Course Outline

The course consists of 10 units. In each of the course's first 10 weeks we will release one unit, and you will have six weeks to complete it.

- **Week 1 - Introduction**

- **Week 2 - Sets**

- **Week 3 - Counting and Combinatorics**

- **Week 4 - Probability and Conditioning**

- **Week 5 - Random Variables, Expectation, and Variance**

- **Week 6 - Discrete and Continuous Distribution Families**

- **Week 7 - Inequalities and Concentration Theorems**

- **Week 8 - Sampling, Confidence Intervals, and Hypothesis Testing**

- **Week 9 - Regression and Principal Component Analysis**

- **Week 10 - Entropy and Compression**