



# ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON Implementation of Data Science Applications Using Python

(4<sup>th</sup> July- 14<sup>th</sup> July 2022)

Organised by

**Electronics & ICT Academy, NIT Warangal**

in Association with

**CMR Engineering College, Medchal, Hyderabad**

(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. It empowers the participants to understand how Data science can be used to innovate and improve the business process and Real time applications. Data Science 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 Data Science, AI and Machine Learning
- ❖ Research in Machine Learning
- ❖ Statistical Machine Learning
- ❖ Recommendation Systems
- ❖ Introduction to Python
- ❖ Feature Representation and Collaborative Filtering
- ❖ Unsupervised Learning Methods, K-Means
- ❖ Supervised Learning Methods
- ❖ Decision Trees
- ❖ Linear Regression: Simple and multiple linear regressions
- ❖ Optimization methods
- ❖ Feature Selection Methods
- ❖ 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
- ❖ Computer Vision and NLP related Applications

## 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

## 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/ZP9rsVvMxgv6QtHXA>

## 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>2.07.2022</b>
<b>Selection List by E- mail</b>	<b>3.07.2022</b>
<b>Duration</b>	<b>4.07.2022 to 14.07.2022</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 CMREC: CMR Engineering College** was established in the Year 2010 at Medchal, Hyderabad and is affiliated to JNTU Hyderabad, approved by All India Council for Technical Education (AICTE), New Delhi. The institute currently has a total intake of 1020 by offering seven-under Graduate Courses in Computer Science Engineering - 240, Electronics & Communication Engineering-240, Information Technology-120 and emerging Departments like CSE (Artificial Intelligence & Machine Learning)-180, CSE (Data Science)-120, CSE (Cyber Security)-60, Artificial Intelligence & Data Science-60; Apart from two Post Graduate Courses -M. Tech in VLSI System Design-12, and Computer Science Engineering-12.

**About CSE-Data Science:** The Department of CSE-Data Science is established in the year 2020 with an intake of 120. The department has well-qualified faculty to impart high-quality education with the latest developments in various technologies. The students in the department are nurtured into competent software professionals to face the real-time challenges of the Data Science and Information Technology sectors.



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ON  
Implementation of Data Science Applications  
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**Organised by**

**Department of CSE-Data Science, CMR Engineering College, Medchal, Hyderabad**

**in Association with**

**Department of Computer Science Engineering and Electronics &  
ICT Academy, NIT Warangal**

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

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 "**Implementation of Data Science Applications Using Python**", sponsored by **Electronics & ICT Academy** during **4<sup>th</sup> July - 14<sup>th</sup> July, 2022** at CMR Engineering College, Medchal, Hyderabad.

Signature of Head of Institution  
(with seal)

**Address for correspondence**

Post your application form

**Dr. M Laxmaiah**

**Professor & HOD CSE-DS,**

Department of CSE – Data Science,

CMR Engineering College, Medchal,

Telangana, India-501401.

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. M. Laxmaiah**

**Professor & HOD CSE-DS**

**Department of CSE-Data Science**

**CMR Engineering College, Medchal**

**Hyderabad, Telangana, India - 501401**

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**Coordinators**

**Dr. M. Srinivas**

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

Computer Science and Engineering

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