

TECHTAN Course Brochure

2024



MISSION AND VISION

Mission

Empowering individuals with tailored tech education in a sophisticated environment. We foster excellence, integrity, and empowerment, guiding learners to thrive in the digital era with personalized attention and industry expertise.

Vision

To be the premier destination for classy tech education, inspiring lifelong learners to unlock their full potential and lead with confidence in the ever-evolving world of technology.

CORE VALUES

We uphold the highest standards of integrity, transparency, and ethical conduct in all our interactions, building trust with our clients, partners, and community through honesty, accountability, and respect.

We foster a culture of collaboration, teamwork, and inclusivity, valuing diverse perspectives and leveraging collective strengths to drive innovation, foster creativity, and achieve shared goals in the tech community.

We strive for excellence in tech education, delivering high-quality programs and services that exceed expectations, foster innovation, and empower individuals to achieve their goals in the digital realm.

We believe in the power of education to empower individuals and transform lives. We empower learners to unlock their full potential, embrace lifelong learning, and thrive in the digital age.



Embrace the elegance of luxury, and the power of perpetual learning in tech. In our journey, we fuse opulence with expertise, crafting a legacy where innovation meets refinement.

SEGUN

DATA SCIENCE

1: Introduction to Data Science

- · Understanding the role of data science
- Introduction to Python programming language for data science
- Overview of essential libraries: NumPy, Pandas, Matplotlib

2: Data Manipulation and Cleaning

- · Data cleaning techniques: handling missing values, outlier detection
- Data manipulation with Pandas: filtering, sorting, merging datasets
- · Data visualization with Matplotlib and Seaborn

3: Exploratory Data Analysis (EDA)

- Conducting EDA to understand dataset characteristics
- · Statistical analysis: descriptive statistics, hypothesis testing
- · Visualizing relationships between variables

4: Machine Learning Fundamentals

- · Introduction to machine learning concepts
- Supervised learning algorithms: regression, classification
- Model evaluation metrics: accuracy, precision, recall, F1-score

5: Supervised Learning Techniques

- · Linear regression
- · Logistic regression
- Decision trees and ensemble methods: Random Forest, Gradient Boosting...

6: Unsupervised Learning Techniques

- · Clustering algorithms: K-means, hierarchical clustering
- · Dimensionality reduction techniques: PCA, t-SNE
- · Anomaly detection

7: Model Evaluation and Validation

- · Cross-validation techniques
- · Hyperparameter tuning
- · Model selection and evaluation

8: Introduction to Deep Learning

- · Basics of neural networks
- Introduction to TensorFlow and Keras
- · Building and training deep learning models

9: Natural Language Processing (NLP)

- · Preprocessing text data
- Text classification techniques
- Sentiment analysis and text generation

10: Time Series Analysis

- · Introduction to time series data
- · Time series forecasting techniques: ARIMA, **Prophet**
- · Analyzing trends, seasonality, and anomalies in time series data

11: Final Project and Capstone

- · Work on a real-world data science project from start to finish
- · Apply all concepts and techniques learned throughout the course
- · Present findings and insights to the class





About us

At Techtan, we understand that the digital landscape is ever-evolving, and navigating it can be daunting. That's why we've created a tech hub designed to empower individuals with the skills and knowledge needed to thrive in today's digital era. We provide top-notch tech education in a clean, calm, and classy atmosphere. We believe that learning should be an enriching experience, which is why we've curated a team of expert instructors who are passionate about sharing their knowledge and guiding learners through their tech journey with personalized attention and support.

ADDRESS

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