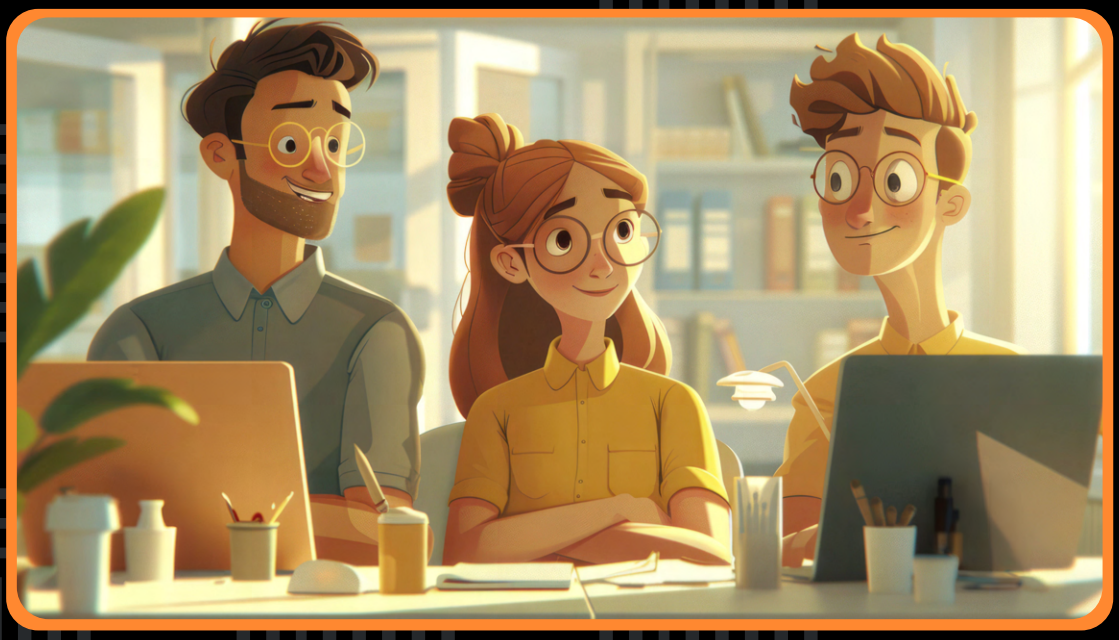
KRUTANIC
A LADDER FOR BRIGHTER FUTURE

DATA SCIENCE

ADVANCED PROGRAM



www.krutanic.com

We assume you might have some questions..

- *Why should I choose krutanic?*
- *Why is data science a good option?*
- *How will the data science program will help you achieve your Dream?*
- *Do you know how many job opening's are worldwide?*
- *What are the data science tool you need to master ?*
- *Will I get a certificate to enhance my resume?*
- *How should I enroll for this program?*

We genuniely care for your dreams and be a path for your success!

That's why our career focused programs seamlessly combine theory with practices, equipping you with real-world skills for employer's value

Ensuring you're not just ready for the next step but also for the future at large, we offer exclusive modules on leveraging generative AI in your field

Build Portfolio

Learn and perfect your skills - hands on by working on **industry relevant projects** to build a **solid portfolio**

Get Placement Ready

Gain the most In - demand skills to launch **switch, or advance your career** with actionable programs across fields

Community Building

Enjoy the best peer - led learning with tons of events while **networking & building lifelong relationships**

Why is Data Science a good career option?

Data Science is ever evolving & YOU need to evolve with it!

