



Using MS Excel *for* Lean Six Sigma Green Belt Training

Personal computing skills are essential to every Lean Six Sigma Green Belt and Black Belt. Participants in the upcoming Lean Six Sigma Green Belt and Black Belt training programs should be equipped with a laptop computer loaded with MS Excel (version 2007 or later). They 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**
If you are using Excel for Mac, in the file menu go to **Tools > Excel Add-ins**
3. In the **Add-ins** box, check the **Analysis ToolPak** check box, and then click **OK**
 - 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 below. Practice and proficiency with these Excel operations will help participants to concentrate on learning the concepts and tools of Lean Six Sigma, without having to learn Excel at the same time.

Excel Tab	Operation
<i>File</i>	Open, Close, Save As
<i>Home</i>	Cut
	Copy
	Paste
	Paste options (values, formulas, etc.)
	Insert row/column

	Delete row/column
	Clear contents
	Format cells (general, text, #, \$, %, etc.)
	Select cell ranges
	Select row(s)
	Select column(s)
	Set row height
	Set 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
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 worksheet
	Rename worksheet
	Move worksheet
	Copy worksheet



If your need to improve your skills in using MS Excel, or you are seeking a good refresher, please find below links to two free YouTube videos that you will find extremely 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=NvBPFwYq3I4>

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.

Topics covered in these two 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.