

## Organizing committee:

### Chief-Patron

**Prof. M.V. Kartikeyan**

Director, IIITDM Kancheepuram

### Patron

**Dr. S. Jayavel**

Dean-SRICCE, IIITDM Kancheepuram

**Dr.Masilamani .V**

HOD, CSE, IIITDM Kancheepuram

### Coordinators

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### For Further Assistance:

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## About IIITDM Kancheepuram:

Indian Institute of Information Technology Design and Manufacturing Kancheepuram (IIITDM Kancheepuram) is an Institute of National Importance focusing on Excellence for technical education and research established in 2007 by the Ministry of Education, Government of India to pursue IT and IT enabled design and manufacturing oriented engineering education and research and to promote the competitive advantage of Indian products in global markets.

It is strategically located in the proximity of the industrial clusters in Chennai. The institute offers academic and research programs that integrate engineering design, manufacturing and management with information technology. The institute offers undergraduate and postgraduate programs which focusses on IT, design and manufacturing in engineering sectors.

## Important Dates:

- Last date of Registration - ~~29th May 2023~~ **31-05-2023 10:00 AM**
- Selection list by email - ~~24th May 2023~~ **31-05-2023 06:00 PM**
- Last date for payment of Registration Fees - ~~27th May 2023~~ **01-06-2023 10:00 AM**
- Duration of the FDP - 5th June 2023  
to  
10th June 2023



**Indian Institute of Information Technology,  
Design and Manufacturing, Kancheepuram,  
Vandalur to Kelambakkam Road, Chennai**

**Six Day Short Term Course**

**on**

**Data Science Using Python**

**5th June 2023 - 10th June 2023**

**(Physical Mode)**

**Organised by**

**Department of Computer Science and Engineering  
and  
Centre for Computer Vision and Machine Learning  
IIITDM Kancheepuram, Chennai-600127**

## Objectives of the course:

Data Science is the science of analyzing data using statistics and machine learning techniques to draw insights from the data for understanding the system which generated the data. This course will help you learn the basics of python along with different steps involved in data science such as data preprocessing, data visualization, summary statistics, inferential statistics, and machine learning models. This course also gives a complete overview of various python based data analytic tools for data science. The participants will be given hands-on training to use various Python libraries such as SciPy, Sk-learn, Opencv, NumPy, Matplotlib,, etc. that are useful for data analysis and visualization for mastering data science with Python. Case studies involving application from time series data, Image processing, computer vision, AIoT will be discussed.

## Eligibility:

The faculty, Post Doc, Ph.D Scholars, P.G/ U.G students and working professionals from various industries can attend this short term course. The number of participants is limited and will be selected on a first-come-first-serve basis. On completion of the STC, Certificates will be provided to the participants based on their attendance.

## Course Fee Details:

Category	Course Fees
• Professionals from Industries	:Rs.6000*/-
• Faculty Members	:Rs.5000*/-
• Post Doc/ Ph.D. Scholar/ P.G./ U.G. Student	:Rs.4000*/-
• IIITDM Kancheepuram students / Scholars	:Rs.3000*/-

(\*) - Inclusive of GST

## About CSE Department:

Department of Computer Science and Engineering (CSE) offers Computer Science and Engineering programmes such as B.Tech (CSE), B.Tech(CSE with Major in AI), Dual Degree (DD) programmes (B.Tech in CSE and M.Tech in CSE), M.Tech.(CSE with Specialization in Data Science and Artificial Intelligence) and Ph.D in various research areas in computer science. The department has about 550 students which includes B.Tech, DD students, M.Tech and Ph.D scholars. There are 14 faculty members who are actively involved in research in areas such as knowledge engineering, machine learning, wireless sensor networks, membrane computing, cyber-physical systems, IOT, high performance computing, VLSI architectures, biometrics, machine learning, image processing, soft computing and theoretical computer science. Several Government sponsored research and Industry consultancy projects are carried out by the faculty members as Principal Investigators(PIs).

## Accommodation:

Those who need accommodation can apply for the same. Hostel rooms will be provided on nominal charges(Rs 125/- per day), the breakfast and lunch will be provided in the hostel on nominal charges (Appr. Rs. 60/- for each Breakfast/Lunch). These charges are not covered in the registration fee, and these charges can be paid directly to the hostel office/mess after coming to the institute.

## Payment:

The selected participants are required to pay the registration fee only through SBI Collect with the below-mentioned steps. Visit:

<https://www.onlinesbi.com/sbicollect>

[Search by "IIITDM" - IIITDM Educational Events - Payment Category "STC on Data Science (Faculty/Student)"]. For further information, and other updates, please visit [www.iiitdm.ac.in](http://www.iiitdm.ac.in) / send a mail to

[preeth@iiitdm.ac.in](mailto:preeth@iiitdm.ac.in)

## Course content:

- Introduction to Data Science - Python Basics: Primitive Data types -Python Scripts using Input/Output, Assignment, and Branching Statements.
- Data Collection and preparation, Handling csv, Excel, text, pdf files for data preparation.
- Object Oriented programming in python - File Processing in Python - Python Scripts for file processing, involving oops.
- Descriptive Statistics: Summary statistics and data visualization based Descriptive statistics using Pandas and Matplotlib -case Study.
- Machine learning for data science -OpenCV for processing image and video data, Machine Learning using Scikit learn - case study.

## Registration:

Participants interested to attend this program should register online using the following link:

<https://forms.gle/AMqat3FpXXhoKwcJ8>

The provisionally selected participants will be informed through the registered email. However, the final list of participants will be confirmed after completion of the payment of the registration fees.

The non-refundable registration fee will be accepted only through SBI Collect. The registration fee includes course materials, certificates, and refreshments (Lunch and Snacks).

Upon paying the registration fees, the participants are requested to upload the copy of the Transaction receipt, Proof of Payment, Date of Transaction, and Amount in a separate link, that will be commuted later by mail.

## Resource Persons:

The course content will be delivered from experts on the subject from leading academic institutions including IITs/NITs/IIITs/Industry.