**Quantitative Techniques**

**QMD1000 / DIT / School of Retail & Services Management**

**Module Content**

***Normal Distribution:*** The most important continuous probability distribution. Determining the values of scores (z-scores) that correspond to various given probabilities.

***Stock Control:*** Constructing an algebraic model for a simple stock system involving replenishment costs and stockholding costs. Determining the cost- minimising solution graphically. Comparing specific stock policies involving stock-out

***Introduction:*** Important statistical terms. The general nature of statistics and it’s role in Business. Uses and abuses of statistics.

***Index Numbers:*** Calculating price and volume index numbers using the methods of Laspeyre, Paasche and Fisher. The Consumer Price Index. Using a price index to ‘deflate’ a series of figures.

***Variation in Populations and Processes :***These measures of dispersion are defined: range, standard deviation, mean deviation and variance.

***Linear Programming:*** Method of optimising functions of two variables subject to constraints. Determining feasible and optimal solutions.

***Measures of Central Tendency:*** The nature of the distribution. Representative values. Mean, median, mode, midrange and weighted mean. Selecting the most appropriate measures. Concept of ‘skewness’.

***Presentation of Data:*** Construction of frequency and relative frequency tables. Using one, two and three-way tabulations of data. Techniques for presenting data using histograms, pie charts, pareto charts, stem-and-leaf plots and boxplots.