# ATAL AICTE

**Sponsored** 

**One Week Faculty Development Program** 

(Application No. 1691574106)

# **Machine Learning and Data Analytics** using Python (Offline Mode)

to be conducted under ATAL Scheme

30th October to 04th November, 2023

# **Registration Form**

1. Name: Male/Female:	
2. Designation:	
3. Organization:	
4. Teaching Exp: Industry Exp:	
5. Highest Qualification:	
6. Specialization:	
7. Areas of interest:	
8. Address for Communication:	
9. Mobile:	
10. E-mail:	

# **Declaration**

The information furnished above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the FDP.

Place:

Date: Signature of the Applicant

# **Registration Link:**

https://atalacademy.aicte-india.org/login

Note: Please send the scanned copy of the filled and duly signed registration form to the email: sunanda.khandait@kdkce.edu.in harish.gorewar80@kdkce.edu.in

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#### **CO-ORDINATOR:**

Dr. S.P. Khandait.

Professor & HOD, Deptt. of Information Technology

#### **CO-COORDINATOR:**

Dr. Harish Gorewar.

Asstt. Professor, Deptt. of Information Technology

#### **ORGANISING COMMITTEE:**

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Asstt. Professor, Deptt. of Information Technology

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Asstt. Professor, Deptt. of Information Technology

B.C.Y.R.C.'s



(NAAC & NBA -CE, ME, EE, ETC, CSE Accredited)

# **Department of Information Technology**

**Organizes** 

**One Week ATAL Faculty Development Program** 

# **Machine Learning and Data Analytics using Python** (Offline Mode)

30<sup>th</sup> October to 04<sup>th</sup> November, 2023



# K.D.K. COLLEGE OF ENGINEERING

Great Nag Road, Nandanvan, Nagpur - 440024. Tel. No. 0712-2711400, 2710030

Fax No. 0712-2713658 Website: www.kdkce.edu.in

E-mail: sunanda.khandait@kdkce.edu.in

#### K.D.K.C.E. At a Glance:

K.D.K. College of Engineering, Nagpur is established in 1984, approved by AICTE, New Delhi and Director of Technical Education Maharashtra and affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. Government of Maharashtra has conferred 'A' Grade on the basis of excellence & adequate infrastructure as well as academic achievements of students & faculty. The college runs Seven Undergraduate courses in Electrical Engineering, Civil Engineering, Mechanical Engineering, Electronics & Telecommunication Engineering, Computer Science & Engineering, Information Technology & Artificial Intellegence and Data Science. And Four Postgraduate courses namely M.Tech. Structural Engineering, Mechanical Engineering Design, Maser of Com[puter Application (MCA) and Master of Business Administration (MBA). The National Board of Accreditation (NBA) has accredited five programs namely Civil Engineering, Mechanical Engineering, Electrical Engineering, Electronics & Telecommunication Engineerinn & Computer Science & Engineering. The institute is also accredited by National Accreditation & Assessment Committee (NAAC), Bangalore which ensures high academic standards of the institution and assures quality outcomes for the students.

## **About Information Technology Department:**

Department of Information Technology was established in 2001 with intake capacity of 40. In the Academic year 2002-2003, the intake capacity was increased to 60. The department has good infrastructure for imparting training and education which includes well equipped Classrooms & Laboratories. The department believes in over all development of students and is aligned in making students technically sound by organizing different Technical Seminars, Workshop, STTP, Guest Lectures all throughout the year. The department has highly qualified and experienced staff. The students of the department also excel in the University Examinations and secure merit ranks every year.

#### About FDP:

Machine learning & Data Analytics are rapidly growing field with the potential to revolutionize many industries. However, there is a shortage of skilled machine learning & data analytics professionals in India. This faculty development program aims to address this shortage by providing faculty members with the knowledge and skills they need to teach machine learning and Data Analytics.

### Objective of FDP:

The objectives of this faculty development program are to:

- Provide faculty members with an understanding of the fundamentals of machine learning and Data analytics
- Teach faculty members how to apply machine learning and Data Analytics to real-world problems
- Enable faculty members to develop their own machine learning and Data Analytics projects

# **Expected Outcome:**

By the end of the program, participants will be able to

- Apply Machine Learning & data analytics concepts to realworld problems and
- Integrate ML & Data analytics solutions into their teaching and research.

# **Targeted Audience / Eligibility:**

The target audience for this faculty development program is

- Faculties from AICTE approved Engineering Colleges/ Polytechnic Colleges and related disciplines.
- · Research Scholars, Persons from Industry, PG Students.

## **Indicative Topics:**

- Introduction to Machine Learning and Data Analytics
- Data pre-processing, data analysis in python
- Introduction to machine learning algorithms and Supervised Learning algorithms: SVM, SVM with Kernel methods
- Statistical and Machine learning terminology for model building and validation
- Regression techniques, and types of regression analysis
- Supervised Learning algorithms: Naïve Bayes, Decision Tree, random forest
- Unsupervised Learning: KNN, K-means, other types of clustering
- Ensemble methods: Boosting, Bagging, Ensemble Voting
- Dimension Reduction Techniques: Principal component Analysis (PCA), KPCA, Linear Discriminant Analysis
- · Feature Engineering and Feature Selection

#### **Resource Persons:**

Academicians from premier institution like VNITs, IIIT, universities, and experts from Industries as well as R & D Organizations having expertise in engineering domain are invited as Resource Person in this Program .

# Registration Fee / Accommodation/ Selection Criteria

No registration fee for participation. Outstation participants from AICTE approved institutions will be given TA/DA and accommodation as per AICTE / Institute norms. Selection will be done based on **first-cum-first serve basis** and the confirmed candidates will be notified immediately. The maximum number of participants will be **50** (Fifty).

The list of selected participants will be notified in the institute's website **www.kdkce.edu.in** and to their personal e-mail IDs.

## How to apply:

Registration for FDP can be done using the link as mentioned below.

https://atalacademy.aicte-india.org/login

Last date for receipt of registration form: 25/10/2023

Intimation of selection on or before : 26/10/2023

#### For further details contact:

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# Dr. H. V. Gorewar

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