



# ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON Insights into Artificial Intelligence and Machine Learning for Bio-Informatics Applications



(27<sup>th</sup> June – 7<sup>th</sup> July 2022)

Organised by

**Electronics & ICT Academy, NIT Warangal**

in association with

**M.Kumarasamy College of Engineering (Autonomous), Karur**

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

## Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. 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:

The Faculty Development Programme will help to disseminate the knowledge in the domain of data science and Machine learning. It empowers the participants to understand how AI and Machine Learning can be used to innovate and improve the business process and Real time applications. ML is a fast-growing field of Artificial Intelligence concerned with the study and design of computer algorithms for learning good representations of data, at multiple levels of abstraction. Since data is overwhelming, organizations are struggling to extract the powerful insights they need to make smarter business decisions. The participants will be trained with hands-on approach in order to have an in-depth insight into the domain of AI and expose them to Feasibility & future scope

## Major Course Contents:

- ❖ Introduction to AI and Machine Learning
- ❖ Research in Machine Learning
- ❖ Introduction to Python
- ❖ Feature Representation
- ❖ Unsupervised Learning Methods, K-Means
- ❖ Supervised Learning Methods
- ❖ Searching Algorithms
- ❖ Decision Trees
- ❖ Naive Bayes Classification
- ❖ Dimensionality Reduction Methods (PCA)
- ❖ Hands on sessions on Unsupervised and Supervised Methods
- ❖ Support Vector Machines and Neural Networks
- ❖ Meta Heuristic Approaches
- ❖ Ensemble Methods and Matrix Vectorization
- ❖ Medical Image analysis applications
- ❖ Machine learning role in Biomedical sciences
- ❖ Prediction of protein structure using ML
- ❖ Clustering for biological data
- ❖ Analysis of Microarray

## 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:

<b>Faculty and Research Scholars</b>	<b>Rs.750/-</b>
<b>Industry Participants</b>	<b>Rs.2250/-</b>

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>

## How to apply:

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

<https://forms.gle/hcKdJ88JkoAuViq48>

## Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

## Important Dates:

<b>Last date (Application &amp; DD)</b>	<b>25.6.2022</b>
<b>Selection List by E- mail</b>	<b>26.6.2022</b>
<b>Duration</b>	<b>27.6.2022 to 7.7.2022</b>

## About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as 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 the 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 MKCE:

M.Kumarasamy College of Engineering is an Autonomous Institution, Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai was established in the year 2000 by M.Kumarasamy Health and Educational Trust with a vision to provide technical education for all the sectors of the society. The institution with its state of the art facilities and dedicated team of faculty members has become a hub of technocrats and is marching towards new frontiers.

Institute offers 9 under graduate and 6 post graduate programs including MBA and MCA and is accredited by NAAC with A grade and NBA. The institute is recognized as research centre by Anna University, Chennai, for Ph.D. programmes in various specialisations. MKCE is awarded with QS igauge eLEAD certification for learning enabled and academic digitization institute. Further MKCE is the first and only institute rated with Platinum grade by QS igauge under engineering category.



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1. Name :

2. Designation :

3. Institution :

4. Email :

5. Mobile No. :

6.

Reference No:
Amount:
Bank :
Date:

7. Address for Correspondence:

8. Educational Qualification:

9. Subjects taught so far:

10. No. of refresher courses/workshops attended:

11. Experience (in years):

Teaching: Research: Industry:

12. Do you belong to SC/ST : YES /NO

(If yes, please specify and attach a copy of caste certificate to claim the concession)

### Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Date

Signature of the Applicant

### SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. .... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on “**Insights into AI and Machine Learning for Bio-Informatics Applications**”, sponsored by **Electronics & ICT Academy** during **27<sup>th</sup> June – 7<sup>th</sup> July, 2022** at M.Kumarasamy College of Engineering (Autonomous), Karur, Tamilnadu.

Signature of Head of Institution  
(with seal)

### Address for correspondence

Post your application form

**Dr. V Durgadevi**

Associate Professor

Department of CSE

M.Kumarasamy College of Engineering (Autonomous),  
Karur -639 113, Tamil Nadu.

It is requested to all the delegates, after completion of application form, all the payment details, screenshot of the payment has to be uploaded in the following online registration link.

### Registration Link:

For more details about Electronics & ICT Academy, NIT, Warangal, please visit:

<https://nitw.ac.in/eict>

### For more enquiries please contact:

**Dr. V Durgadevi,**

**Associate Professor, Department of CSE,**

**M.Kumarasamy College of Engineering**

**(Autonomous), Karur, 639 113, Tamilnadu.**

**Mobile: 9487947809**

**Email: [durgadeviv.cse@mkce.ac.in](mailto:durgadeviv.cse@mkce.ac.in)**

## Coordinators

### Dr. M Srinivas

Ph.D. (IITH), Post-Doc (Academia Sinica, Taiwan & ETS, Canada)

Computer Science and Engineering

National Institute of Technology

Warangal – 506 004 (Telangana State)

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