



## One Week Faculty Development Program

### on “Applications of Advanced Computing Techniques in Electronics Engineering”

2<sup>nd</sup> – 6<sup>th</sup> March, 2022

Organized by

**Department of Electronics and Communication Engineering**  
Meerut Institute of Engineering and Technology, Meerut, UP  
Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow, UP, India

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**Coordinator(s)**

**Dr. Subodh Kumar Tripathi (Assoc. Prof., ECED)**

**Mrs. Mohini Preetam Singh (Asst. Prof., ECED)**

**Technical Sponsors: MathWorks, Design Tech and AICTE IDEA Lab**

**REGISTRATION LINK FOR FDP:** <https://forms.gle/bioH1RnkkAGnaUys9>

## ABOUT MIET



Meerut Institute of Engineering & Technology (MIET) has officially been ranked as the 4th best Engineering College in Uttar Pradesh by AKTU. MIET is one of the oldest self-financed Engineering Institutions in Uttar Pradesh. It has B++ NAAC ranking and 4 departments are NBA accredited. The Institute offers PG and UG courses including MBA, MCA, M.Tech., M.Pharm., B.Tech. in 13 popular branches and B.Pharm. The Institute has established Atal Community Innovation Centre, a five-year project from NITI AYOJ.

### DEPARTMENT OF ECE (NBA accredited)

Since its inception in the year 2001, the ECE department has taken a great leap in providing quality technical education. At present, the department is running a 4 years B.Tech program and 2 years M.Tech program. Both the programs are approved by AICTE, New Delhi and affiliated to Dr. A.P.J Abdul Kalam Technical University, Lucknow. The department has been accredited by 'NBA' three times in the respective years 2008, 2014 and 2020.

### PREREQUISITS

There are no prerequisites however basics of Neural Network will help in getting better understanding

**DEADLINE FOR REGISTRATION: 26<sup>th</sup> February, 2022**

**REGISTRATION FEE:** There is no registration fee.

### ELIGIBILITY OF PARTICIPANTS

Faculties from AICTE approved Institutions/Research Scholars, interested in the field of Artificial Intelligence, Statistics, Machine Learning, Deep Learning and Smart Architectures.

### ADDRESS OF CORRESPONDENCE

**Mrs. Mohini Preetam Singh**

Assistant Professor, ECE

Meerut Institute of Engineering & Technology, Meerut-250005 (UP)- India

Contact No.- +91-6398486825

Email: [mohini.singh@miet.ac.in](mailto:mohini.singh@miet.ac.in)



## OBJECTIVES OF THE FDP

- Understand and Implement AI/ML algorithms using python and MATLAB.
- Concept of accelerator for ML algorithms and understanding of bottleneck for High computing architectures.

## FDP CONTENTS

- Statistics in Data Science
- Intelligent Architectures for Intelligent Computing Systems
- Machine Learning Research Areas and Problems – Linear Regression
- Hands-on session on Python Distribution over Classification Problems, Logistic Regression for numerical, text and image data.
- Image Processing and Computer Vision with MATLAB
- Expert talk on Stress Management
- CNN accelerators for ASICs
- Deep Learning Basics and Research domains
- Machine Learning with MATLAB
- Deep Learning with MATLAB
- Insights on Deep Learning Applications

## LEARNING OUTCOMES

At the end of this Faculty Development Program, participants will be able to:

- Implement Statistics tools for Data Science
- Implement the algorithms of ML and DL
- Build and Analyze the Models
- Tune the parameters and hyper parameters
- Acquire insights on Accelerators
- Integrate research prospects in Architectures

## CERTIFICATION

An **E-Certificate** will be provided to every participant on successful completion of FDP provided participant maintains minimum 80% attendance in sessions and 60% score in quiz.

## CO-COORDINATOR(s)

Mr. Neeraj Joshi (*Asst. Prof., ECED*)  
Dr. Shashwat Pathak (*ACIC, MIET Meerut Foundation*)

## ORGANIZING COMMITTEE

Mr. Priyank Sharma (*Assoc. Prof., ECED*)  
Dr. Hari Shankar (*Asst. Prof., ECED*)  
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Mrs. Abhilasha Jain (*Asst. Prof., ECED*)  
Dr. Kanwarpreet Kaur (*Asst. Prof., ECED*)  
Ms. Neelima (*Asst. Prof., ECED*)

## CHIEFGUEST

Prof. Rajeev Shorey  
CEO, The University of Queensland - IIT Delhi Academy of Research (UQIDAR) and  
Adjunct Professor, Department of CSE, IIT Delhi

## RESOURCE PERSONS

**Professor Pritee Khanna**  
PDPM Indian Institute of Information Technology Design and Manufacturing,  
Jabalpur, India

**Professor Onur Mutlu,**  
Department of Computer Science at ETH Zurich

**Dr. Jitendra Kumar**  
School of Advance Sciences (SAS)  
Vellore Institute of Technology, Vellore (T.N.) India

**Dr. Ayan Seal**  
Assistant Professor at IIITDM Jabalpur, India

**Dr. Amioy Kumar**  
Research Scientist Manager, Intel, Bangalore, India

**Mr. Manoj Kumar**  
Sr. Engineer Technical Support- Mathworks

**Ms. Diksha Moolchandani**  
Researcher at IMEC, Belgium

**Mr. Sawan Rai**  
Assistant Professor in the CSE at ITER SOA, Bhubaneswar, Odisha, India

**Dr. Devendra Arora**  
Professor and Dean, MIET Business School, India