Using MS Excel
for
Lean Six Sigma Green Belt Training Sessions

Personal computing skills are essential to every Lean Six Sigma Green Belt and Black Belt. Participants in this training program should be equipped with a laptop computer loaded with MS Excel (version 2007 or later). MS Excel is used extensively in the Green Belt sessions; please see below for important information about necessary Excel Proficiency.

You will also need to add in the **Analysis ToolPak**, a statistical package that comes with MS Excel.

If a Mac is used, it must be loaded with the 2016 version of Excel for Macs to be compatible with the course materials.

To load and activate the MS Excel Statistical Analysis ToolPak onto your laptop computer:

1. Click the ***File*** tab, click ***Options***, and then click the ***Add-ins*** category.

   If you are using Excel 2007, click the ***Microsoft Office Button***, and then click ***Excel Options***.

2. In the ***Manage*** box, select ***Excel Add-ins,*** and then click ***Go***.

3. If you are using Excel for Mac, in the file menu go to ***Tools > Excel Add-ins***.

4. In the ***Add-ins*** box, check the ***Analysis ToolPak*** check box, and then click ***OK***.

5. If the ***Analysis ToolPak*** is not listed in the ***Add-ins available*** box, click ***Browse*** to locate it.

   If you are prompted that the ***Analysis ToolPak*** is not currently installed on your computer, click ***yes*** to install it.

Please note:

1. If the ***Analysis ToolPak*** option was not included in the original installation, then the commands above will not be successful. Excel must be re-installed making sure it is included, or

2. You can download the ***Analysis ToolPak*** from the Microsoft Office web site.

Excel Proficiency
Participants in the Lean Six Sigma training program should know how to perform the Excel operations listed in the table on the following page. Practice and proficiency with these Excel operations will allow participants to concentrate on learning the concepts and tools of Lean Six Sigma, without having to learn Excel at the same time.

Please note that the items highlighted in green are more advanced operations and while participants will be instructed in their use during class, learning them ahead of time will be extremely helpful.

Excel Tab	Operation
File	Open, Close, Save As
Home	Cut, Copy, Paste
	Paste options (values, formulas, etc.)
	Insert & Delete row/column
	Clear contents
	Format cells (general, text, #, $, %, etc.)
	Select cell ranges
	Select row(s) &/or column(s)
	Set row height/column width
Insert	Create, format, and modify Column charts
	Create, format, and modify Line charts
	Create and modify Pivot Tables
	Create, format, and modify Scatter plots
	Create, format, and modify Box & Whisker plots
Formulas	Insert Function
	AutoSum
	Edit cell formulas
	Copy cell formulas
	Use basic math, stats, logic functions in formulas (SUM, SQRT, AVERAGE, STDEV, IF).
	Use relative and absolute cell references; use quotation marks to signify a text result in a logic formula (e.g., =IF(C2<1500, "Fail", "Pass")
Data	Sort, including add/delete levels
	Filter
	Text to Columns
	"Data Analysis" needs to be enabled (see notes in Excel Set-up section).
View	Options to show Gridlines, Formula Bar and Headings should be checked
	New Window
	Arrange All
	Hide/Unhide columns
	Freeze/Unfreeze Panes
Other Excel functions	Use of right-click mouse commands
	Drag & drop
	Select/Move worksheet
	Rename worksheet
	Copy worksheet

If you need to improve your proficiency with MS Excel, or are seeking a good refresher, the following 3 links to **free Excel tutorial videos** will be very helpful:

1. Beginners Tutorial - https://www.youtube.com/watch?v=tuk99Sgc6Fw

This video starts with simple tasks like selecting cells and entering data, then quickly moves to calculating data with basic formulas and functions.

2. Intermediate Tutorial - https://www.youtube.com/watch?v=gMyfHDt_uJI

This video shows how simple it is to sort and filter and then moves to one of Excel's most popular features, Pivot Tables which are used during the Lean Six Sigma Green Belt training program.

3. Beginner to Advanced - https://www.youtube.com/watch?v=TpOIGij43AA

This extensive video contains 6 comprehensive modules to take you from beginner to Excel expert in under 6 hours! It starts with the basic Excel Formulas for Beginners, and then moves on to intermediate concepts such as Pivot Tables and Dynamic Array Functions. It concludes with Advanced Formulas and dives deeper into Logical Functions and other advanced Excel functions.

Topics covered in these three tutorials include: Start Screen & Templates, Ribbon & QA Toolbar, Backstage View, Interface, Share Pane, Tell Me, Smart Lookup, Navigating, Keyboard Shortcuts, Entering Text Formatting Numbers, Deleting & Formatting, AutoSum, Simple Formulas, Simple Functions, Absolute Referencing, Inserting Rows Inserting Columns, Moving & Copying Data, Autofill, Cell Styles, Worksheet Themes, Excel Templates, Grouping Worksheets, Freeze Panes, Custom Views, Spell Check, Printing, Flash Fill, List Design & Single Level Sorting, Multi-Level Sorting, Custom Sorting, Filtering, Multi-Level Filtering, Search Filtering, Format as Table, Table Style Options, Remove Duplicates, Convert to Range, Subtotal, Multi-Level, Subtotaling, Remove Subtotals, Quick Analysis Charts, Inserting Data Charts, Formatting Data Charts, Chart, Templates, Spark lines, Printing Charts, MS Query, Exporting Overview, Pivot Tables, Multiple-Field Pivot Tables, Drill Down Reports, Pivot Charts & Grouping Fields, Slicer Tool, Data Validation, Cell & Sheet Protection, and Conditional Formatting.