SKYPARK ITECH
"The Future of Innovation"

Power BI/ Tableau Data Analytics Internship

(15 Days | Practical-Oriented | Industry Ready)

INTERNSHIP SYLLABUS

Internship Objective

To train students in **data analytics, dashboards, KPIs, business insights, and storytelling using Power BI & Tableau**, enabling them to independently build **real-time analytics projects**.

Tools & Technologies

- Microsoft Power BI
- Tableau Public / Tableau Desktop
- Excel (Advanced)
- SQL (Basics)
- CSV / Excel / Database sources
- DAX (Power BI)
- Calculated Fields (Tableau)

Day 1 – Introduction to Data Analytics

- What is Data Analytics & BI?
- Role of Data Analyst vs Data Scientist
- Business use cases (Sales, HR, Finance, Marketing)
- Power BI vs Tableau comparison

Practice:

Install tools & explore sample dashboards

Day 2 – Data Sources & Data Understanding

- Types of data (Structured / Semi-structured)

- Importing Excel, CSV, Text files
- Data profiling & data quality checks

Practice:

Load multiple datasets

Day 3 – Data Cleaning & Preparation

- Removing duplicates & nulls
- Data transformation concepts
- Power Query Editor / Tableau Data Prep

Practice:

Clean raw business dataset

Day 4 – Data Modeling Concepts

- Fact & Dimension tables
- Relationships (One-to-Many)
- Star schema basic

Practice:

Create data model

Day 5 – Excel for Analytics (Supporting Skills)

- Pivot tables
- VLOOKUP / XLOOKUP
- Conditional formatting

Practice:

Business KPI analysis in Excel

Day 6 – Power BI Visualizations

- Charts: Bar, Line, Pie, Card, KPI
- Filters, slicers
- Drill-down & drill-through

Practice:

Build interactive Power BI report

Day 7 – DAX Fundamentals

- Measures vs calculated columns
- SUM, COUNT, AVERAGE
- Time intelligence basics

Practice:

Sales growth & trend analysis

Day 8 – Tableau Fundamentals

- Tableau interface & worksheets
- Dimensions & measures
- Marks card & filters

Practice:

First Tableau dashboard

Day 9 – Advanced Tableau Visuals

- Calculated fields
- Parameters
- Dashboard actions

Practice:

Dynamic business dashboard

Day 10 – SQL for Data Analytics

- SELECT, WHERE, GROUP BY
- Joins (Basic)
- Connecting SQL to BI tools

Practice:

SQL-based analytics

Day 11 – KPI Design & Business Metrics

- Sales KPIs
- Financial KPIs
- Customer & performance metrics

Practice:

Executive summary dashboard

Day 12 – Data Storytelling

- Visual storytelling principles
- Choosing right charts
- Presenting insights to management

Practice:

Insight-based dashboard narration

Day 13 – Real-Time Mini Project

Project Examples:

- Sales Performance Dashboard
- HR Attrition Analytics
- Retail Demand Analysis

Practice:

Start full project

Day 14 – Project Completion & Optimization

- Dashboard refinement
- Performance optimization
- Exporting & sharing reports

Practice:

Final project polish

Day 15 – Presentation & Career Guidance

- Project demo
- Interview questions
- Resume & portfolio guidance
- Internship evaluation