Course Duration: 3 Days | Prerequisites: None

## Launch yourself into outerspace

Official Tableau Combined Fundamentals and Advanced Training Course is the complete starter training package for the beginner to intermediate level Tableau user. It is for anyone who works with data, regardless of technical or analytical background.

You can start the course with only the basic understanding of Tableau, because In three jammed packed days attendees will learn the important concepts and techniques used in Tableau, then move from simple to complex visualisations, whilst learning how to combine them in interactive dashboards. You will learn how to prepare and organise your data and all the while, sticking to best practices.

This course will include extensive hands-on activities to re-enforce the skills and knowledge attained and you will take away all of the source material, plus have access to a wide range of resources that we have hand-picked for you.

## Learning Objectives:

At the end of this class, the student will be able to:

- + Understand the many options for connecting to data
- + Understand the Tableau interface / paradigm components, shelves, data elements, and terminology. The student will be able to use this knowledge to effectively create the most powerful visualisations
- + Create basic calculations including string manipulation, basic arithmetic calculations, custom aggregations and ratios, date math, logic statements and quick table calculations
- + Represent your data using a wide range of visualisation types
- + Use Trend Lines, Reference Lines and statistical techniques to describe your data
- + Understand how to use group, bin, hierarchy, sort, set and filter options effectively
- + Work with the many formatting options to fine tune the presentation of your visualisations
- + Understand how and when to use measure name and measure value
- + Understand how to deal with data changes in your data source such as field addition, deletion or name change
- + Understand all of your options for sharing your visualisations with others

- + Combine your visualisations into interactive dashboards and publish them to the web
- + Build advanced chart types and visualisations
- + Build complex calculations to manipulate your data
- + Work with statistics and statistical techniques
- + Work with parameters and input controls
- + Implement advanced geographic mapping techniques and use custom images and geo-coding to build spatial visualisations of non-geographic data
- + Implement all options in working with data: Joining multiple tables, data blending, performance considerations and working with the Data Engine, sharing your connections as meta data, and understand when to implement which connection method.
- + Build better dashboards using techniques for guided analytics, interactive dashboard design and visual best practices
- + Implement many efficiency tips and tricks
- + Understand the basics of Tableau Server and other options for sharing your results



## Course Topics:

#### Introduction and Overview

- + Why Tableau? Why Visualisation?
- + Level Setting Terminology
- + Getting Started creating some powerful visualisations quickly
- + The Tableau Product Line
- + Things you should know about Tableau

### **Getting Started**

- + Connecting to Data and introduction to data source concepts
  - » Working with data files versus database servers
- + Understanding the Tableau workspace
- + Dimensions and Measures
- + Using Show Me!
- + Tour of Shelves (How shelves and marks work)
- + Building Basic Views
- + Help Menu and Samples
- + Saving and Sharing your work

### Concepts and Options

- + Data Types and Roles
  - » Dimension versus Measures
  - » Data Types
  - » Discrete versus Continuous
  - » The meaning of pill colours
- + Database Joins
- + Data Blending
- + Working with the Data Engine / Extracts and scheduling extract updates
- + Working with Custom SQL
- + Adding to Context
- + Switching to Direct Connection
- + Building metadata via shared Data Source connections
- + Performance considering and working with big data
- + OLAP considerations (overview)

#### Analysis

- + Creating Views
  - » Marks
  - » Size and Transparency
  - » Highlighting
  - » Working with Dates
  - » Date aggregations and date parts
  - » Discrete versus Continuous
  - » Dual Axis / Multiple Measures
  - » Combo Charts with different mark types
  - » Geographic Map
  - » Page Trails
  - » Heat Map
  - » Density Chart
  - » Scatter Plots
  - » Pie Charts and Bar Charts
  - » Small Multiples
  - » Working with aggregate versus disaggregate data
- + Analysing
  - » Sorting & Grouping
  - » Aliases
  - » Filtering and Quick Filters
  - » Cross-Tabs (Pivot Tables)
  - » Totals and Subtotals
  - » Drilling and Drill Through
  - » Aggregation and Disaggregation
  - » Percent of Total
  - » Working with Statistics and Trendlines





## Course Topics: (cont...)

#### Getting Started with Calculated Fields

- + Working with String Functions
- + Basic Arithmetic Calculations
- + Date Math
- + Working with Totals
- + Custom Aggregations
- + Logic Statements

