Module code	SM-2403			
Module Title	Introductory Statistics			
Degree/Diploma	Undergraduate GenNEXT Bachelor degree			
Type of Module	Breadth			
Modular Credits	2	Total student Workload	8	hours/week
		Contact hours	4	hours/week
Prerequisite	None			
Anti-requisite	BB-1102 Business Statistics			
	SM-2205 Intermediate Statistics			

Aims

The module is designed for students to understand the fundamental principles of probability and statistics and to apply these techniques in real world problems.

Learning Outcomes

On successful completion of this module, a student will be expected to be able to:

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Lower order :	30%	- understand the basic principles of descriptive and inferential statistics and	
		various distributions	
Middle order :	60%	- analyse various categorical and numerical data	
Higher order:	10%	- interpret the results of analyses	
		- work independently and in a team	

Module Contents

- Descriptive statistics, tables and graphs.
- Probability, discrete probability distributions such as Bernoulli, discrete uniform, binomial, hypergeometric, Poisson, geometric and negative binomial. Expected values and standard deviation of discrete random variables.
- Continuous probability distributions such as uniform, exponential, gamma, beta and normal. Expected values and standard deviation of continuous random variables.
- Approximation results including Chebyshev's inequality, Normal and Poisson approximations to the binomial distribution.
- Statistical inference: sampling distributions, central limit theorem, estimation and confidence intervals of means, proportions and variances, hypothesis tests for means, proportions and variances.

Assessment	Formative	Tutorial and feedback.
	assessment	
	Summative	Examination: 60%
	assessment	Coursework: 40%
		- 2 tests (40%)