Month 1: Excel for Data Analysis
(Weeks 1-4)
Week 1: Introduction to Excel
Day 1: Excel basics: Interface, navigation, and shortcuts
Day 2: Working with data: Entering, editing, and formatting data
Day 3: Basic formulas: SUM, AVERAGE, COUNT, MIN, MAX
Week 2: Intermediate Excel
Day 1: Conditional formatting and data validation
Day 2: Advanced formulas: IF, VLOOKUP, HLOOKUP
Day 3: Data cleaning techniques: Removing duplicates, handling missing values
Week 3: Data Analysis in Excel
Day 1: Sorting, filtering, and working with tables
Day 2: Pivot tables and Pivot charts for data summarization
Day 3: Advanced Excel functions: INDEX, MATCH, and nested IF statements
Week 4: Excel Data Visualization
Day 1: Creating charts and graphs: Bar, Line, Pie charts
Day 2: Sparklines, slicers, and dashboards
Day 3: Hands-on project: Analyzing a dataset with Excel

Month 2: SQL for Data Analysis

(Weeks 5-8)
Week 5: SQL Basics
Day 1: Introduction to databases and SQL: Relational databases, tables, and relationships
Day 2: Writing basic SQL queries: SELECT, WHERE, and simple conditions
Day 3: Aggregate functions: COUNT, SUM, AVG, MAX, MIN
Week 6: Intermediate SQL
Day 1: Grouping and filtering data: GROUP BY, HAVING, and filtering conditions
Day 2: SQL joins: INNER JOIN, LEFT JOIN, RIGHT JOIN
Day 3: Combining queries: UNION, INTERSECT, and subqueries
Week 7: SQL for Data Analysis
Day 1: Using SQL to clean and transform data
Day 2: Advanced SQL queries: CASE statements and window functions
Day 3: Introduction to database normalization and optimization
Week 8: SQL Projects
Day 1: Hands-on project 1: Building queries to analyze sales data Day
2: Hands-on project 2: Analyzing customer data using SQL
Day 3: SQL challenge: Working on a comprehensive dataset with complex queries

Month 3: Tableau for Data Visualization

(Weeks 9-12)
Week 9: Introduction to Tableau
Day 1: Introduction to Tableau: Interface, data connections, and importing data Day

2: Basic charts in Tableau: Bar charts, Line charts, and Pie charts Day
3: Sorting and filtering data in Tableau

Week 10: Intermediate Tableau

Day 1: Using calculated fields and table calculations
Day 2: Data aggregation and disaggregation in Tableau Day
3: Building dashboards and stories

Week 11: Advanced Tableau

Day 1: Creating interactive dashboards with parameters and filters
Day 2: Advanced charts: Heat maps, scatter plots, and tree maps
Day 3: Connecting multiple data sources and data blending

Week 12: Tableau Projects

Day 1: Hands-on project 1: Creating a sales dashboard
Day 2: Hands-on project 2: Building a customer insights dashboard
Day 3: Final project: Designing a comprehensive data visualization dashboard End of

Course: Capstone Project Final Week:

Students work on an integrated project combining Excel, SQL, and Tableau to solve a real-world business problem, analyze data, and present insights.