

Faculty of Engineering & Technology

Probability and Statistics

Information :

Course Code : EMP312

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Biomedical Engineering

Description :

Probability definitions and concepts; Conditional probability; Statistical independence and Bayes theorem; Discrete and continuous random variables; Distribution functions; Probability distributions and moments; Random variables and their probability distributions including uniform, binomial, geometric, Poisson, normal, and exponential distributions; Expected value and variance; Stochastic simulation; Sampling distributions; Maximum likelihood and least squares methods of estimation; Statistical inference including hypothesis testing and interval estimation; Applications using MATLAB