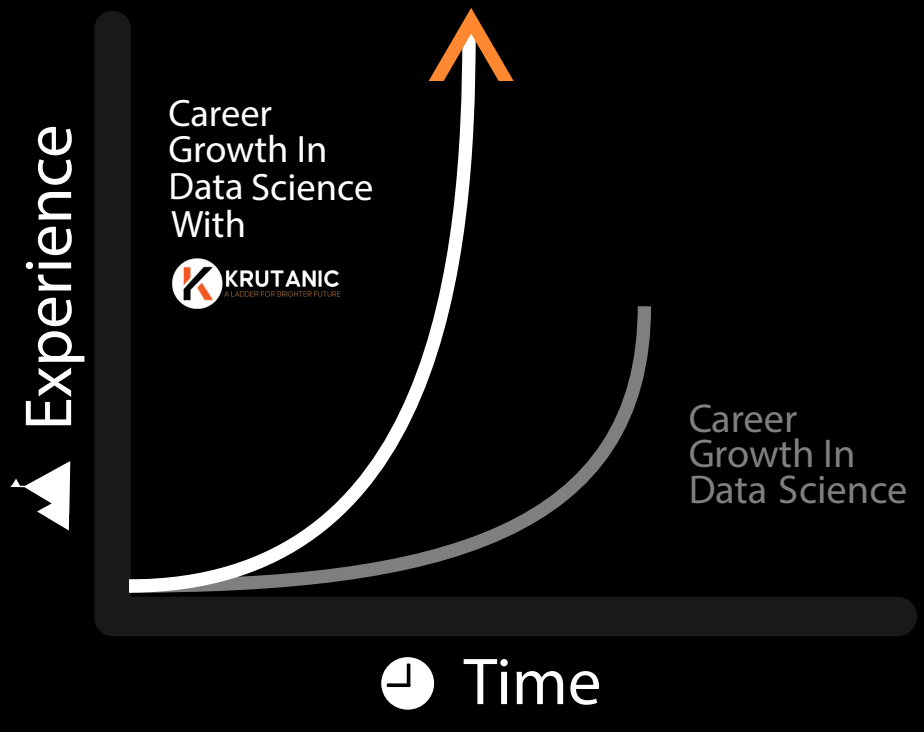
In today's rapidly advancing digital age, data science has become a cornerstone for driving innovation and adapting to ever-changing consumer behaviors. Leveraging technologies like AI, machine learning, and advanced analytics, data science empowers businesses to extract actionable insights, optimize decision-making, and create personalized experiences that lead to measurable outcomes.

Data science is no longer just a competitive advantage it's a necessity for organizations aiming to thrive. Data scientists play a pivotal role in transforming raw data into meaningful strategies, enabling businesses to achieve specific goals and succeed in an increasingly data-driven world.

$361.44 BILLION
Global Data Science market by 2033...

#5 MOST IN - DEMAND SKILLS

24000+
Job opening's in India



How will the Data Science will help you achieve your Dream?

THEY SAW THEIR CAREERS TRANSFROM & YOU CAN TOO HERE'S HOW?

1

Online Induction

Meet your tribe, participate in fun yet intense challenges and kick-start your transformative journey.

2

Master the concepts of Data Science

Build a strong foundation in Data science and learn the strategies used by industry leaders to become a data-scientist in 6 months.

3

Build proof of work

Work on industry-relevant assignments, participate in challenging projects to develop a portfolio that showcases your diverse set of skills.

4

Prepare for interviews & land your dream job

Participate in live portfolio review sessions, mock interviews, and get guidance throughout the job application process.

132000+

Job opening's worldwide

- Data Scientist
- Data Engineer
- Machine Learning Engineer
- Business Intelligence Analyst
- AI Research Scientist
- Data Analyst
- Big Data Specialist
- Quantitative Analyst
- Data Architect
- Data Product Manager
- Data Scientist Intern
- Data Science Consultant
- Data Science Manager
- Data Science Trainer
- Data Science Researcher

Data Science Tools

Weeks 1-2

Advanced Machine Learning Techniques

This module covers the fundamentals of both supervised and unsupervised learning, and explores complex algorithms for solving advanced machine learning problems. Students will learn about ensemble methods like random forests, boosting, and bagging, along with techniques for model evaluation, cross-validation, and hyperparameter tuning.

- Supervised and Unsupervised Learning
- Ensemble Methods (Random Forest, XGBoost, etc.)
- Model Evaluation and Metrics
- Cross-Validation Techniques
- Hyperparameter Tuning and Optimization

LEARNING OUTCOME

By completing this module, Students will learn advanced supervised and unsupervised machine learning algorithms, ensemble methods, model evaluation, and hyperparameter then you'll explore Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs), along with optimizations such as dropout and learning rate schedules.

Weeks 3-4

Deep Learning with Tensorflow and Keras

Students will dive into deep learning models using TensorFlow and Keras. This module emphasizes building neural networks for tasks such as image recognition and natural language processing (NLP).

- Neural Networks Fundamentals
- Convolutional Neural Networks (CNNs)
- Recurrent Neural Networks (RNNs) and LSTM
- TensorFlow & Keras Basics
- Model Optimization and Fine-Tuning

LEARNING OUTCOME

Involves training neural networks with many layers to recognize patterns in large datasets, often used for image, speech, and text recognition.

A popular open-source library for building and deploying deep learning models. It provides a wide range of tools for data processing, model training, and deployment across various platforms.

