## About Sant Longowal Institute of Engineering and Technology, Longowal

Sant Longowal Institute of Engineering and Technology is a Centrally Funded Technical Institute and deemed to be university located in Longowal, Punjab. In line with the vision of the National Education Policy-2020, this institute aims to serve as an international platform for developing and transferring technical competence through quality academics. The institute is dedicated to delivering high-quality technical education with a strong focus on industry-oriented practical training. The Department of Mathematics at SLIET offers B.Sc., M.Sc. and Ph.D. programmes and is actively involved in interdisciplinary research and collaborative academic efforts.



#### **About GLA University, Mathura**

GLA University is a renowned (NAAC A+) private university located in Mathura, Uttar Pradesh, with more than 22,000 students enrolled in B.Tech., B.Sc., M.Sc., and other programs. The university boasts over 600 experienced faculty members across disciplines. The Department of Mathematics comprises 27 committed faculty members who actively contribute to teaching and research in pure and applied mathematics courses.



## FACULTY DEVELOPMENT PROGRAMME (FDP)

(ONLINE MODE)



# Mathematics and Machine Learning for Engineering Problems

**MMLEP-2025** 

This five-day online Faculty Development Programme (FDP) is specially designed for faculty members and researchers from various domains of mathematics and engineering who are interested in learning how modern machine learning techniques can be applied to solve real-world problems. The sessions will focus on building a strong foundation in key concepts while also providing hands-on experience using popular tools such as Python, Scikit-learn, and TensorFlow, etc. Participants will gain valuable insights into how these techniques can be effectively used in academic research and practical applications across mathematical and engineering domains.

#### **Who Can Attend**

Faculty, PhD Scholars and Industry personnel

#### **Important Dates**

**Last Date of Online Registration:** 

**04** July 2025

**Online FDP Dates:** 

07-11 July 2025

## FACULTY DEVELOPMENT PROGRAMME (FDP)

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### Mathematics and Machine Learning for Engineering Problems

**MMLEP-2025** 

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Fointly Organized by

Department of Mathematics SLIET, Longowal

Department of Mathematics
GLA University, Mathura





Mathura | Greater Noida

#### **CHIEF PATRONS**

Prof. M.K. Paswan Director, SLIET Prof. A.K. Gupta VC, GLAU

#### **PATRONS**

Prof. A.S. Shahi, Dean (Acad.), SLIET Prof. Ashish Sharma Dean (Acad.), GLAU

#### **ORGANIZING CHAIRS**

Prof. J.R. Sharma
HOD Mathematics, SLIET
Prof. Manish Goyal
HOD Mathematics, GLAU

#### **CONVENORS**

Prof. Vijay Kumar Kukreja
Department of Mathematics, SLIET
Dr. Amit Kumar Saraswat
Department of Mathematics, GLAU

#### **CO-ORDINATORS**

Dr. Yogesh Kapil
Department of Mathematics, SLIET
Dr. Umashankar Samal
Department of Mathematics, GLAU

#### **RESOURCE PERSONS**

Renowned Experts from IITs, IIITs and CFTIs

#### **PROGRAMME FEATURES**

- Designed for faculty and researchers from mathematics and engineering backgrounds
- Exposure to real-world applications of machine learning in mathematical domains
- Strong emphasis on interdisciplinary applications
- Highly Interactive Sessions with theoretical and practical applications

#### **COURSE CONTENTS**

- Introduction to Machine Learning and its types: Supervised, Unsupervised, etc.
- Mathematical Foundations of ML: Linear Algebra and Probability Theory
- Regression and Curve Fitting: Statistical
   Foundations and Machine Learning Perspectives
- Classification Algorithms and Convolutional Neural Networks (CNN) for Solving Classification Problems
- Clustering Techniques: k-Means and Dimensionality Reduction using PCA
- Machine Learning for Solving Differential Equations

#### **HANDS-ON SESSIONS**

Practical sessions are planned to help participants to apply the concepts to real-world datasets and develop research techniques.

#### **REGISTRATION DETAILS**

- Who can attend: Faculty and Research Scholars, Masters Students, and Industry personnel
- **Registration link** https://forms.gle/fG6ajs4xBh6gHUkN7
- **Registration fee:** Rs. 250 for internal research scholars and Rs. 500 for others.
- Last Date for Registration: 04 July 2025

#### **ONLINE PAYMENT DETAILS**

ACCOUNT NAME	MMLEP 2025
ACCOUNT NUMBER	5809009974
BANK NAME	Central Bank of India
BRANCH NAME	Longowal
IFSC CODE	CBIN0283105

- UPI ID: 12432926@cbin
- QR Code



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