

PROGRAM / COURSE OUTLINE	
	Program Name: Tableau
	Software Application: Tableau 2022.X
	Level: Beginner to Intermediate & Intermediate to Advanced
	Duration: 16-20 hrs
Learners' Profile	
1	The course is for first time users of Tableau. They use Excel extensively. Hence, analogies to Excel helpful - Above average working knowledge of Excel's Pivot Table & Charts
2	There should be heavy focus on Practice. This will make them comfortable in their day to day use.
3	The learners are not Developer. Topics such as Integration with Server, Tableau Products are not very relevant. Additionally, the use of advanced topics such as Hi-level expressions (LoD) should be limited.
4	Overview of Data Organisation (Structure, Preparation, Joins)
Flow:	
	Phase 1 - focuses on the navigating through the Interface, fundamentals of creating Visualisation, and key concepts needed to use the data correctly.
	Phase 2 - focuses on the deeper customization settings, detailed settings, advanced concepts such as Level of Details (LOD), Advanced Charts
	Note: Advanced Statistical Analysis is not included.
1 Introduction - Working with Tableau	
	Exploring the GUI & Understanding the useful terms
	Side Bar = Data pane & Analytics pane
	Dashboard pane
	Navigating Tableau
	Cards and Shelves,
	Sheets (worksheets, dashboards, or stories)
	Pages, Filters & Marks
	Marks - Color, Size, Label, Detail, Tooltip, Path
	"Show Me" feature
	Fields - Dimensions & Measures
	Green Pills vs Blue Pills (~Fields)
	Spatial Data (Lat. & Long.)
	Case Study Storyline (400 lines of data - Employee Compensation by Division, Gender, Rating, Age, DoJ)
	Making a Basic Dashboard
	Creating Bins and Distributions for Age
2 Practice Case Study - Basics of Tableau Visualisation	

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	Case Study Storyline (3y Sales - all data in the SAME file - 60K lines of data)
	An MNC has four divisions - Bikes, Clothing, Accessories, Components. Each of these four divisions have multiple categories of products. The company sells its products globally, and has 600+ customers (retail stores). Each customer is categorised as Gold, Silver or Platinum.
	Connect Tableau to various Datasets: Excel, Txt and CSV files
	Creating a Customer Segmentation Dashboard
	Clustering In Tableau
3	Essential Concepts
	Flat files vs. Cross-Tab files
	Measures & Dimensions
	Continuous & Discrete data
	Values axis & Category axis
	Granularity
4	Data Blending
	What is Data Blending?
	Data Blending on Multiple columns
	Create Calculated Fields in a Blend
	Understanding Types of Joins (LEFT, RIGHT, INNER, and OUTER)
	Difference between Relationships vs Joins
	Knowing difference between Joining Data vs.. Blending Data
	Working with Relationships
5	Data Visualization Building Blocks - Deep Dive
	Worksheets & Dashboards
	Filters:
	Creating Filters
	Customizing Filters
	Filter Actions
	Filter Selected Sheets
	Filtering Large Dimensions
	Filter Types:
	Local Filters
	Global Filters
	Data Source level Filters
	Context Filters
	Sorting:
	Sorting Single Dimension Graphs
	Sorting Multi Dimension Graphs

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	Sorting by Different Measures
	Row Shelf & Column Shelf
	Marks cards:
	Color
	Size
	Label
	Detail
	Tooltip
	Path
	Organising your data:
	Using Groups (Static Groups vs. Dynamic Groups)
	Creating and Using Hierarchies
	Creating a Combined Field
	Using Sets
	Overview of Calculated Columns
6	Visualizations - Charts (Basic to Intermediate)
	Line Charts:
	Lines (continuous) charts
	Lines (discrete) charts
	Dual lines
	Bar Charts:
	Horizontal bar charts
	Stacked bar charts
	Side-by-Side bar charts
	Text tables
	Heat maps
	Highlight tables
	Symbol maps
	Filled Maps
	Common Geographical Data Errors
	Pie Charts
	Treemaps
	Circle views
	Side-by-Side Circle views
	Area Charts:

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	Area Charts (Continuous)
	Area Charts (Discrete)
	Combination charts
	Scatter Plots
	Histogram
	Gantt charts
	Bullet Charts
	Packed bubble charts
7	Visualizations - Charts (Advanced)
	Box plot
	Waterfall Charts
	Funnel Charts
	Pareto Charts
8	Tableau Dashboards, Values, Actions
	Building Dashboards
	Forecasting
	Reference Bands
	Reference Lines
	Sheet Sorter
	Show Missing Values
	Trend Lines
	Handling Null Values
	Legend Highlighting
	Highlight Actions
	Visually Grouping Data
	Table Calculations
	Grand Totals, Sub-totals and Changing Aggregation
	Measure Name & Measure Values
	Highlight table with Multiple Measures
	Hiding Columns
	Computing Totals
	Formatting
	Annotating
	Layout Containers
	Tiling & floating dashboards
	Actions:
	Filter
	Highlight

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9	Slicing Your Data by Date
	Working with Dates
	Using Discrete Date Parts
	Create Data Hierarchies
	Creating Date Filters
	Defining a Fiscal Year
	Creating Custom Dates
10	Connection Types
	Extract vs. LIVE Connections
	Creating Extract
	Using and Refreshing Extracts
	Incremental Refresh
	Why Extracts & Incremental Extracts
11	Saving and Publishing
	Packaged Workbooks
	Tableau file types
	TWB (Tableau workbook) vs. TWBX (Packaged Workbooks)
	TDE (Extract)
	TDS vs. TDSX
	TBM (Bookmarks)
12	Calculations and Statistics
	Edit in Shelf
	Introduction to Calculations
	Overview - Statistical Calculations
	Calculation Types
	Creating Calculated Fields
	Using Logic Statements
	Type Conversions and Date Calculations
	Using Quick Table Calculations
	Calculations and Aggregations
	Conditional Formatting
13	Practice Case Studies
	Cash Flow Analysis (Debits and Credits) of a Banking Company
	Expense Analysis of a Banking Company

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14	Level of Details Expressions (LOD)
	Usage of curly braces
	Use of LoD functions – Fixed, Include & Exclude
	Case Studies
15	Designing and Building Dashboards
	Dashboard Designing
	Navigation Buttons
	Finalizing KPIs
	Dashboard Formatting
	Bringing Images and web pages in Tableau
	Best Practices in Dashboard Designing
	Sizing
	Exporting results from Tableau into Powerpoint and Word
16	New Features & Overview of next level topics
	Using Parameters for Dynamic Values. E.g. TopN
	What if Analysis using parameters
	Connecting data from PDF files
	Control Charts
	Motion Charts
	Publishing to Server
-End of Document-	