Course Name	Programming in Statistics & Probability		Course Code		114 COMP - 3			
Credit	3		Contac		Hours	Theory	Lab	Total
Hours	3		Contact H		iours	2	2	4
Offered as	University Requirement College Requirement Program Requirement Elective							
Offered in	BS - Computer Science BS – Information Technology BS - Computer & Network Engineering							
Level	4 <sup>th</sup> Level	vel <b>Prerequisite</b>			isite	NIL		
Course Description:  This course provides an elementary introduction to statistics and probability with applications. This course also covers several topics specifically, basic definitions, graphs, measure of central tendency, measure of dispersion, theory of probability, random variables, probability distributions, correlation and linear regression.								
<ul> <li>Course Objectives:</li> <li>These are the objectives of the course:</li> <li>Familiarize with the concepts and principles of statistics and probability.</li> <li>Describe discrete data graphically and compute measures of centrality and dispersion.</li> <li>Construct the probability distribution of random variables, based on real world situations and use it to compute expectation and variance.</li> <li>Compute averages and standard deviation of a series of independent observations of random variables.</li> <li>Compute probabilities based on practical situations using Poisson, Binomial and Normal distribution.</li> </ul>								
Calculate correlation coefficient and to find regression line on the scatter diagram.								
Grading	⊠ Exam 1	20%	⊠ E	xam 2	20%	Assign	nment(s)	10%
	⊠ Final	50%	\( \) L	ab	0%	Mini I	Project	0%

## **Text Book:**

• Bluman, A. G. (2014). Elementary Statistics a Step by Step Approach, 9th Edition, McGraw-Hill.

## **Reference Book:**

• Larson, R. C. & Farber, E. (2012). Elementary Statistics Picturing the World, 5th Edition, Prentice Hall / Pearson.