Module code	SM-1402			
Module Title	Basic Statistics			
Degree/Diploma	Undergraduate GenNEXT Bachelor degree			
Type of Module	Breadth			
Modular Credits	2	**Total student Workload**	6	hours/week
		Contact hours	3	hours/week
Prerequisite	None			
Anti-requisite	None			

Aims

The module is designed to provide the students the fundamental knowledge of statistics, its application and the basic concepts of random variables and sampling.

Learning Outcomes

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

Lower order :	30%	- represent statistical data in different graphical and tabular formats
Middle order :	60%	-calculate the elementary statistical properties of a univariate data sample -calculate the probabilities of the outcomes of a range of simple random experiments
Higher order:	10%	- recognise and apply a number of standard probability distributions to model simple random processes

Module Contents

- Methods of data representation.
- Descriptive statistics:
- Mean, median, mode, standard deviation and quartiles.
- Probability:
  Sample spaces, counting techniques and rules of probability.
- Random variables:
- Expected value, probability density functions and normal distribution.
- Sampling:
  Random samples and the central limit theorem.

Assessment	Formative assessment	Tutorial and feedback.
	Summative assessment	Examination: 60%
		Coursework: 40% - 2 class tests (30%) - 1 assignment (10%)