

# DATA SCIENCE & AI



Ociuz  
ACADEMY

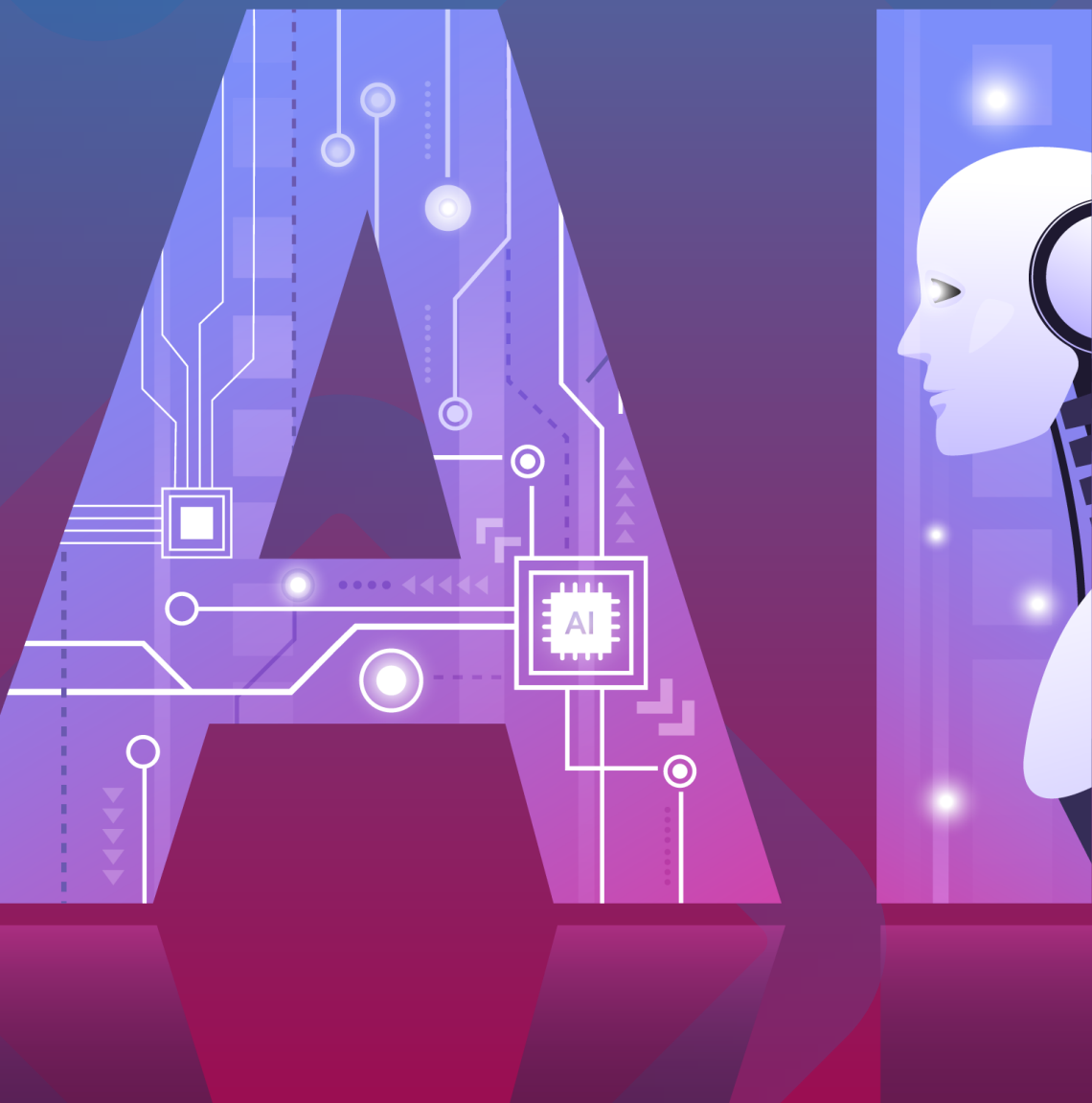
+91 8089 000 806

[www.ocmuz.in](http://www.ocmuz.in)

[ocmuzacademy@gmail.com](mailto:ocmuzacademy@gmail.com)

# What Is DATA SCIENCE & AI ?

Artificial Intelligence And Data Science Is A New Branch Of Study That Deals With Scientific Methodologies, Processes, And Techniques Drawn From Different Domains Like Statistics, Cognitive Science, And Computing And Information Science To Extract Knowledge From Structured Data And Unstructured Data.



