

Class	Module	Topic
1	Counting	Counting (permutation and combinations)
2		Pigeon hole Principle and Inclusion Exclusion Principle
3		Permutation and Combination with repetition
4	Basics of Probability	Probability axioms, Sample Space and Events
5		Different Types of Events
6	Conditional Probability	Conditional Probability
7		Law of Total Probability
8		Baye's Theorem
9	Descriptive Statistics	Mean, median, mode, variance and standard deviation
10		Correlation and Covariance
11	Random Variable	Random Variable, Discrete Random Variable
12		Continuous Random Variable
13		Expectation and Variance of Discrete Random variable
14		Expectation and Variance of Continuous Random variable
15		Properties of Expectation and Variance
16	Joint Random Variable	Joint Probability (Discrete)
17		Marginal and Conditional Probability (Discrete)
18		Joint Probability (Continuous)
19		Marginal and Conditional Probability (Continuous)
20		Expectation and Variance in JRV
21		Covariance and Correlation in JRV
22		Conditional Expectation and Variance
23		Multivariate Distribution
24	Probability Distributions	Discrete Uniform and Bernoulli Distribution
25		Geometric and Binomial Distribution
26		Poisson Distribution and Continuous Uniform Distribution
27		Exponential Distribution and Normal Distribution
28		Standard Normal Distribution and T- Distribution
29	Inferential Statistics	Basics of Statistics, Central Limit Theorem for mean and sum
30		Confidence Interval
31		Hypothesis Testing

32		Z-Test
33		T-test
34		Chi-Squared Test