Faculty of Engineering & Technology

Probability and Statistics

Information :

Course Code :	EMP312	**Level**	:	Undergraduate	**Course Hours :**	3.00- Hours

Department : Mechatronics Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Basma Magdy Ahmed Mohamed	2
Teaching Assistant	Salma Motaz Fouad Ali El Sherif	

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;