

Advanced Excel

for Business and Industry

Type	Amount
Total Income	=SUM(IF((LEFT(data[GL Code],4)*1 >= 3000)* (LEFT(data[GL Code],4)*1<=3900), data[Amount], FALSE))

Power Query Table	
GL Code	Amount
3020-0111	40,000
3040-0100	50,000
4010-0001	3,000
4020-0103	2,500

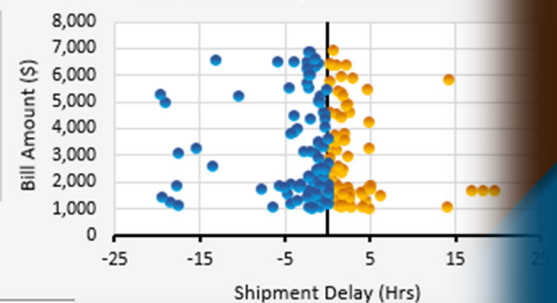
LAMBDA Function	
Client:	Client A
Date:	1-Sep
PO#:	=MULTILOOK(G12,G13)

Min Miles:	=MIN(IF(ISERROR(E17:E19),FALSE,E17:E19))		
Type	ID	Sector	Miles
Car	1001225	Sector 2	20684
Car	1001057	Sector 2	17783
Truck	1000419	Sector 2	#N/A

Warehouse 1		
Part #	Stock	Prod
XG-416	4	=XLOOKUP(B23,INDIRECT(ven_part),INDIRECT(ven_price),"NA")
BV-3458	2	1,000.50
XCD-674	3	300.25

Group	Start	End	Qty	FY 24											
Equipment Upgrade Dates				J	F	M	A	M	J	J	A	S	O	N	D
Group B	1/8/24	3/17/24	16												
Group C	3/20/24	5/19/24	22												

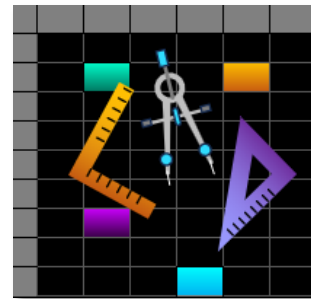
Shipment Delay Distribution



Stop manually making that weekly Excel report over and over again. Learn about Excel's advanced querying, formula, and data processing capabilities and use them to build self-adjusting business tools.

How our class can help you.

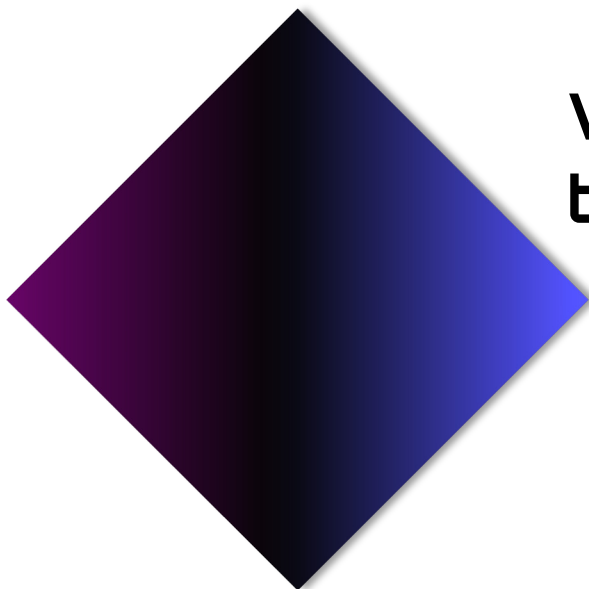
Our 1-day class shows you hands-on how to build powerful self-adjusting Excel business tools and reports. Our class starts off with how to use Power Query along with Excel tables; various filtering functions; and spill over arrays to quickly create autonomous reports.



Class Examples >

In addition, our training shows how to build advanced lookups; logic formulas; and array formulas to solve tough data problems. Also discussed is how to use LAMBDA to create your own custom worksheet functions.

It also shows how to combine PivotTables, Pivot Charts, Conditional Formatting, shapes, and linked pictures to rapidly build dashboards and reports.



Who should attend the class?

Business, government, industry, military, engineering, science, techs... Class examples will be determined by those in attendance.

Minimum Excel skills needed for the class.

Select this Excel training if you or your group have:

- Built / formatted charts and worksheets
- Typed in formulas and used functions like VLOOKUP, IF, MAX, MIN, COUNTIF... before
- Built a worksheet table before and performed drag and fill operations on formulas
- Used basic logic before in formulas and know the relational operators <, >, <=, >=, <>, =
- Used basic Excel data tools before like Sort and AutoFilter
- Used PivotTables in a basic capacity



How we run the class.

