

Complete Internship Guide: From Data to Dashboard

1. Python (Basic)

Learning Path:

- Introduction to Python & Setup
- Data Types, Variables & Operators
- Control Flow (Loops & Conditional Statements)
- Functions & Modules
- File Handling & Exception Handling

Projects:

- 1. Simple ChatBot (Rule-Based) Skills: Conditionals, String handling
- 2. Number Guessing Game Skills: Random, Loops, Conditionals
- 3. Password Generator Skills: Random, String module, List comprehension
- 4. Rock Paper Scissors Game Skills: Random, Conditionals
- 5. QR Code Generator Skills: Variables, functions, and input handling



2. Python for Data Science

Learning Path:

- Introduction to Data Science with Python
- Data Manipulation with NumPy
- Data Analysis with Pandas
- Data Visualization with Matplotlib
- Advanced Visualization with Seaborn

Projects:

- 1. Sales Report Generator Skills: Pandas and Matplotlip
- 2. Netflix Data Analysis Skills: Pandas, Numby, Matplotlip, EDA
- **3. IPL Data Analysis & Player Stats Skills:** Pandas, Matplotlip, EDA
- 4. Retail Store Sales Forecasting (EDA) Skills: Pandas, Numby, Matplotlip, EDA
- 5. Top 100 Movies Dataset Visualization Skills: Pandas and Matplotlip
- 6. Electric Vehicle Sales Data Study Skills: Pandas, Numby, Matplotlip



3. Advanced Excel

Learning Path:

- Advanced Formulas & Functions
- Data Validation & Conditional Formatting
- Pivot Tables & Pivot Charts
- Dashboard Design & Data Visualization
- Power Query & Data Cleaning Tools

Projects:

- 1. Sales Tracker
- 2. Budget Planner
- 3. Financial Statement Analyzer
- 4. Employee Payroll Sheet
- 5. Business KPI Dashboard
- 6. HR Dashboard
- 7. Online Course Progress Tracker
- 8. Sales Funnel Analysis
- 9. Event Planning Budget Sheet



4. PowerBI

Learning Path:

- Getting Started with Power BI
- Data Transformation using Power Query
- Data Modeling & Relationships
- DAX (Data Analysis Expressions)
- Report Building & Dashboard Design

Projects:

- 1. Monthly Sales Trend Analysis
- 2. Regional Sales Comparison
- 3. Employee Attendance Dashboard
- 4. Social Media Metrics Dashboard
- 5. E-commerce Sales Insights
- 6. Campaign Performance Tracker
- 7. Survey Analysis Report
- 8. Government Budget Allocation Tracker



5. Tableau

Learning Path:

- Introduction to Tableau
- Data Preparation & Cleaning
- Visual Analytics & Charting
- Dashboards & Storytelling
- Publishing, Sharing & Best Practices

Projects:

- 1. Customer Segmentation Dashboard
- 2. Marketing ROI Dashboard
- 3. Attrition and Retention Analysis
- 4. Team Performance Tracker
- 5. Course Enrollment Trends
- 6. Population Growth Dashboard
- 7. School/College Performance Analysis



6. Database for SQL (MYSQL)

Learning Path:

- Introduction to Databases & MySQL
- Data Types, Constraints & Table Operations
- SQL Queries CRUD Operations
- Joins, Subqueries & Aggregation
- Advanced SQL Concepts

Projects:

- 1. Library Management System
- 2. Personal Finance Tracker
- 3. Bus/Train Ticket Booking Database
- 4. Online Movie Ticket System
- 5. Restaurant Billing System
- 6. Hospital Management with Departments & Specializations
- 7. Banking System with Transactions & Audit Logs
- 8. Insurance Policy & Claims Database