


AMOU UNIVERSITY
“A Vehicle for Peace and Development”
AMOU UNIVERSITY



FACULTY OF COMPUTING AND ICT

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY PROGRAMME

ACADEMIC YEAR 2015/ 2016

COURSE DESCRIPTION

BIT 227	Probability and Statistics	
Contact Hours	52	
Pre-requisite	N/A	
Purpose/Aim	This course introduces the statistical principles and methods required for use in various information technology courses.	
Course Objective (Indicative Learning Outcomes)	<ul style="list-style-type: none"> • The learner will formulate and test hypotheses • The learner will explain the principles of sampling and collecting data • The learner will implement fundamental counting and calculation techniques to record and summarize data • The learner will interpret the results of various statistical processes on data. 	
Course Content	<ul style="list-style-type: none"> • Quadratic functions and equations. Surds, logarithms and indices. Permutations and combinations. • Series: finite, infinite, arithmetic, geometric and binomial, positive integral index only, including applications to compound interest, approximations, growth and decay. Remainder theorem and its application to solution of factorizable polynomial equations. • Trigonometry: trigonometric functions including their graphs are inverses in degree and radian measure. Sine and cosine formulae. Addition, multiple angle and factor formulae. • Statistics: collection and representation of data, and measures of central tendency and variability by graphical and calculation methods. Probability: classical and axiomatic approaches to probability, compound events, conditional probability, tree diagrams, and binomial 	



AMOU UNIVERSITY
“A Vehicle for Peace and Development”

	distribution.		
Learning & Teaching Methodologies	Lectures, tutorials and computer laboratory exercises		
Instructional Materials/Equipment	Classroom with audio visual aids		
Course Assessment	Type	Weighting (%)	
	Final Examination	60	
	Mid Term Examinations	20	
	Continuous Assessment(Assignments)	10	
	Attendance	10	
	Total	100	
Recommended Reading	Title	Author	Publisher
	Elementary linear Algebra	Henry C Edwards	Prentice-Hall (2001)
Additional Reading	A First Course in Probability	Sheldon, R.	Prentice-Hall (1998)
Other Support Material			