

Contact Hours	Exp No.	Experiment Title	Methodology	Remarks
1–3	Exp 1	Calculate probabilities of events & random variables using R	R Console	
4–6	Exp 2	Binomial, Poisson, Negative Binomial distributions	R Console	
7–9	Exp 3	Uniform and Exponential distributions	R Console	
10–15	Exp 4	Normal distribution: density, CDF, quantile, and simulations	R Console	
16–21	Exp 5	Confidence intervals for mean & proportion; z-tests for mean and proportion	R Console	
22–27	Exp 6	t-test for means and F-test for variance equality (one-sample, two-sample, paired, etc.)	R Console	
28–33	Exp 7	χ^2 -test: goodness of fit & independence of attributes (tables, expected values, degrees of freedom)	R Console	
34–39	Exp 8	One-way & Two-way ANOVA: assumptions, execution, interpretation	R Console	
40–48	Exp 9	Correlation matrix, scatterplots, simple & multiple regression with diagnostics	R Console	