



## Facilities:

### Library

The Library has well rounded collection of books and periodicals/ journals. These include text books, foundation books and books for subsidiary readings. Institute has access to digital library resources also.

### Labs

There are many labs under different divisions for example: Bio-Medical, Telemedicine, Cyber Security, Advance Network Engineering Lab, FOSS Lab, Multilingual Lab, Multi-Media & Web design, IT For Masses Lab, Workshops etc. These Labs are equipped with PC's, Servers (i3 / i5 / i7 Latest Configuration), IT hardware, Software and each system is connected with LAN. Class rooms are equipped with LCD projector.

### Auditorium & Conference Room

The Centre has an AC Auditorium with capacity to accommodate 100+ persons. The auditorium is fitted with audio-visual equipment. The conference room has a capacity to accommodate 30 persons.

## About C-DAC

Centre for Development of Advanced Computing (C-DAC) is the premier R&D organization of the Ministry of Electronics and Information Technology (MeitY) for carrying out R&D in IT, Electronics and associated areas. C-DAC has emerged as a premier R&D organization in the country working on strengthening national technological capabilities and responding to change in the market need in selected foundation areas.

C-DAC, Mohali operates from its own impressive building having a covered area of approximately 4300 sq. mts. The centre is engaged in design and deployment of world class IT and electronics solutions in the following domains:

- Health Informatics
- Multilingual Technologies
- Artificial Intelligence
- Software Technologies
- Cyber Forensics and Security

C-DAC Mohali is also conducting M.Tech program in Artificial Intelligence, Cyber Security and Embedded Systems. It also offers courses for foreign participants, sponsored by MEA under ITEC/SCAAP programs.

## About Applied AI & Analytics Group

The Applied Artificial Intelligence & Analytics Group at C-DAC Mohali comprises a team of highly skilled and experienced professionals dedicated to advancing AI and analytics research and development. The AAIA lab is equipped with state-of-the-art infrastructure, including high-performance GPU servers and workstations, enabling cutting-edge research and large-scale AI computations. The lab has developed a range of innovative solutions in areas such as machine learning, deep learning, natural language processing, computer vision, and data analytics. These solutions are tailored to meet the specific needs of industry, government, and academia, contributing to the broader adoption and impact of AI technologies in various sectors.

ADVANCED RESIDENTIAL TRAINING PROGRAM  
ON

## RESPONSIBLE AI: CONCEPTS , APPLICATIONS AND ETHICAL CONSIDERATIONS

for  
**Scientists and Technologists  
working in Government  
Sector**

**18th Nov - 22nd Nov, 2024**



सत्यमेव जयते

विज्ञान एवं  
प्रौद्योगिकी मंत्रालय  
MINISTRY OF  
SCIENCE AND  
TECHNOLOGY

Sponsored By:

Department of Science & Technology,  
Govt. of India, New Delhi



Organised By:

Centre for Development of Advanced Computing  
(C-DAC), A-34, Phase VIII, Industrial Area,  
Mohali, Punjab

## Course Brief

This advanced training program provides an in-depth exploration of responsible AI, emphasizing ethical, privacy, and fairness considerations. Participants will engage with the latest frameworks, tools, and best practices for creating AI systems that are transparent, accountable, and aligned with societal values.

## Course Objective

The objective is to equip participants with the knowledge and skills to develop and implement AI solutions that are ethical, fair, and compliant with regulatory standards. The course aims to foster a deep understanding of responsible AI principles and practical approaches to addressing challenges in AI deployment.

## Target Group

The programme has been specially designed for Scientists/ Technologists (Group-A only) working in Departments/ Ministries of Central Govt Public Sector Units, Govt. Research Laboratories and Scientists/ Technologists working in State Governments. The Scientists and Academicians(only Ph.D./ M.Tech Degree holders) from Central and State Universities, Educational Institutions & Colleges, engaged in R&D in any discipline of Science & Technology are also eligible.

- Group 'A' officer serving in Govt. organization.
- The upper age limit is 58 years on July 1, 2024.
- Number of years of service as Group 'A' scientist - 05 years and above.
- The nominations shall be accepted as per DST guidelines.
- Only 2 nominations shall only be accepted from one government department

## Training Session Plan

### Day 1

**Fundamentals of Artificial Intelligence:** Overview of AI principles, the significance of data in AI, frameworks for building AI systems, and current trends and emerging technologies in AI.

### Day 2

**Foundation of Machine Learning Techniques:** Basics of machine learning techniques, potential applications of machine learning, deep learning architectures, and principles of ethical AI-fairness, transparency, accountability.

### Day 3

**Understanding Bias in AI Systems:** Identifying and understanding bias in AI, techniques for bias detection and mitigation, comprehensive methods for fairness evaluation, and human-centered approaches to fair AI, supplemented by an industrial visit.

### Day 4

**Addressing Challenges in AI Interpretability:** Challenges in AI interpretability, techniques and tools for model interpretability, case studies and applications of explainable AI, and practical approaches to enhancing model interpretability.

### Day 5

**Ethical AI: Case Studies and Best Practices:** Case studies and best practices in ethical AI, and the regulatory landscape and compliance in AI.

## Batch Size

The programme has a limited intake capacity of 25 participants, and their admission will be based on the criteria outlined in the Training Guidelines set by the Department of Science and Technology (DST), Government of India.

## Fees

The programme is sponsored by the Department of Science and Technology (Government of India), and participants will not receive any Travel Allowance (TA) or Daily Allowance (DA). However, all expenses related to the training program, including Fees, Food, Accommodation, and Local Transportation, will be covered by the DST, GoI, except for the costs of the participants' travel from their place of duty to C-DAC, which will be borne by the sponsoring organizations.

## How to apply

Applicants can send their nominations online by applying at <https://training.dst.gov.in>.

For any further details, contact:

Ph. No- 0172-6619000, 2237052-55

Email ID: mail to:ajay@cdac.in , dst-trg@cdac.in

For Course Related Queries contact:

soniad@cdac.in, msanjay@cdac.in

## Organizing Committee:

Sh. VK Sharma (Scientist-G & Centre Head)

Sh. Ajay Mudgil (Scientist-E & Nodal Officer)

Dr. Manjit Kaur (Scientist-E & Program Coordinator)

Smt. Amritpal Kaur (Senior Technical Officer)

## Technical Committee:

Smt. Sonia Dosanjh (Scientist-F & HoD - AAIA)

Dr. Sanjay Madan (Scientist-E & Training Coordinator)

Sh. Chetan Manchanda (Principal Technical Officer & Faculty)

Sh Ankit Khurana(Scientist-D & Faculty)

Smt. Gulbadan Khehra (Project Engineer & Faculty)