

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



FACULTY OF COMPUTING AND ICT

DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME

ACADEMIC YEAR 2016/ 2017

**COURSE DESCRIPTION**

<b>DIT 401</b>	<b>Probability and Statistics</b>		
Contact Hours	45		
Pre-requisite	N/A		
Purpose/Aim	The course introduces students to the fundamentals of		
Course Objective (Indicative Learning Outcomes)	<ul style="list-style-type: none"> <li>Students are required to learn concepts such as</li> </ul>		
Course Content	<ul style="list-style-type: none"> <li>Elementary Statistics: Population and sample, raw data, classification.</li> <li>Principles of data tabulation, graphical representation of data.</li> <li>Fundamental statistical measures: Averages, Dispersion, Skewness, and Kurtosis.</li> <li>Statistical inference; Probability: Axiomatic definition of probability.</li> <li>Sample spaces and events. Conditional probability. Probability trees.</li> <li>Random variables and their distributions: binomial, Poisson, exponential. Markov and Chebychev inequalities.</li> <li>Expected values: moments and moment generating functions.</li> <li>Derived distributions such as <math>X^2</math>, t and f.</li> <li>Bivariate distributions: correlation and regression.</li> </ul>		
Learning & Teaching Methodologies	Lectures, tutorials		
Instructional Materials/Equipment	Classroom with Audio Visual Aids Computer Laboratory		
Course Assessment	<b>Type</b>	<b>Weighting (%)</b>	
	Final Examination	60	
	Mid Term Examination	20	
	Assignment	10	
	Attendance	10	
	Total	100	
Recommended Reading	<b>Title</b>	<b>Author</b>	<b>Publisher</b>
Additional Reading			
Other Support Material	A variety of multimedia systems and electronic information resources as		



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	prescribed by the lecturer. Various application manuals, URL search and journals.
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