# Course Structure

- ➔ **5 Months Course**
- ➔ **3 Months Internship**
- ➔ **100% Placement Assistance**

## Data Science & AI Syllabus

### ➔ **PREPARATORY SESSIONS – PYTHON & LINUX**

1. Introduction to Python and IDEs
2. Python Basics
3. Object Oriented Programming
4. Hands-on Sessions And Assignments for Practice
5. Introduction to Linux
6. Linux Basics
7. Hands-on Sessions And Assignments for Practice

### ➔ **DATA ANALYSIS WITH MS-EXCEL**

1. Excel Fundamentals
2. Excel For Data Analytics
3. Data Visualization with Excel
4. Excel Power Tools

5. Classification Problems using Excel
6. Information Measure in Excel
7. Regression Problems Using Excel

## **DATA WRANGLING WITH SQL**

1. SQL Basics
2. Advanced SQL
3. Deep Dive into User Defined Functions
4. SQL Optimization and Performance

## **PYTHON WITH DATA SCIENCE**

1. Extract Transform Load
2. Data Handling with NumPy
3. Data Manipulation Using Pandas
4. Data Preprocessing
5. Data Visualization

## **LINEAR ALGEBRA AND ADVANCED STATISTICS**

1. Descriptive Statistics
2. Probability
3. Inferential Statistics

## **MACHINE LEARNING**

1. Introduction to Machine learning
2. Regression

3. Classification
4. Clustering
5. Supervised Learning
6. Unsupervised Learning



## DEEP LEARNING USING TENSORFLOW

1. Artificial Intelligence Basics
2. Neural Networks
3. Deep Learning



## POWER BI

1. Introduction to Power BI
2. Getting Started with Power BI Desktop
3. Data Modelling
4. Visualization and Reporting
5. Power BI Service



## DEPLOYING MACHINE LEARNING MODELS WITH CLOUD

1. Introduction to MLOps
2. Deploying Machine Learning Models



## GIT

1. Version Control
2. GIT

## DATA SCIENCE CAPSTONE PROJECT

## BUSINESS CASE STUDIES

1. Recommendation Engine
2. Rating Predictions
3. Census
4. Housing
5. Object Detection
6. Stock Market Analysis
7. Banking Problem
8. AI Chatbot

## NATURAL LANGUAGE PROCESSING

1. Text Mining, Cleaning, and Pre-processing
2. Text classification, NLTK, sentiment analysis, etc
3. Sentence Structure, Sequence Tagging, Sequence Tasks, and Language Modeling
4. AI Chatbots and Recommendations Engine

## COMPUTER VISION

1. RBM and DBNs & Variational AutoEncoder
2. Object Detection using Convolutional Neural Net
3. Generating images with Neural Style and Working with
4. Deep Generative Models
5. Distributed & Parallel Computing for Deep Learning Models

6. Reinforcement Learning

7. Deploying Deep Learning Models and Beyond



## **DATA SCIENCE AT SCALE WITH PYSPARK**

1. Introduction to Big Data And Spark

2. RDDs

3. Advanced Concepts & Spark-Hive



---

+91 8089000806



---

ociuzacademy@gmail.com  
www.ociuz.in

#### Campus

📍 3rd Floor  
Buhari Tower, M.G Road,  
Thrissur- 680004

#### Registered office

📍 LSpace, VIP Road, Near JLN  
Metro Station & Stadium,  
Kaloor, Kochi- 682017