





### Centre for Agricultural Market Intelligence under NAHEP – CAAST International Agri-Business Management Institute Anand Agricultural University, Anand

# Certificate Course on

# **Data Analytics using Python**

06<sup>th</sup> August to 22<sup>nd</sup> October 2022

**Course Duration: 12 Weeks** 

:: Venue ::

Information Technology Center, AAU, Anand







#### **About NAHEP-CAAST, AAU, Anand:**

Anand Agricultural University has been awarded an ICAR- World bank funded project to establish Centre for Agricultural Market Intelligence. The major objectives of this project include price forecasting and behavior, export competitiveness, evaluation of e-NAM, market institutions and capacity building of faculty, students, farmers and other stakeholders. Experts from country's premium institutes including IIM- Ahmedabad, Institute of Rural Management (IRMA), Indian Space Research Organization (ISRO), Junagadh Agricultural University, National Cooperative Dairy Federation of India (NCDFI) apart from foreign universities namely Australia's Western Sydney University, and The Papua New Guinea University of Technology are associated with the project.

Centre for Advanced Agricultural Science and Technology (CAAST) is a student centric subcomponent of the World Bank sponsored National Agricultural Higher Education Project (NAHEP) granted to AAU, Anand to provide a platform for strengthening educational and research activities of post graduate and doctoral students.

#### **About the Course:**

Data analytics is a discipline focused on extracting insights from data. It comprises the processes, tools and techniques of data analysis and management, including the collection, organization, and storage of data. The main aim of data analytics is to apply statistical analysis and technologies on data to find the trends. Data analytics draws from a range of disciplines including computer science, information technology, mathematics, and statistics to perform analysis on data in an effort to describe, predict, and improve performance. Python is most popular and widely used programming language for data analytics.

Python is an open source and popular multi-purpose programming language widely used for its flexibility, as well as its extensive collection of libraries, which are valuable for analytics and complex calculations.

This course includes examples of analytics in a wide variety of domain. It will help the participants for their study and research perspectives. One of the most important aspects of this course is that hands-on experience creating analytics models using Python programming.

#### **Eligibility:**

Any Postgraduate Students / Faculties / Working Professionals from Academic and Research Organizations.

#### **Selection Criteria:**

The selected candidates will be inform through email. The course director is the final authority for the selection of candidates based on the eligibility and availability of seats

#### **Evaluation:**

■ There will be an evaluation of the candidate at the end of every month. The final evaluation will be at the end of the course.

#### No. of Seat:

50 participants

#### **Course Fee:**

Free

#### **Registration Link:**

https://forms.gle/5KtZMpJzBU7FVLch7



#### **Important Instructions:**

- This is offline certificate course on Saturday of every week.
- No TA/DA will be paid by the host institute.
- Attendance is compulsory.
- Certificate will be provided to the attendees.
- Accommodation will be provided as per availability.

#### **Course Plan:**

Week 1: Introduction to Python Programming

Week 2: Working with Python

Week 3: Introduction to Data Analysis and Probability

Week 4: Sampling Distributions

Week 5: Hypothesis Testing

Week 6: Design of Experiment

Week 7: Linear and Multiple Linear Regression

Week 8: Maximum Likelihood Estimation and Logistic Regression

Week 9: Principal Component Analysis and Factor Analysis

Week 10: Cluster Analysis

Week 11: Classification and Regression Tree (CART)

Week 12: Artificial Neural Network (ANN)

## **Organizing Committee**

#### **Patrons**

Dr. K. B. Kathiria, Hon'ble Vice Chancellor, AAU, Anand

Dr. R. C. Agarwal, DDG (Education) & National Director (NAHEP), ICAR, New Delhi

#### **Advisors**

Dr. Anuradha Agrawal, National Coordinator- NAHEP-CAAST, ICAR, New Delhi Dr. Dr. M. K. Jhala, Director of Research & Dean PG Studies, AAU, Anand

#### Convener

Dr. R. S. Pundir, Principal & Dean, IABMI & PI, NAHEP- CAAST, AAU, Anand

#### **Course Director**

Dr. D. R. Kathiriya, Director (IT), Principal & Dean (AIT), Core Co - PI, NAHEP-CAAST, AAU, Anand

#### **Course Coordinator**

Dr. Prity Kumari, Assistant Professor & Head, College of Horticulture, AAU, Anand Dr. Chetan Dudhagara, Assistant Professor & Head, IABMI, AAU, Anand

#### **Committee Members**

Mr. Alpesh Agja, Programmer, AAU, Anand

Mr. Umesh Rathod, Programmer, AAU, Anand

Mr. Bhavik Patel, RA, NAHEP-CAAST, AAU, Anand

Mr. Ankur Vora, SRF, NAHEP-CAAST, AAU, Anand

Mr. Smit Bhavsar, PA, NAHEP-CAAST, AAU, Anand

:: Contact Details ::

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