(Formerly Government Engineering College)**

**Sejbahar, Old Dhamtari Road,
Raipur, Chhattisgarh, 492015**

E-Mail :- principal@gecraipur.ac.in

Phone No. :- +91-8319022268 / +91-0771-2972963

Website :- www.gecraipur.ac.in

ABOUT THE INSTITUTE

Chhattisgarh Institute of Technology (CGIT), Raipur (Formerly Government Engineering College Raipur) established in 2006, is a centre for imparting quality engineering education in Chhattisgarh. The institute is affiliated to Chhattisgarh Swami Vivekananda Technical University, Bhilai and recognized by AICTE, New Delhi. The college functions in a large unified academic campus with sound infrastructure and a conducive environment for academic excellence.



VISION OF THE INSTITUTION

To excel in imparting quality technical education with ethical values.

MISSION OF THE INSTITUTION

- To provide state-of-the-art infrastructure for holistic education and sustainable research.
- To promote inclusivity for society.
- To collaborate with national and international organizations.

DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering at Government Engineering College, Raipur is one of the core and prominent departments of the institute. Established along with the college in 2006, it offers undergraduate education in Mechanical Engineering with a strong emphasis on both theoretical knowledge and practical skills. It is affiliated to Chhattisgarh Swami Vivekananda Technical University and approved by AICTE. It focuses on industrial, design, thermal, and manufacturing engineering concepts. It encourages research, innovation, and project-based learning and supports technical associations and industry exposure. The Mechanical Engineering program has received NBA accreditation extension (2026–2028), reflecting its quality education and standards.

VISION OF THE DEPARTMENT

To be a centre of excellence in mechanical and allied domains.

MISSION OF THE DEPARTMENT

- To impart knowledge and technical skills to students.
- To develop leadership qualities and ethical values.
- To upgrade infrastructure for research and innovation.

ABOUT THE FDP

The Faculty Development Program aims to provide participants with in-depth knowledge of the integration of Artificial Intelligence (AI) with Solar Energy Systems for achieving smart and sustainable power generation.

The program is designed to bridge the gap between traditional solar technologies and modern intelligent systems through expert lectures, discussions, and practical insights.

OBJECTIVES OF THE PROGRAM

- To understand the fundamentals of solar energy systems.
- To explore AI integration in solar energy applications.
- To study machine learning techniques for solar energy forecasting.
- To examine smart grid applications in sustainable power generation.

ELIGIBILITY

- Faculty members, UG, PG and research scholars from AICTE-approved institutions
- Industry Professionals

INDUSTRIAL VISIT

Date: 11th September, 2026

Location: 50 MW SECL Solar Power Plant, Charoda, Bhilai

Focus Area: Solar Park Operations

TOPICS

- Current Industry Scenario of Solar PV systems.
- Solar passive heating
- Green buildings
- National Education Policy, 2020
- Fire hazard and remedy in solar parks
- Advanced Solar Thermal Systems
- Topic to be taught: Thermal Inspection of Solar Parks using UAV
- India's Green Energy Revolution through Sunlight.
- Applications of AI and ML in solar PV Systems
- Solar heating Systems

LIST OF EXPERTS

Mr. Shailendra Shukla, ICON Solar Raipur
Mr. Sanjeev Jain, CREDA Raipur
Mr. Arvind Rastogi, Technovations Bhilai
Dr. Kirti Bhushan Mishra, IIT Roorkee
Dr. Ajay Tripathi, CGIT Raipur
Dr. Anil Tiwari, NIT Raipur
Dr. Balkrishna Mehta, IIT Bhilai
Mr. S. R. Gupta, Innovative Engineers
Dr. C S Malvi, MITS Gwalior
Mr. Hriday Mohan, BSP Bhilai

REGISTRATION PROCESS

- There will be no registration fee
- Login as a participant in the ATAL FDP portal
- Click on FDPs selection, select FDP type ATAL offline, September, Thrust Area - Engineering and Management, Select mode - Offline

- Identify FDP on “Artificial Intelligence Integrated Solar Energy Systems for Smart and Sustainable Power Generation” with application number - 1775886779
- Upload ID card and NOC.
- <https://atalacademy.aicte.gov.in/signup>

PATRON & MANAGEMENT

Patron :

Dr. Prof. M. R. Khan
Principal, CGIT Raipur

Program Coordinator:

Dr. Ajay Tripathi,
Professor & Head,
Dept of Mechanical Engineering

Co-Coordinator:

Mr. Rahul Sahu
Assistant Professor,
Dept of Mechanical Engineering

COMMITTEE MEMBERS

Mrs. Swastika Patel Assistant Professor
Mr. Chhavikant Sahu Assistant Professor
Mr. Suraj Kumar Chand, Assistant Professor
Mr. Bhavyavesh Sahu, Assistant Professor
Mr. Nutan Diwan, Assistant Professor
Mr. Kranti Kumar, Assistant Professor
Mrs. Meenu Sahu, Assistant Professor
Mr. C. P. Dewangan, Assistant Professor
Mr. Sunil Kumar Patel, Assistant Professor
Dr. Govind Sahu, Assistant Professor
Contact: 7869799800 / 9165158952