



# FACULTY DEVELOPMENT PROGRAMME (Hybrid Mode)



## ON Future Trends in Deep Learning and Machine Learning Challenges and Applications

(6<sup>th</sup>-11<sup>th</sup> January 2025)

Organised by

**Electronics & ICT Academy, NIT Warangal**

In Association With

Department of AIML, Chaitanya Bharathi Institute of Technology, Hyderabad

Sponsored by

Ministry of Electronics and Information Technology (MeitY), GoI

### Preamble:

Warangal with financial assistance from MeitY, GoI. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

### About the FDP:

This Faculty Development Program (FDP) is designed to provide researchers and educators with advanced knowledge and practical skills in Machine Learning (ML) and Deep Learning (DL). Covering essential topics like CNNs, RNNs, Transformers, and Vision Transformers, the FDP emphasizes real-world applications across sectors such as healthcare, finance, and transportation. Hands-on Python sessions will enable participants to tackle contemporary ML challenges and develop impactful solutions. By the program's end, attendees will be equipped to drive innovation using ML and DL techniques.

### Major Course Content:

- Introduction to Machine learning and Deep learning Approaches. Feature Representation, Metaheuristics
- Supervised and Unsupervised Learning Methods
- Dimensionality Reduction, SVM, Regression
- Convolutional Neural Network (CNN) and Various Pre-trained models.
- Recurrent Neural Network (RNN) and Attention models.
- Cutting-edge models like Transformers and Vision Transformers.
- Challenges in Deep Learning and Its Applications.
- Hands-on Machine learning and deep learning.

Participants need to pay the Registration Fee Online using the following details

Online Transfer Details	
Account Name :	<b>Electronics &amp; ICT Academy NITW</b>
Account No	<b>62423775910</b>
IFSC	<b>: SBIN0020149</b>
Bank and Branch:	<b>State Bank of India, NIT(REC) Warangal</b>

### Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

### Registration Fee Particulars:

Faculty and Research Scholars	Rs.1000/-
Industry Participants	Rs.3000/-

### How to apply:

Participants are required to fill the online registration form by clicking on the following link:

<https://forms.gle/iH6CxpI5eXnZ1WmQ6>

### Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 40 (Forty). Candidates will be issued satisfactory certificates on successful completion of the course.

### Important Dates:

Last date (Application)	<b>31.12.2024</b>
Selection List by E- mail	<b>02.01.2025</b>
Duration	<b>6.01.2025-11.01.2025</b>

### About NIT Warangal:

National Institute of Technology, Warangal, is the first among 17 RECs set up as a joint venture of the Government of India and the state government. Over the years, the college has established itself as a premier Institute imparting technical education of a very high standard, leading to B.Tech degrees in various branches of engineering, M.Tech., and Ph.D. programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

### About CBIT Hyderabad:

Chaitanya Bharathi Institute of Technology (CBIT) is one of the premier Engineering Colleges in the self-financing category in the state of Telangana established in the year 1979. The college offers 11 UG and 10 PG Programmes. The Institute has become Autonomous under UGC w.e.f. 2013-14. UG & PG Programmes are accredited by NBA. The Institute is accredited by NAAC with 'A++' grade in 2023 for five years. CBIT (A) ranked in the rank band 150-200 in Engineering Category under National Institutional Ranking Framework (NIRF), Govt. of India, MHRD.

### Coordinators

<b>Dr.Y.Ramadevi,</b> Professor & Head, Department of AI&ML, Chaitanya Bharathi Institute of Technology, Hyderabad Email: yramadevi_cseaiml@cbit.ac.in Ph.No: 9441286660	<b>Dr. M. Srinivas,</b> Assistant Professor, Dept of CSE, NIT Warangal Email: msv@nitw.ac.in Ph. No:8897064421
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