

Artificial Intelligence & Machine Learning Certification Course



Joint Program of
Eckovation and Shri
Venkateshwara
University (SVU)

Course Brochure

Course duration: 2 Months, Open for : All years, all streams

Certification: Eckovation and SVU

What will you learn?

- Complete knowledge of python
- Build 4 real life projects using Machine Learning
- Complete understanding of using the latest cutting-edge ML & AI algorithms
- Ability to use the best algorithm on the basis of the problem statement provided

Why to choose AI ML program of Eckovation



**Industry Oriented
Curriculum**



**Most Trusted
Online Platform by 10+ Lakh
Learners Worldwide**



**Real-Time
Doubt Solving**



**24*7 Availability
with Lifetime Content
Access**



**Capstone Project under
Expert Guidance**



**Guaranteed Internship
after Course Completion**

The whole world has been in constant change since the release of computers and the internet! They used to be an extra hand to the capabilities of the human mind since the last couple of decades.

Recently, with the advances in the power of computers and ease of access to the large amount of information, it has been made possible to run special algorithms on these tufts of data!

How Machine learning works – With the availability of a tremendous amount of DATA and the ease in accessing them, it is possible to make the computers learn to take decisions. Once we have enough data, ML algorithms are employed based on this data and we get nearly accurate results through prediction. As more data is accumulated, the accuracy improves. Accurate algorithms are then created and data-driven predictions are obtained. You will see in details how this actually happens during this course.

This course gives you COMPLETE know how of Python & Machine Learning, and hence making you are confident enough to launch your career in the world of ML and AI.

For any doubts or concerns please contact +91-9266677335.

Once you complete the course and all the assignments you will be granted a soft and hard copy of the **completion certificate**.

If you are working professional and wants to enhance your skills, **we will provide you an experience letter** once you complete the course and have worked on the machine learning projects

Price: Rs 25,000

Special additional discount of Rs 5000 for all SVU Students.

Details related to Guaranteed Internship:

- i) **Why?** - We believe acquiring a new skill without working on an actual project is wasteful spending of your time and resources. For your holistic learning experience, both course and internship should be combined.
- ii) **Who?** - An Internship is guaranteed by Eckovation to **all Eckovation Alumni** - those who complete at least a course with us.
- iii) **Where?** - The Internship will be either with **Eckovation or one of our partner organizations**. You will be able to access internship.eckovation.com once you register for a course with us. Our Internship Portal will feature profiles of our alumni and also list internship opportunities by various organizations where alumni can apply.
- iv) **How many?** - The internship will be related to the skill(s) which you've acquired from Eckovation platform. In case of **multiple skills**, multiple internship opportunities may be provided.
- v) **Nature of internship?** - The internships will be **virtual** in nature, i.e., you will be able to work on the internship project from home.
- vi) **When?** - The Internship will start only **after your course completion** in either Summer/December Vacation depending on which comes first. In-semester internships can also be considered on case-by-case basis.
- vii) **Certificate** - A **separate internship certificate** will be provided at the end of the internship period.

Curriculum

Python Programming Language

- All the concepts required for Machine Learning

Introduction to Machine Learning

- Introduction

Supervised and Unsupervised Learning

- What is Supervised Learning?
- What is Unsupervised Learning?

Linear regression

- Simple Linear Regression
- Multiple Linear Regression
- Assumptions of Linear Regression
- Python Implementation
- Applications of Linear Regression

Logistic regression

- Introduction
- Difference b/w linear and logistics regression
- Logistics Equation
- Assumptions
- Python Implementation
- ROC Curve

Polynomial regression

- Introduction
- Limitations
- Python Implementation

Multivariate regression

- Introduction
- Difference b/w Multiple Regression and Multivariate Regression
- Problem Statement
- Solution
- Step wise Python Implementation

Decision Tree

- Introduction
- Construction

- Representation
- Assumptions
- Python Implementation

Random Forest

- Introduction
- Bootstrap Aggregation
- Bagging
- Problem Statement
- Python Implementation
- Conclusion

Support Vector Machines

- Introduction
- Tuning Parameters: Kernels, Regularization, Gamma, Margin
- Python Implementation
- Conclusion

Principal Component Analysis

- Introduction
- Feature Elimination
- Feature Extraction
- When to use PCA
- Working of PCA
- Python Implementation

Linear Discriminant Analysis

- Introduction
- Need for LDA
- Representation of Model
- How to make predictions from a learned LDA
- Python Implementation

Hierarchical Clustering

- Single-link and complete-link clustering
- Time complexity of HAC
- Group-average Agglomerative clustering
- Centroid clustering
- Optimality of HAC
- Divisive clustering
- Cluster labeling
- Python Implementation

k-means clustering

- Introduction
- Business Uses
- Algorithm

- Python Implementation

k-mode clustering

- Introduction
- Notations
- Algorithm
- Python Implementation

Naive Bayes Classification

- What is Naive Bayes algorithm?
- How Naive Bayes Algorithms works?
- What are the Pros and Cons of using Naive Bayes?
- Applications of Naive Bayes Algorithm
- Steps to build a basic Naive Bayes Model in Python
- Tips to improve the power of Naive Bayes Model

Deep Learning Concepts

- Neural network Introduction
- Tensorflow installation
- Convolution Network

Capstone Project

- Build your industry grade, resume ready project

About Instructors

Niranjan Kumar

BITS Pilani, 8y+ experience

A BITS Pilani graudate, with experience of over 8 years.

Over last couple of years, he has been associated with the top companies like Oracle, and eBay.

He is a proficient software architect, with deep experience in building highly scalable systems distributed online systems.

He has in-depth working knowledge of technologies like Machine Learning system, MEAN stack and many more.

FAQ

Is this course provided by Eckovation or IIT?

This course has been taught by IIT Alumni working with Eckovation. We do not have any collaboration with any IIT for this course.

What are the modes of payments available?

You can make the due payment via net banking, debit cards, credit cards or online wallet.

Can cash payment be done for courses?

Cash payment facility is not available. Only online transactions are accepted.

When will the classes commence?

The course contains on-demand recorded lectures run on a batch basis. You can access all the videos as soon as you have completed your payment for the course.

How do I enrol in the course?

You can directly click on the Enrol Now button given above to start the enrolment process.

What is the payment structure?

The payment for the course can be made through Credit Card, Debit Card, Net Banking. One can either complete the process with direct on-time payment or with equal monthly instalments.

What does seat booking or token amount mean?

Seat booking or token amount is a non-refundable amount to be paid to book your slot in the batch so that you can pay the total fee on later due date and not worry about missing the batch seat, which are on first come first serve basis.

What should I expect once the enrollment is complete?

Once the enrolment is done, you will receive an email from Eckovation stating all the directions of how to proceed further and what to expect before and during the course.

What if I do not want to continue the course after I have made my payment?

If you do not wish to continue the course you can ask for a refund within 7 days of payment or commencement of the course, whichever is later. For Instalments, once the refund deadline is over, there won't be any refunds, including future pending EMIs.