





Self-help Statistics Resources

Course/Tutorial	Content	URL
		
Khan Academy Free access via your browser		
Statistics and Probability	Introductory mathematical concepts: Categorical data and analysis; quantitative data – displaying, summarizing, modelling. Bivariate numerical data. Probability, sampling distributions. Confidence intervals, significance (hypothesis) testing. Inferential statistics including chi-squared, regression and analysis of variance (ANOVA)	https://www.khanacademy.org/math/statistics-probability
		
Lynda.com https://www.jcu.edu.au/library/learn/linkedinlearning Free access; log on using your JCU username and password		
		
		
Statistics Foundations 1:	Descriptive statistics; mean, median, range, standard deviation, spread of data, distribution curves, probability, z-score as a measure of distance from the mean.	https://tinyurl.com/y2n2om2m <ul style="list-style-type: none"> or log into LinkedIn Learning and search for <u>Statistics Foundations 1</u>
Statistics Foundations 2:	Collecting data; simple random sample; assessing data validity, data size, sample size and population, hypothesis testing.	https://tinyurl.com/y6hjttyp <ul style="list-style-type: none"> or log into LinkedIn Learning and search for <u>Statistics Foundations 2</u>
Statistics Foundations 3:	Small sample sizes, comparisons of two populations, chi-square Goodness of Fit, ANOVA and regression.	https://tinyurl.com/y36azl6y <ul style="list-style-type: none"> or log into LinkedIn Learning and search for <u>Statistics Foundations 3</u>
Excel Statistics Essential Training: 1	Fundamental concepts of descriptive and inferential statistics and how to apply them using Microsoft Excel. Hypothesis testing; ANOVA, Regression, Correlation	https://www.LinkedInLearning/Excel-tutorials/Excel-2016-Essential-Training/376985-2.html <ul style="list-style-type: none"> or log into LinkedIn Learning and search for <u>Excel Statistics Essential Training 1</u>



Excel Statistics Essential Training: 2	Using statistical concepts and tools to perform analysis in Excel. Organising and presenting data, Solver and Analysis ToolPac add-ons. Linear, multiple and non-linear regression, forecasting and running simulaitons.	https://www.LinkedIn Learning/Tableau-tutorials/Statistics-Excel-Part-Two/455718-2.html or log into LinkedIn Learning and search for <u>Excel Statistics Essential Training 2</u>
SPSS for Academic Research (released 2017)	How to run and interpret data for the most common types of quatitative tests using SPSS: t-tests, ANOVA, statistical measurement. Also covers data types, sample size, normal distribution, Central Limit Theorem.	https://www.LinkedIn Learning/SPSS-Statistics-tutorials/SPSS-Academic-Research/606072-2.html <ul style="list-style-type: none">• or log into LinkedIn Learning and search for <u>SPSS For Academic Research</u>
SPSS Statistics Essential Training (released 2014)	Importing spreadsheets, build charts, calculate descriptive statistics, t-tests, chi-squares, correlations, contingency tables, multiple regression analysis, formatting and exporting presentations	http://tinyurl.com/yy2dj8kz <ul style="list-style-type: none">• or log into LinkedIn Learning and search for <u>SPSS Statistics Essential Training</u>
R for Excel Users 2016	Introduction to R for those familiar with Excel and basic statistics. Installing R; DescTools; working between Excel and R; bivariate analysis <i>Note: RDCOMClient not visible in packages list, instead paste this command and hit enter.</i> install.packages("RDCOMClient", repos = "http://www.omegahat.net/R")	https://www.LinkedIn Learning/Excel-tutorials/R-Excel-Users/474684-2.html <ul style="list-style-type: none">• or log into LinkedIn Learning and search for <u>R for Excel Users</u>
R statistics Essential Training 2013	Introduces and uses R Studio; importing data; working with data files; colour palettes; charting one variable; descriptive statistics; bivariate plots and statistics; multivariate plots and statistics	https://www.LinkedIn Learning/R-tutorials/R-Statistics-Essential-Training/142447-2.html <ul style="list-style-type: none">• or log into LinkedIn Learning and search for <u>R Statistics Essential Training</u>
Learning R Released 2013	More compact version of above.	https://tinyurl.com/yxhkkfts <ul style="list-style-type: none">• or log into LinkedIn Learning and search for <u>Learning R</u>
There are many free on-line books/tutorial you can access, such as...		
R for Data Science	Importing, structuring, transforming, visualizing and modelling data.	https://r4ds.had.co.nz/
Python for Data Science Essential Training	Charts, time series and statistical plots; data analysis basics, Machine learning introduction and methods	http://tinyurl.com/y2k3bnmx <ul style="list-style-type: none">• or log into LinkedIn Learning and search for <u>Python for Data Science Essential Training</u>