ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)
ON
DATA SCIENCE AND ITS APPLICATIONS

(15th June 2024 – 26th June 2024)
Timing: 3 PM to 7 PM
Organized by
E & ICT Academy, NIT Warangal, Telangana
in association with
Department of Computer Science and Engineering
NIT Raipur, Raipur – 492010, Chhattisgarh
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 role is to offer faculty development programmes (FDPs) in standardized courses and emerging areas of electronics, information communication technologies, training and consultancy services for Industry, curriculum development for Industry, CEP for working professionals, advice and support for technical incubation and entrepreneurial activities.

This Online FDP is devoted to address the need to enhance the knowledge about the latest development pertaining to **Data Science and its Applications** is being conducted at **Department of CSE, NIT Raipur, Raipur – 492010, Chhattisgarh**. The whole course is handled by academicians and industry experts.

Major Course Contents:

- **Introduction to Data Science**
- **Purpose and Components of Python in Data Science**
- **Mathematical Computing with Python**
- **Scientific Computing with Python**
- **Data Manipulation with Pandas**
- **Prediction using Scikit-Learn**
- **Random Variables and Distributions**
- **Exploratory Data Analysis**
- **Quantitative and Graphical Techniques**
- **Feature Generation and Feature Selection**
- **Clustering Techniques**
- **Nearest Neighbors Algorithm**
- **Data Visualization**
- **Statistical Foundations for Data Science**
- **Statistical Testing**
- **Regression**
- **Hypothesis Testing**
- **PCA and SVD**
- **Data Wrangling**
- **Predictive Analytics**
- **Ethical Issues: Privacy and Security**
- **Next Generation Data Scientists**
- **Recommender Systems**
- **Case Studies on Data Science**

Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Raipur, Raipur – 492010, Chhattisgarh and NIT Warangal. Academicians in the concerned field from IITs/NITs/IIITs/IISERs/NISERs/ Abroad are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

Eligibility:

The program is open to the faculty of engineering colleges, MCA colleges and other allied disciplines in India. Industry personnel working in the concerned/allied discipline can also attend.

Registration Fee Particulars:

Faculty, Research Scholars and Industry Participants	Rs. 1000/-

Participants need to pay the registration fee online using the following details

Online Transfer Details
Account Name: Electronics & ICT Academy NITW
Account No: 62423775910
IFSC: SBIN0020149

How to apply:

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

https://forms.gle/Kvt3oVJUhPQWw6neA

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 100 (hundred). The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD/online payment 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:

Last date for submission of Application	12 / 06/ 2024 (11:59 PM)
Selection List by E- mail	13 / 06 / 2024 (11:59 AM)
Duration	15 / 06 / 2024 (Saturday) to 26 / 06 / 2024 (Wednesday)

About NIT Raipur:

NIT Raipur situated in the capital city of Chhattisgarh, has proven to be "avant-grade" in the field of science and technology over the past few decades. The foundation Ceremony was graced by the then Honorable President of India Dr. Rajendra Prasad on 14th September 1956. The institute initially under the name Government Engineering College (GEC) started with two Departments namely Metallurgical Engineering and Mining Engineering. From 1st December 2005, the institute has become the NIT and hence joining the elite category "Institute of National Importance". The institute currently offers 12 undergraduate (UG) and 11 Postgraduate (PG) programs in almost all the thrust areas Engineering and Technology. The institute secured 70th Rank in the Engineering Category under the NIRF-2023.

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. programs in various specializations. All B. Tech. and M. Tech. programmes of NIT Warangal are NBA accredited.

Coordinator(s):

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