

### COURSE PLAN

1. Instructors: V. Murugan, B.R. Shankar, **P. Sam Johnson**, Vishwanath K P.
2. Evaluation Plan
  - Internal : Surprise & Assignment 10% + Quiz 15%
  - Mid-Semester Exam : 25%
  - End-Semester Exam : 50 %
3. Attendance : Minimum 75% (compulsory)
4. **Topics** : Introduction to probability, Sample space, Definitions of probability, Conditional probability, Bayes theorem, Random variables, pmf, pdf, cdf, Marginal and Conditional Distributions, Mean and Variance, Covariance and Correlation, Probability distributions: Bernoulli, binomial, Poisson, uniform, exponential, normal, Gamma and use of statistical tables.

Note: Chapters 1 to 10 excluding 7.7, 8.3, 9.11, 9.12, 10.5, 10.6, 10.7 in [1].

### References

1. P.L. Meyer, Introductory Probability and Statistical Applications, Oxford & IBH Publishing Co.
2. S.M. Ross, Introduction to Probability and Statistics for Engineers and Scientists, John Wiley.
3. R.A. Johnson, Miller & Freund's Probability and Statistics for Engineers, 5th Ed., PHI,1999.
4. Murray R. Spiegel, J. Schiller & R. Alu Srinivasan, Probability and Statistics, 2nd Ed., (Schaum's Outlines) Tata McGraw-Hill, 2000
5. E. Kreyszig, Advanced Engineering Mathematics, John-Wiley & Sons, INC., New Delhi, 2003.