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Convener

Dr. Khadar Babu SK ,

Head, Department of Mathematics

Coordinators

Dr. Raja Das

Dr. Ragukuamr P

Dr. Nageshwar Rao Ragi



Registration link

https ://events.vit.ac.in/

Last date **for Registration**

15th November 2026

Course Fee

Course Fee: Rs.500/- (Inclusive of GST)

Number of participants: 70

Schedule of Instructions

The VAC is conducted in four sessions from 10 am to 5 pm during 17-21, March 2025.

Venue: Online

Contact Us:

Dr. Raja Das[1]

Dr. Ragukuamr P[1]

Dr. Nageshwar Rao Ragi[2]

[1]Department of Mathematics, SAS

[2]Department of Databases Systems, SCOPE

VIT, Vellore - 632 014

Mobile. 82205 74791, 8870216958

E-mail: rajadas@vit.ac.in

ragukumar.p@vit.ac.in

nraoragi@vit.ac.in

VIT®

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)



Value Added Course

(online only)

on

Machine Learning using Python

(VAC--2402)

16-20, 23-25 November 2026

Department of Mathematics

School of Advanced Sciences

VIT, Vellore-632014

VIT

VIT has made a mark in the field of higher education in India imparting quality education in a multi-cultural ambience, intertwined with extensive application-oriented research. VIT was established with the aim of providing quality higher education at par with institutions of international standards. It persistently seeks and adopts innovative methods to improve the quality of higher education in all fields of science and technology. VIT was established by the well-known educationalist and former parliamentarian, honourable Dr. G. Viswanathan, the Founder and Chancellor, a visionary who transformed VIT into a Centre of excellence in higher technical education. In It is ranked 597 in QS World University Rankings 2027. Also Also based on the same survey, Engineering and Technology Rank of VIT is 119 globally and 6th in India as per the 2026 subject rankings. It is ranked the 14th best university and 14th best research institution and the 11th best engineering institution in India (NIRF ranking, Govt. of India 2025). It is ranked within the top 200 universities in Asia (QS – Asia University rankings 2022) and has got A++ in the 4th cycle of NAAC accreditation.

School of Advanced Sciences

School of Advanced Sciences (SAS), a platform for intellectuals in VIT, is pledged to internationally acclaimed research and inventive instruction with a priority on disciplinary rigor and establishing academic achievement. SAS comprises three academic departments spanning Mathematics, Physics, and Chemistry. The school offers Ph.D. research programs in all these disciplines and Master's Programmes in Mathematics, Physics, and Chemistry.

Deparatment of Mathematics

The subject of Mathematics in VIT is ranked 5 in India and top 104 in the world as per QS World University Rankings by Subject 2026. The department of mathematics has 133 faculty members who are actively involved in teaching and mathematical and interdisciplinary research. The department offers Masters Programs in Data Science, Business Statistics, Integrated M. Sc. Computational Statistics and Data Analytics, Integrated M. Sc. Mathematics and Ph. D. with a plethora of field expertise. Several departmental research projects are financially supported by the leading funding agencies such as CSIR, DRDO, DST, NBHM and MHRD. Recently, the department was also recognized by DST-FIST which aided in establishing

About the Course

Machine learning using Python has revolutionized the way we analyze data and build intelligent systems. Python's simplicity and extensive library ecosystem make it an ideal language for implementing machine learning algorithms. Libraries such as Scikit-learn, TensorFlow, PyTorch, and Pandas streamline tasks like data preprocessing, model training, and evaluation, enabling both beginners and experts to focus on solving complex problems. Machine learning applications range from predicting outcomes and automating repetitive tasks to uncovering insights in vast datasets, with use cases in fields like healthcare, finance, and e-commerce. Python's integration capabilities and community support further enhance its utility, making it the go-to choice for anyone looking to leverage the power of machine learning to create impactful solutions.

Course contents

1. Introduction to Python Programming
2. Data Analysis and Exploration
3. Supervised Learning Algorithms
4. Unsupervised Learning Algorithms
5. Clustering Algorithms
6. Semi-Supervised Algorithms
7. Applications of Machine Learning

Course Outcomes

After completion, a participant will be able to

1. install Python software and IDEs, to use various data types like List, Tuple, and Dictionary, etc., to use multiple loops and conditional statements
2. manipulate data using Numpy and Pandas, and visualize data using Matplotlib
3. implement various machine learning algorithms
4. evaluate various machine learning algorithm
5. apply machine learning algorithm on given data and Evaluation and visualization of model performance
6. make predictions using machine learning algorithms

Who Can Attend?

The course is open to all under-graduates, postgraduates, research scholars, faculty members and representatives from industry.