## **Statistics for Data Science Syllabus**

## **Statistics for Data Science As A Self Starter:**

Basics Stats	Intermediate Stats	Advanced Stats
Probability	12. Standard Normal Distribution	30. Q-Q plot
1. Introduction to Basic Terms	13. Z score	31. Chebyshev's inequality
2. Variables	14. Probability Density Function	32. Discrete And Continuous Distribution
3. Random Variables	15. Cumulative distribution function	33. Bernoulli And Binomial Distribution
4. Population, Sample, Population Mean, Sample Mean	16. Hypothesis Testing	34. Log Normal Distribution
5. Population Distribution, Sample and Sampling Distribution	17. Many different plotting graphs	35. Power Law Distribution
6. Mean, Median, Mode	18. Kernel Density Estimation	36. Box Cox Transform
7. Range	19. Central Limit Theorem	37. Poisson Distribution
8. Measure Of Dispersion	20. Skewness of Data	38. Application Of Non Gaussian Distribution
9. Variance	21. Covariance	
10. Standard Deviation	22. Pearson Correlation Coefficient	
11. Gaussian/Normal Distribution	23. Spearman Rank Correlation Coefficient	
	24. Importance of Correlation	
	25. Hypothesis Testing	
	26. Null Hypothesis	
	27. Alternative Hypothesis	
	28. Understanding Hypothesis testing	
	29. (T-test, Chi square test, p-values)	