01 Python for Data Science

- Introducing Python - Python Basics, Operators, Loops, Functions, Strings, List, Tuples, Dictionary, Set, Object-oriented concepts(OOPs) and much more.

- Data Toolkit - Getting started with Files, Inventory Management System with Files, Inventory Management System with JSON, Mastering Numpy Arrays, Getting Started with OS , Jupyter Notebook Setup, OS with Python, etc.

- Libraries - Numpy, Pandas, Matplotlib, Streamlit, etc.

02 Mathematics

- Maths for Data Analysis: Basic Probability for Data Science, Statistics, Probability Distribution, Inferential Statistics, and much more

- Maths for ML & AI: System of Linear Equation, Matrix, Vectors, and Calculus, etc

03 Data Analytics

- Data Analysis with Python: Getting started with Pandas, Data Preprocessing with Google Play store, Introduction to EDA, Data Cleaning, Data Visualization, Data Analysis

Projects: Sugarcane Production, Black Friday Sales Data Analysis, Data Visualization on Heart Disease Dataset, GDP Analysis

- Excel: Exploring Data, Preparing Data, Analysing Data, Important Interview Questions

Projects: Sales Data Analysis Using Covered Functions and Pivot Tables

- Power BI - Introduction to Power BI, Understanding Parameters, Basic Plots, Fundamentals of Power BI, Designing the Plots, etc

Projects: Superstore Sales Analysis Dashboard, Covid-19 World Dashboard

- Web Scraping - Learn how to Scrape, Selenium, Image Dataset Creation, and much more

Projects: Wikipedia Scraper, Youtube Scrapper, Stock Images Infinite Scroll

- SQL - Databases Fundamentals, SQL Fundamentals, Data Manipulation(DML), Querying, Intermediate SQL Queries, Joining and combining Data, Set Theory Clauses, Subqueries, Window Functions, Data Preprocessing and analysis

04 Machine Learning & AI

- Introduction to AI, How Data Science Comes into Play,

- Linear Regression, Multiple Linear Regression & Polynomial Linear Regression,

- Support Vector Machines, Decision Trees, Random Forests,

- Classification Algorithms, Clustering Algorithms, Feature Engineering, and much more

05Specialization

- Deep Learning - Perceptrons, Multi-layer perceptron architecture, and Convolutional Neural Network (CNN)

- Image Processing - Fundamentals of Image Formation, Image Processing Techniques, Image Processing on Live WebCam, Taking a Selfie Program with OpenCV, Image Manipulation, DIY Instagram Filters, Masking, Adding Logo on a Live VideoFace Detection and Manipulation

- Natural Language Processing - Getting Started with NLP, Mastering Strings and ASCII Codes, Regular Expression from Scratch, Getting started with Spacy, Text Sequencing using Word Cloud, and much more

Project: Spell Checker, Guessing the title of a Corpus