Week 5

Big Data Analytics

Learn to manage, analyze, and process large datasets using big data tools such as Hadoop and Apache Spark. This module provides practical experience with distributed data storage, processing pipelines, and real-time data analysis tools.

- Hadoop Ecosystem Overview
- Apache Spark for Big Data Processing
- NoSQL Databases (MongoDB, Cassandra)
- Building Data Pipelines
- Real-Time Data Processing with Kafka & Spark

LEARNING OUTCOME

Students will work with tools like Hadoop and Spark to process and analyze large-scale data, gaining expertise in distributed computing and real-time data analysis.

Weeks 6-7

Feature Engineering and Model Optimization

In this module, you'll gain hands-on experience in preparing data and optimizing models. Key techniques like feature extraction, selection, dimensionality reduction, and regularization are covered, enabling students to build more efficient and effective models.

- Feature Extraction and Transformation
- Feature Selection Algorithms
- Dimensionality Reduction (PCA, t-SNE)
- Regularization Techniques (L1, L2, ElasticNet)
- Model Tuning with Grid Search and Random Search

LEARNING OUTCOME

Involves creating new, relevant features from raw data to improve the model's predictive power. This can include selecting, transforming, or creating new features based on domain knowledge.

Focuses on fine-tuning model parameters, such as adjusting learning rates, choosing the best algorithm, and using techniques like cross- validation to reduce overfitting and improve accuracy.

Week 8

AI Applications and Real-World Case Studies

Students will apply AI techniques to solve real-world problems across various industries such as healthcare, finance, and retail. This module includes analyzing case studies to identify practical uses for machine learning models and deploying them to solve challenges like fraud detection and predictive analytics.

- AI in Healthcare, Finance, Retail, and More
- Fraud Detection and Anomaly Detection Models
- Predictive Analytics for Business Intelligence
- Industry-Specific Case Studies
- Deployment Strategies for AI Models

LEARNING OUTCOME

Students will apply AI to solve real-world business problems like fraud detection and predictive analytics, gaining insights into industries like healthcare and finance.

Weeks 9-10

Natural Language Processing

This module focuses on text processing and analysis techniques for natural language understanding. Students will work on applications such as sentiment analysis, text classification, and named entity recognition (NER), leveraging state-of-the-art models like BERT and GPT.

- Text Preprocessing (Tokenization, Lemmatization)
- Sentiment Analysis and Text Classification
- Named Entity Recognition (NER)
- Word Embeddings (Word2Vec, GloVe, FastText)
- Transformer Models (BERT, GPT)

LEARNING OUTCOME

Students will master NLP techniques such as sentiment analysis, named entity recognition, and the use of transformer models like BERT for language understanding.

Weeks 11-12

Data Visualization and Communication

Learn Effective data visualization to making data insights understandable and actionable. This module will teach you how to create interactive dashboards and visually communicate data findings using Python libraries like Plotly and Tableau.

- Advanced Visualization Tools (Matplotlib, Seaborn)
- Interactive Dashboards with Plotly/Dash
- Building Business Dashboards (PowerBI, Tableau)
- Data Storytelling and Reporting
- Presenting Results to Stakeholders

LEARNING OUTCOME

Students will learn how to visualize data and communicate insights effectively using tools like Tableau and Python libraries, enhancing their ability to present data to stakeholders.

Weeks 13-14

Cloud Computing for Data Science

Cloud platforms provide powerful resources for scaling machine learning workflows. This module will introduce cloud-based tools like AWS, GCP, and Azure to process, store, and deploy machine learning models at scale.

- Overview of Cloud Platforms (AWS, Azure, Google Cloud)
- Cloud Data Storage and Management (S3, BigQuery, Azure Data Lake)
- Serverless Computing for Data Pipelines
- AI and ML in the Cloud (AWS SageMaker, GCP AI Platform)
- Automating Data Science Workflows with Cloud Tools

LEARNING OUTCOME

Students will explore cloud platforms like AWS and GCP to run data science models, enabling scalable and efficient processing of large datasets.

Weeks 15-16

Ethical AI and Responsible Data Science

Explore the ethical challenges posed by AI and machine learning. This module covers topics like model fairness, data privacy, transparency, and the societal impact of AI systems, ensuring that students can develop responsible AI solutions.

- Bias in Machine Learning Models
- Ethical Implications and Fairness in AI
- Privacy and Data Protection (GDPR, CCPA)
- AI Transparency and Accountability
- Building Responsible AI Solutions

LEARNING OUTCOME

Students will gain experience with time series analysis and forecasting using ARIMA models and LSTM networks to predict trends in stock prices and other sequential data.