#### Formatting

- + Options in Formatting your Visualisation
- + Working with Labels and Annotations
- + Effective Use of Titles and Captions
- + Introduction to Visual Best Practices

#### **Building Interactive Dashboards**

- + Combining multiple visualisations into a dashboard
- + Making your worksheet interactive by using actions and filters
- + An Introduction to Best Practices in Visualisation

### **Sharing Workbooks**

- + Publish to Reader
- + Packaged Workbooks
- + Publish to Office
- + Publish to PDF
- + Publish to Tableau Server and Sharing over the Web

#### Putting it all together

- + Scenario-based Review Exercises
- + Best Practices

### Moving on to the Advanced Topics

- + A Quick Review of Basic Calculations
  - » Arithmetic Calculations
  - » String Manipulation
  - » Date Calculations
  - » Quick Table Calculations
  - » Custom Aggregations
  - » Custom Calculated Fields
  - » Logic and Conditional Calculations
  - » Conditional Filters
- + Advanced Table Calculations
  - » Understanding Scope and Direction
  - » Calculate on Results of Table Calculations
  - » Complex Calculations
  - » Difference From Average
  - » Discrete Aggregations
  - » Index to Ratios
- + Understanding where Calculations Occur
- + Statistics
  - » Reference / Trend Lines
  - » Statistical Calculations
  - » Summary Stats
  - » Cohort Analysis
- + Working with Dates and Times
  - » Continuous versus Discrete Dates
  - » Dates and Times
  - » Reference Dates





## Course Topics: (cont...)

### Advanced Mapping

- + Fundamentals Review: Building basic maps
  - » Fixing geographies
  - » Geographic Fields
  - » Map Options
- + Built-in Demographics / Layering
- + WMS working with a Web Map Service
- + Importing Custom Geographies
- + Assigning Geographies to Non-Geographic fields
- + Distance Calculations
- + Spatially Visualising non-Geographic Data using background images and geo-coding

#### Working with Parameters

- + Parameter Basics
  - » Data types of parameters
  - » Using parameters in calculated fields
  - » Inputting parameter values and parameter control options
- + Advanced Usage of Parameters
  - » Using parameters for titles, field selections, logic statements, Top X

#### Best Practices in Formatting and Visualising

- + Formatting Tips
  - » Drag to Legend
  - » Edit Legend
  - » Fill 100% Black Line
  - » Highlighting
  - » Labeling
  - » Legends
  - » Working with Nulls
  - » Table Options
  - » Annotations and Display Options
- + Introduction to Visualisation Best Practices

## Building Advanced Chart Types and Visualisations / Tips

This topic covers how to create some of the chart types and visualisations that may be less obvious in Tableau.

It also covers some of the more common tips & tricks / techniques that we use to assist customers in solving some of their more complex problems.

- + Bar in Bar
- + Box Plot
- + Bullet Chart
- + Custom Shapes
- + Gantt Chart
- + Heat Map
- + Pareto Chart
- + Spark Line
- + KPI Chart

#### **Building Better Dashboards**

- + Interactive Dashboards
  - » Quick Filters
  - » Dashboard Objects
  - » Filter Actions
  - » Highlighting and Actions
  - » Performance
  - » Publish to Web
  - » Zones
- + Guided Analytics
  - » Cascading Filters
  - » Highlighting
  - » Quick filter Options
  - » Select then See Visual
  - » Self-Populating Dashboards
  - » Shortcuts
  - » URI Actions





## Course Wrap Up:

### Overview - Working with Tableau Server

In Tableau Fundamentals, we saw that we could use Tableau Server as a mechanism to share our visualisations and dashboards. Now we will dig in a bit deeper.

- + Publishing to Tableau Server Overview of publishing, scheduling & security options
- + Tableau Server Usage Interacting with Published Visualisations

#### Wrap Up Activities

- + Summary of what we have learned
- + Advanced activities to pull together and solidify the concepts

#### Where to get Further Assistance

- + The Help File / Product Manual
- + Knowledge base
- + Forums
- + Whitepapers & Books
- + Further Training Offerings & Professional Services
- + Technical Support

#### Tableau Power User Status Awaits

Graduates from the Tableau Combo Training Course possess expert capacity for building visualisations, dashboards and workbooks, giving your organisation a whole new level of enhanced insight.

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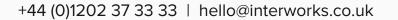
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