



LSSBM's
**PADMASHRI DR. V.B. KOLTE COLLEGE OF ENGINEERING, MALKAPUR,
DIST-BULDANA (M.S) - 443101**

(NAAC Accredited, Approved by AICTE-New Delhi, Government of Maharashtra, DTE, MSBTE, Mumbai and
Affiliated to Sant Gadge Baba Amravati University)

Website - www.coemalkapur.ac.in Email:- coemalkapur@rediffmail.com

Summary Report
National Level One Week Faculty Development Program
On
“Python for Data Science”

In association with

“ISTE-New Delhi, Institution of Engineers (India) (IEI) Aurangabad Local Center

Department of Computer Science and Engineering of Padm. Dr. V. B. Kolte College of Engineering, Malkapur (VBKCOE) conducted **National Level One Week Faculty Development Programme on “Python for Data Science”** from 27th to 31st May 2022. We conducted this FDP programme which enriches the knowledge of faculties, research scholar, PG and UG students.

The number of faculties, research scholar, and PG students were participated for this FDP from various disciplines, and states from India.

Programme	Department of Computer Science and Engineering
Title of course	FDP On “Python for Data Science”
Scheduled Date	27th to 31st May 2022
Programme Convener	Prof. S. L. Farpat Prof. M. V. Shastri
Programme coordinator	Prof. B. B. Thakare Prof. Y. B. Jadhao
Organizing Committee	Prof. G. V. Patil Prof. B. B. Thakare
Principal	Dr. A. W. Kharche Padm. Dr. V. B. Kolte College of Engineering Malkapur Dist-Buldhana (Maharashtra)

Objectives of FDP:

- To introduce participants to the basic concepts and techniques of Python.
- To develop skills of using recent technologies for solving practical problems.
- To gain experience of doing independent study and research.



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The FDP helps create awareness and deeper understanding of recent technology such as Python, Data science among the faculties and researchers working in various disciplines of engineering and sciences. It also helps the participants to understand and apply these technologies through several case studies and real-life examples. It provide opportunities to faculty members, research scholars and post graduate students to enhance their knowledge in research.

Resource Persons:

- Prof. Dhananjay Joshi, Asst. Professor CSE Department, SVKM's NMIMS MPSTME Shirpur.
- Dr. A. B. Gadicha, HOD, CSE , P.R.Pote Patil College of Engineering and Management , Amravati.
- Mr. Vijay Tathe, Project Head & CEO, Microspectra Software Technologies Pvt. Ltd.
- Prof. Mayuri Kulkarni, Assistant Professor, SVKM's Institute of Technology, Dhule
- Prof. Ashish Awate, Assistant Professor, SVKM's Institute of Technology, Dhule

Inauguration:

Prof. G. V. Patil, Asst. Professor, Computer Science and Engineering Department welcome to all participants, explaining objectives of FDP and given brief introduction of speaker about their professional experience. Dr. Y. A. Kharche, Dean Administration, shared views regarding this FDP and congratulated to organizing team.

The screenshot shows a Zoom meeting interface with a slide titled "Online One Week National Level Faculty Development Programme On Python for Data Science (27th to 31th May 2022)". The slide content is as follows:

- Patron:** Shri. D. N. Patil (President, LSSBM), Shri. P.B. Kolte (Vice-President, LSSBM), Dr. A.W. Kulkarni (Secretary, LSSBM), Shri. N. J. Pachpande (Treasurer, LSSBM), Dr. D. T. Patil (Member, LSSBM), Dr. D. N. Kulkarni (Member, LSSBM), Shri. Anil L. Ingole (Member, LSSBM), Shri. D. R. Patil (Member, LSSBM), Dr. Narendra Singh (President, IET, India), Dr. U. B. Kulkarni (Chairman, E-India, Aurangabad Local Chapter), Dr. A. I. Dhatriak (ISTE- Executive Council Member)
- Technical Committee:** Dr. P.A. Kharat (Associate Professor), Prof. M. U. Karande (Assistant Professor), Prof. A. D. Bhopale (Assistant Professor), Prof. G. V. Patil (Assistant Professor), Prof. S. G. Bondel (Assistant Professor)
- Address For Communication:** Program Convener: Prof. S. L. Farpat (Head of Department); Program Coordinator: Prof. Y. B. Jadhav (9595181601)
- Organized By:** Department of Computer Science and Engineering
- In association with:** ISTE Local Chapter, VBKCOE, Malkapur; The Institution of Engineers (India) (IIE) Aurangabad Local Center
- Principal:** Dr. A. W. Kharsha (VBKCOE, Malkapur)

The slide also features logos for NAAC Accredited, ISTE, and IIE, along with contact information for LSSBM's Padmashri Dr. V.B. Kolte College of Engineering, Malkapur, Dist-Buldana-443101.