Weeks 17-20

Capstone Project and Career Preparation

This final module provides students with the opportunity to apply everything they have learned by working on an industry-level data science project.

Capstone Project : Fraud Detection in Financial Transactions & Capstone Project

LEARNING OUTCOME

Students will develop fraud detection models using anomaly detection methods, and apply everything learned to a Capstone Project, showcasing their expertise.

Weeks 21-24

Placement Preparation

It also focuses on career preparation, including resume building, mock interviews, and job search strategies.

- Building a Strong Data Science Portfolio
- ATS friendly Resume Building for Data Science Roles
- Personality Development
- Mock Interviews and Feedback Sessions
- Placement Assistance and Job Search Strategies

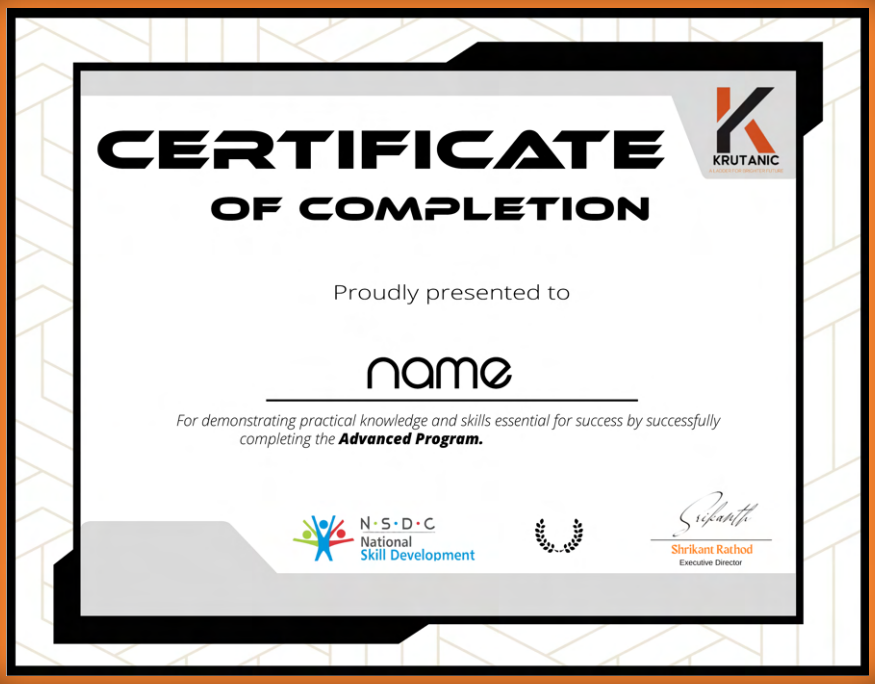
LEARNING OUTCOME

Prepare for a successful job search and interviews with a professional portfolio and job-ready skills.

Will I get a certificate to enhance my resume?

Upon completing the Data Science Advanced Program, you'll earn a certificate, highlighting your skills and expertise.

Showcase your new abilities and build a stronger professional portfolio..



All Data Science Concepts, Strategies, Assignments, Tools & Community Events At One Affordable Price

61,999+ GST 24 weeks | 60 Seats per cohort

- Access to an Exclusive Community of Top Marketers and Industry Professionals.
- One-Year Access to Comprehensive Course Materials, Including Pre-reads and Training Resources.
- Exclusive Invitations to Physical Events, Networking Meetups, and Workshops.
- Personalized Guidance from Guest Mentors with Experience in Leading Startups.
- Real-World Insights and Strategies to Accelerate Your Marketing Career.

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TECHNOLOGY


Infosys


SAMSUNG


Flipkart


salesforce


TATA
CONSULTANCY
SERVICES


ZOHO


ORACLE


HCL


Jio
DIGITAL
LIFE


BAJAJ
FINSERV


Deloitte.


Bank of America


TOYOTA


IBM


Booking.com


ITC Limited

I'm all in! How should I sign up?

READY TO TAKE CHARGE OF YOUR CAREER?

Take you first steps towards a rewarding career in Data Science by filling out application form

Fill out the application form

Application review by experts

Selected candidate will recive an offer

FINALLY PROGRAM KICK OFF & ONBOARDING

Apply now

Got more question for us? Feel free to reach out to us at www.krutanic.com