

## Faculty of Engineering & Technology

## **Probability and Statistics**

Information :					
Course Code : EMP312	Level	:	Undergraduate	Course Hours :	3.00- Hours
Department : Computer & Intelligent Systems 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					