

CS201	Probability and Statistics for Computer Science		T	P
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**Introduction:** Data Collection and Descriptive Statistics, Inferential Statistics and probability Models, Population and Samples.

**Descriptive Statistics:** Describing Datasets, Single Point Summarization, Paired Datasets.

**Probability:** Sample Space and Events, Axioms of Probability, Conditional Probability.

**Random Variables and Expectations:** Random variables, Jointly Distributed Random variables, Expectation, Variance, Co-variance, Probability Distributions. Parameter Estimation-Maximum Likelihood Estimates; Regression Analysis; Applications, Markov Process, Poisson Process.

***Suggested Readings:***

1. S. M. Ross, Introduction to Probability and Statistics for Engineers and Scientists, Elsevier.
2. W. Feller, An Introduction to probability Theory and its Applications- Vol. 1, Wiley.
3. K. S. Trivedi, Probability and Statistics with Reliability, Queuing and Computer Science Applications, Wiley.