

Start Your Career in

DATA SCIENCE WITH AI



**KERALA INSTITUTE OF
DIGITAL EDUCATION**
The Pathway to Innovation

+91 99466 86600

TRIVANDRUM | KOCHI

Why Choose This Program?

- 160 Hours of Instructor-led Training
- Hands-on Real-time Projects & Case Studies
- Global Certification Preparation
- Covers Data Science, AI, ML, DL, and BI Tools
- End-to-End Data Science Workflow Training



Job Roles After Completion

- Data Scientist
- Machine Learning Engineer
- NLP Engineer
- Data Analyst
- Business Intelligence Developer
- Tableau Developer
- Computer Vision Engineer
- Image Processing Architect
- Software Engineer
- Database/Data Operations Analyst
- Analytics Consultant
- Reporting & Dashboard Analyst
- Supply Chain / Operations Data Analyst
- Finance / Marketing Data Analyst
- AI & ML Research Assistant



Course Objective

This Data Scientist program provides practical, hands-on experience with real-world data science projects. It builds strong foundations in programming, mathematics, machine learning, deep learning, and business intelligence tools like Tableau and Power BI. The course prepares learners for high-demand roles by covering the complete data science workflow from data collection to deployment.



Key Highlights

- Expert Trainers – Industry professionals with years of experience
- Hands-On Learning – Real-time projects and capstone
- Tools & Platforms – Python, NumPy, Pandas, Matplotlib, Seaborn, Power BI, Tableau
- Portfolio Development – Showcase real-world projects to employers
- Placement Assistance – Resume preparation, mock interviews, and career guidance
- Innovation Exposure – Solve real-world business problems using Data Science & AI



Course Structure (160 Hours)

Data Science Introduction	2 hrs
Python (Basics)	24 hrs
Python for Data Science (Numpy, Pandas, etc.)	14 hrs
Math for Data Science	20 hrs
Data Preprocessing & Visualization	20 hrs
Machine Learning (ML Algorithms, Tuning, Clustering)	35 hrs
Deep Learning (Neural Nets, Keras/TensorFlow, NLP)	28 hrs
Power BI (Dashboards & DAX)	17 hrs
Projects (Real-time Apps, CV, DL, BI)	17 hrs



Data Science Introduction & Python Fundamentals

Month 1

- Overview of Data Science and AI
- Python Basics: Variables, Loops, Functions, Data Types
- Problem-solving using Python



Python for Data Science

Month 2

- Libraries: NumPy & Pandas for Data Handling
- Data Cleaning, Transformation, and Analysis
- Visualization with Matplotlib and Seaborn



Math, Data Preprocessing & Machine Learning

Month 3

- Statistics and Math Concepts for Analytics
- Data Preprocessing: Handling Missing Values, Outliers, and Errors
- Machine Learning Algorithms: Regression, Classification, Clustering
- Deep Learning & Neural Networks
- Introduction to NLP Concepts



Business Intelligence & Projects

Month 4

- Power BI: Dashboards, Data Modeling, and Reports
- Tableau: Charts, Graphs, and Storytelling with Data
- End-to-End Real-time Projects
- Capstone Project: Complete workflow from Data Collection → Cleaning → Analysis → Visualization → Prediction
- Implementation of multiple mini-projects to showcase practical knowledge



Global Certifications Aligned

- Global certifications (optional – external exams)
- Microsoft Certified: Data Scientist Associate (DP-100)
- TensorFlow Developer Certificate
- AWS Certified Machine Learning – Specialty
- Google Professional Data Engineer
- IBM Data Science Professional Certificate
- Tableau Desktop Specialist / Certified Associate
- Microsoft Certified: Data Analyst Associate (Power BI)
- Python Institute – PCAP (Certified Associate in Python Programming)
- Note: these global certifications are not issued by our institute. They are optional external certifications.



CERTIFICATIONS



K-IDE



STED COUNCIL



**KERALA INSTITUTE OF
DIGITAL EDUCATION**
The Pathway to Innovation

+91 99466 86600

TRIVANDRUM | KOCHI

K-IDE



THANK YOU !



**KERALA INSTITUTE OF
DIGITAL EDUCATION**
The Pathway to Innovation

 +91 99466 86600

 TRIVANDRUM | KOCHI