



Electronics & ICT Academy IIT Roorkee



An Initiative of
**Ministry of Electronics
& Information
Technology (MeitY)**
Government of India

Joint Faculty Development Program on

Data Science for All

Joint Faculty Development Programme
In association with



Feb 24 - Mar 03, 2025

12:00-2:00 PM & 6:00-8:00 PM

Register Before: Feb 19, 2025

Mode of Delivery is Online



About E&ICT Academy

Electronics and ICT Academy is an initiative of Ministry of Electronics & Information Technology (MeitY), Govt. of India for conducting various Faculty/ Research Scholar Development Programme. Academy has planned short-term training programs on fundamental and advanced topics in IT, Electronics & Communication, Product Design, and Manufacturing with hands-on training and project work using the latest software tools and systems. In addition, the Academy will conduct specialized/customized training programs and research promotion workshops for corporate sector & educational institutions.

Prerequisites

No experience is required, but fundamental knowledge of any programming language would be helpful.

Objectives of the course

- To build a robust mathematical foundation in concepts such as matrices, vectors, vector spaces, and statistical measures, which are essential for understanding data science and machine learning.
- To familiarize participants with advanced data processing techniques, including dimensionality reduction and principal component analysis, for optimizing data representation and analysis.
- To introduce the fundamental concepts of machine learning, including regression, classification, and clustering, and their practical applications in solving real-world problems.

Focus Areas

- Mathematical Foundations of Data Science
- Data Processing and Optimization
- Machine Learning Basics
- Programming for Data Science
- Deep Learning
- Practical Applications and Case Studies

Course Features

- 40 Hours of Lectures, hands-on, and Pedagogy/Industry sessions.
- Lectures from Expert Speakers, Hands-on from industry/Academia experts.
- Access to learning material and video lectures
- Certificate by E&ICT Academy IIT Roorkee

Course Outcomes

Participants are likely to:

- Apply mathematical concepts like matrices, vector spaces, and statistical measures to solve data science problems.
- Use data processing techniques such as dimensionality reduction and PCA for efficient data representation.
- Develop machine learning models for regression, classification, and clustering tasks.
- Handle and process large datasets using scalable approaches like MapReduce.
- Perform data wrangling and visualization using R and Python programming.
- Implement deep learning techniques using Scikit, Keras, and TensorFlow for practical applications.



Experts from Academia/Industry

Who Should Register?

Any Interested Faculty/PhD-Scholars
UG/PG/ & Industry Persons can register

Registration Fee

Fees: ₹ 500/- Faculty/Research Scholar
Note: Registration Fee is Refundable if the
cancellation request is submitted before the last
date of registration.

FDP Kits & Refreshment will be provided

How to make Payment

Please make the payment first using the below link
upload the payment receipt when filling out the
Google registration form

<https://eict.iitr.ac.in/instruction-for-payment/>

Conference Code: EICTIITR-FDP-25-21

Registration Link

<https://forms.gle/EVopehqDVR3oXkjUA>



Scan QR for
registration

Register before:
Feb 19, 2025

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Resource Person

- Prof. DVLN Somayajulu Director NIT Manipur
- Prof. RBV Subramanyam NIT Warangal
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