

# Become a Data Analyst

## Programming Basics

- ✓ Introduction to Python
- ✓ Variables & Data Types
- ✓ Operators & Conditional Statements
- ✓ Functions, Classes
- ✓ Strings
- ✓ Lists
- ✓ Dictionaries
- ✓ Data Science (Numpy, Pandas, Matplotlib)

## Intro to Business Case Studies

## Mathematics for Analytics

- Probability
- Applied Statistics

## Descriptive Analytics

- Exploration
- Data Cleaning
- Pre-Processing
- Visualisation

## Predictive Analysis

- Supervised Learning
- Ensemble Techniques

## Database Management

- SQL
- Schema Design
- Data Modelling

## Machine Learning

- Unsupervised Learning
- Feature Engineering
- Reinforcement Learning
- Time Series Analysis

## Analytics with Excel / Power BI

- Analytics with Excel and Power BI
- Spreadsheets and g-spread library
- Power BI
- Dashboards

## Data Management and Warehousing

- NoSQL Databases
- JSON Handling
- Extract-Transform-Load (ETL)
- Big Data / Cloud