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1st Day (27/05/2022)

Session I	Prof. Dhananjay Joshi, Assistant Professor , Department of Computer Science and Engineering, SVKM's NMIMS MPSTME Shirpur	Basics of Python
Session II	Prof. Dhananjay Joshi, Assistant Professor , Department of Computer Science and Engineering, SVKM's NMIMS MPSTME Shirpur	

2nd Day (28/05/2022)

Session I	Prof. Dhananjay Joshi, Assistant Professor , Department of Computer Science and Engineering, SVKM's NMIMS MPSTME Shirpur	Python for Data Visualization
Session II	Dr. Ajay B. Gadicha, Head of Department, Computer Science & Engineering P.R.Pote Patil College of Engineering and Management , Amravati	Python for Data Visualization

3rd Day (29/05/2022)

Session I	Mr. Vijay Tathe, Project Head , Microspectra Software Technologies Pvt. Ltd.	Python for Data Analytics
Session II	Mr. Vijay Tathe, Project Head , Microspectra Software Technologies Pvt. Ltd.	

4th Day (30/05/2022)

Session I	Prof. Ms. Mayuri Kulkarni, Assistant Professor, SVKM's Institute of Technology, Dhule	Python libraries in data science
Session II	Prof. Ashish Suresh Awate, Assistant Professor, SVKM's Institute of Technology, Dhule	Statistics in Data Science using Python

5th Day (31/05/2022)

Session I	Prof. Ashish Suresh Awate, Assistant Professor, SVKM's Institute of Technology, Dhule	Statistics in Data Science using Python
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Number of participants Registered: 356

Outcomes of FDP:

- Participants familiar with new technology like Python, Data Science



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- Researchers get more clear idea about innovation.
- Research scholars and post graduate student's knowledge is upgraded with new area for research and development.
- Enhancement in academic excellence


Valedictory:

Prof. G. V. Patil, Asst. Professor, Compute Science and Engineering Department, delivered vote of thanks to all participants, Resource Persons for sharing their professional experience, Knowledge and skills. The vote of thanks also delivered towards Management and Principal Dr. A. W. Kharche sir, our associated bodies-ISTE, IEI, organizing team members who directly/indirectly involving program activities for successful completion of FDP Programme.

Glimpses of FDP

**LSSBM's
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One Week National Level Faculty Development Programme
On
"Python for Data Science"
27th to 30th May 2022



Basics of Python

Session-1: 11:00 to 12:30 (Code:- 1A)
Dates:- 27th May 2022

By:
Dhananjay Joshi
Assistant Professor, Department of Computer Engineering

Participants: Participants, Chat, Share Screen, Record, Reactions

Participants list:
VBKCOE58
VBKCOE58
Dhananjay Joshi
Ravindra Vairag...
Ravindra Vairaglar
Yugesh Kharche
Administrator
Administrator
Poonam Patil



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MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING, SHIRPUR

Variables

- Rules for Naming Variables/Identifiers (Class, Object, Function, etc)
 - A variable name must start with a letter or the underscore character.
 - A variable name cannot start with a number.
 - A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, & _).
 - Variable names are case-sensitive (name, Name and NAME are three different variables).
 - The reserved words(keywords) cannot be used naming the variable.

```
# An integer assignment  
age = 45  
# A floating point  
salary = 1456.8  
# A string  
name = "John"  
print(age)  
print(salary)  
print(name)
```

Python Libraries for Data Science

Extract, Transform, Load (ETL) | pandas | Beautifulsoup | INTAKE

Data Exploration | Seaborn | matplotlib

Data Evaluation | NumPy | TensorFlow

Data Modeling | sklearn | SciPy | SM

Data Presentation | matplotlib | VisPy



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The screenshot shows a Zoom meeting interface with a Jupyter Notebook open. The notebook displays a heatmap of correlation coefficients for various features. The features listed on the y-axis include: concave_points_se, symmetry_se, fractal_dimension_se, radius_worst, texture_worst, perimeter_worst, area_worst, smoothness_worst, compactness_worst, concavity_worst, concave_points_worst, symmetry_worst, and fractal_dimension_worst. The x-axis lists the same features. The heatmap shows a strong positive correlation between the 'se' (smoothness) and 'worst' (texture) versions of the same feature. For example, the correlation between 'radius_worst' and 'radius_se' is approximately 0.9. A color scale on the right indicates correlation values from -0.5 (dark purple) to 1.0 (red).

SVKM's Institute of Technology, Dhule

Levene's Test using Python

```
1 scipy.stats.levene(ratings_df[ratings_df['gender'] == 'female']['eval'],
2 ratings_df[ratings_df['gender'] == 'male']['eval'], center='mean')
```

LeveneResult(statistic=0.1903292243529225, pvalue=0.6628469836244741)

P-value > 0.05
We can't reject Null Hypothesis
Conclusion : Variance Does not differ

```
1 scipy.stats.ttest_ind(ratings_df[ratings_df['gender'] == 'female']['eval'],
2 ratings_df[ratings_df['gender'] == 'male']['eval'], equal_var = True)
```

02:27:03 Department of Computer Engineering 02:11:17 93