#### **About MITS**

Madanapalle Institute of Technology & Science is established under the auspices of Ratakonda Ranga Reddy Educational Academy, in the year 1998, under the visionary proactive leadership of Dr. N. Vijaya Bhaskar Choudary, Ph.D., Secretary & Correspondent. This is the most sought after premier institution, situated in the charismatic silhouette of Horsley Hills, in the hilly regions of Madanapalle, Annamayya district of Andhra Pradesh. MITS is approved by AICTE, New Delhi and affiliated to JNTUA, Anantapuramu. MITS is a NAAC accredited Institution with A+ Grade, with autonomous status from UGC since 2014. MITS is an ISO 21001-2018 Institution. MITS ranked in the band 201-300 - NIRF 2024 under Engineering Discipline. National Board of Accreditation (NBA) accredited 6 UG Programmes (CE, CSE, CST, ECE, EEE, ME) and 2 PG programmes (MBA and MCA).

#### **Institute Vision**

To become a globally recognized research and academic institution and thereby contribute to technological and socio-economic Development of the nation.

#### **Institute Mission**

To foster a culture of excellence in research, innovation, entrepreneurship, rational thinking and civility by providing necessary resources for generation, dissemination and utilization of knowledge and in the process create an ambience for practice-based learning to the Youth for success in their careers.

### **About Department**

The Department of Mathematics, since its inception, has been under dynamic progress and is able to establish quality education in undergraduate and post graduate programs in various disciplines. The department is funded with UGC, DST, SERB etc. worth of Rs. 74.77 Lakhs. The department faculty has published 410 research articles in reputed national and international journals. The major research areas are Algebra, Theoretical and Computational Fluid Dynamics, Graph Theory, Stochastic modelling, Control Theory, Fuzzy Logics, Multivariate Analysis and nonlinear Functional Integral Equations. The department is committed to excel mathematical computational skills of students for success in their careers.

**Chief Patron** Dr. N. Vijaya Bhaskar Choudary, Secretary & Correspondent

#### Patron

Mrs. Keerthi Nadella

**Executive Director** 

**Program Chair** 

Dr. C. Yuvaraj

Principal, MITS

**Co-Chair** Dr.Vadim Azhmyakov, Ph.D

Professor **Department of Mathematics , MITS** 

#### Convener

Dr. P. Ramesh Reddy, Ph.D

**HoD-Mathematics**, **MITS** 

Coordinator Dr. A. Subba Rao, Ph.D

Asst. Professor, Dept. of Mathematics, MITS

**Co-coordinator** 

Dr. R. Saravana, Ph.D

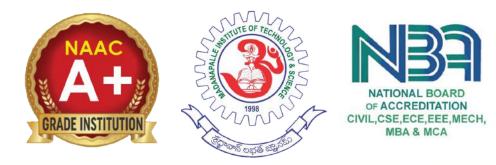
Assoc. Professor, Dept. of Mathematics, MITS

#### Certificate

E-Certificate will be provided on the completion of Faculty Development Program.

## **One Week Online Faculty Development Programme**

### on **"Mathematical Foundations for Computational Intelligence**"







## **Department of Mathematics**

### **MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE** (UGC-AUTONOMOUS INSTITUTION) Madanapalle-517325, Annamayya Dist., Andhra Pradesh

## Date: 25/11/2024 to 30/11/2024

Organized by

# www.mits.ac.in

## **Resource Persons:**

## Session:1

## Day 01: (25-11-2024)



Dr. K.V. Narasimha Murthy Associate Professor, **Department of Mathematics, MITS** 

**Topic:** Probability Modelling



#### Day 02: (26-11-2024) Session:3



Dr. R. Vishnu Vardhan Professor, Department of Statistics, Ramanujan School of Mathematical Sciences, Pondicherry University