We focus our training on what our customers need. When training begins, we analyze those needs and shift our outline appropriately. We will stress or add topics that our customers want.

Class formats and signup.

In-Person, Virtually, and Onsite. Our live hands-on classes can be attended virtually or in-person. Please visit our public signup page for [class times and pricing >](#). Contact EMAGENIT directly at 805.498.7162 for more information about our onsites.

Key Excel topics covered in class.

- Rapidly parsing reports using Excel tables, names, spill over arrays, and the UNIQUE, SORT... functions
- Building report templates with formulas and charts that self-adjust to typed, pasted, or external data
- Using Power Query to rapidly import, merge, and shape data from workbooks, text files, and databases
- Processing data with multiple conditions using the IFS, AND, OR... functions
- Using the Text, Date/Time, Math... functions to build complex logic criteria for formulas
- Using LAMBDA to create custom worksheet functions that replace large formulas
- Using Excel tables, slicers, structured references, and charts to quickly build report dashboards
- Building self-adjusting logic for the SUMIFS, COUNTIFS... worksheet functions
- Creating worksheet interfaces to control your Excel data tools using Data Validation and ActiveX Controls
- Using Conditional Formatting, shapes, charts, and formulas to build advanced data displays
- Full, partial, and smart table lookups using the VLOOKUP, INDEX, INDIRECT... functions
- Using array formulas to analyze complex datasets, perform multi-condition lookups, and filter data
- Using slicers, timelines, PivotTables, Pivot Charts, and Excel tables to construct adaptive reports

Detailed class syllabus.

Building Self-Adjusting Reports Using Functions, Excel Tables, Spill Over Arrays

- Linking data from different sheets, the foundation to building adaptive reports
- New ways to use cell reference notation in data formula construction
- Rapidly linking data between workbooks and worksheets using cell references, names, and functions
- Using Excel tables, structured references, and spill over arrays to rapidly parse report data
- Using functions like UNIQUE, FILTER, CHOOSECOLS... to rapidly parse report data
- Building report templates with formulas and charts that automatically adjust to pasted or external data

Using Power Query to Rapidly Access, Merge, and Shape Your Report Data

- Using Power Query to link with and process data from workbooks, text files, databases...
- Performing various Power Query shaping tasks like filtering data, sorting, splitting dates, cleaning text...
- How to merge and append different queries in Power Query
- How to add existing Excel tables to Power Query, combine them, and process them
- How to group data in Power Query and sum, count, average...
- Performing formula calculations inside Power Query

Using Functions, Advanced Logic, and LAMBDA to Analyze Data

- How to use concatenation, operators, and names to build adaptive logic for SUMIFS, COUNTIFS...
- Using the IFS, AND, OR... functions to build multi-condition logic for your data problems
- Using the DSUM, DMIN, DMAX... functions to quickly calculate table data
- Using key Text, Date / Time, Math... functions to analyze data and build logic criteria for your formulas
- Developing advanced logical tests for your IF, DSUM... functions that analyze text, dates, spaces...
- Learn to use the LAMBDA function to build custom worksheet functions that replace complex formulas

Visualizing Your Report Data and Controlling Your Data Tools

- Using slicers, Excel tables, and charts to setup an instant dashboard
- Using Conditional Formatting to flag data, auto-format tables, and create data displays
- Using Data Validation and ActiveX controls to control user entry on a worksheet
- Dynamically displaying cell values in shapes and creating linked pictures that display data
- How to combine these features to quickly build reports and basic dashboards

Building Advanced Lookups to Track and Find Your Data

- Using concatenation and text functions to build adaptive lookup values for VLOOKUP, XLOOKUP...
- How to clean up (TRIM, CLEAN...) data in a formula then use it in a lookup

- How to build multi-table VLOOKUP, XLOOKUP... problems
- Using structured references to lock onto part of an Excel table, great for partial table lookups and returns
- Using INDIRECT, OFFSET, IF, and string concatenation to automatically toggle between and find data in tables

Using Array Formulas to Solve Complex Worksheet Calculations

- What is an array formula and how can they make your life easier?
- How to tell when a worksheet function or formula can take an array and produce an array
- Using simple array formulas to clean, replace... data for functions like VLOOKUP, SUM...
- Creating array formulas that process complex datasets using logic
- Creating array formulas that perform multi-condition lookups
- How to use array formulas and spill over arrays to filter data for schedules, timelines...

Using PivotTables and Pivot Charts to Create Advanced Reports

- Building the Excel table that your PivotTable will use
- How to create various running totals, counts, ranks, % totals... for a PivotTable
- Using PivotTables to perform calculations, statistics, and build various report tables
- How to use the GetPivotData function to retrieve PivotTable data
- Setting up a quick dashboard using slicers, timelines, Pivot Charts, and formatting