**Topic:** Predictive Analytics Using R



## Session:5

# Day 03: (27-11-2024)



Dr. A. Prashant

Assistant Professor, **Department of Mathematics MITS** 

**Topic:** An Introduction to Graph Algorithms: Finding Shortest Paths and Spanning Trees



Professor, BITS Pilani, Hyderabad Systems

**Department of Computer Science & Information Topic:** Optimization in machine Learning

### Session:2

#### Dr. Om Prakash

Professor, Department of Mathematics, IIT Patna

**Topic:** Linear Algebra for Machine Learning

### Session:4

#### Dr. D. Pradeep Kumar

Professor, **Department of Management Studies MITS** 

**Topic:** Dimensionality Reduction Technique

### Session: 6

#### Dr. Y.V.K. Ravi Kumar

## **Resource Persons:**

## Session:7

### Day 04: (28-11-2024)



#### Dr. Subramanian Kuppusamy

**Research Fellow**, Deakin University, School of Engineering, Australia

**Topic:** Memory Sampled-data Control for T-S **Fuzzy Systems** 



## Session:9

## Day 05: (29-11-2024)



#### Dr.J.Indhumathi Professor, Department of Information Science and Technology, Anna University, Chennai

**Topic:** The Role of Mathematics in Emerging **Technologies** 



Dr. Basabi Chakraborty Ph.D. (Tohoku University, Japan) **Professor & Dean Department of Computer Science and Engineering, MITS Topic:** Some Proposals of Similarity Measures for **Efficient Analysis of Time Series Data** 

## Session:11

## Day 06: (30-11-2024)

#### Dr. S. Kusuma

**Assistant Professor & HoD Department of CSE- Data Science, MITS Topic:** Advanced AI for Health : Personalized Application with google gemini



Dr. Goutam Chakraborty Ph.D. (Tohoku University, Japan) **Distinguished Professor and Dean Department of Computer Science and Engineering, MITS Topic:** Graph clustering and Matrix Rank **Reduction - Two Sides of the Same Coin** 

## Session:8

#### Dr. R. Nidhya

Professor, **Department of Computer Science and Engineering, MITS** 

**Topic:** Building Neural network from Scratch

### Session:10

## Session: 12

# **About FDP**

A Faculty Development Program (FDP) on "Mathematical Foundations for Computational Intelligence" is designed to provide faculty members with a solid understanding of the mathematical principles that underpin key methods in Computational Intelligence (CI). The goal of the program is to bridge the gap between theory and practice, helping participants grasp the mathematical tools and techniques essential for fields like machine learning, artificial intelligence, data analysis, and optimization.

This one-week FDP will cover several core areas of Mathematics that are foundational for Computational intelligence, with a focus on both the theoretical concepts and their practical applications in real-world problems.

# **Organizing Commitee Members**

- Dr. K. V. Narasimha Murthy Assoc. Prof
- Dr. Ramasamy Subramaniam Asst. Prof
- Dr. Kata Sreelakshmi Asst.prof
- Dr. Nazeer Ansari Asst. Prof
- Dr. P. Ramesh Asst. Prof
- Dr. Pujari Bharath Kumar Asst. Prof
- Dr. T. Thamizharasan Asst. Prof
- Dr. G. Leena Rosalind Mary Asst. Prof

# **Eligibility to Participate**

The faculty members of the UGC / AICTE recognized Universities and Engineering College, Research scholars, Industry (Bureaucrats/Technicians/Participants from Industry etc.).

# **Registration Fees**

Rs. 200/- for faculty members.

Rs. 150/- for PG students & **Research Scholars.** 



Scan & Pay Using PhonePe App

# **Registration Link:** https://forms.gle/9He6nepRxC1MaiQ19 Last Date for Registration : 24/11/2024

# **Contact Details :**

Dr. A. Subba Rao, Ph.D

Mobile: 91-9160020473

Email: subbaraoa@mits.ac.in



- Dr. T. Chalapathi Asst. Prof
- Dr. K. Padmaja. Asst. Prof
- Dr. A. Divya Asst. Prof
- Dr. P. Murugan Asst. Prof
- Dr. Durga Bhavani Asst. Prof
- Dr. Athmakoori Prashant Asst. Prof
- Dr. Sarode Rekha Asst. Prof
- Dr. Kezia Saini Asst. Prof



