

# Statistics for Managers

## MNGT 4630

(Core)

### Course aims / objectives:

At no time in our history have managers had greater access to data about the performance of their firms. Data warehouses, e-commerce solutions, employee and customer surveys, financial reporting, Six Sigma and transaction databases are providing managers with significant opportunities to manage with data. But have the skills of managers kept pace? Do managers know how to analyse data, to report and argue confidently about what the data is suggesting? Except in the most straightforward of cases, the answer is probably no. Can they navigate a statistical package on their PCs with ease, selecting the tools that analyse performance results and model cause-and-effect? Except for basic spreadsheet functions, the answer is again probably no.

This course prepares students in understanding and applying the concepts and tools of data analysis. It develops the skills to confidently apply statistical methods to performance problems inside their companies. Areas such as marketing, human resource management, operations, information systems and accounting provide rich opportunities for the application of statistics and modelling. This course acts as a service course for analysing data from all areas of business.

This course will combine theory from the course notes with problem-solving exercises using the statistical package StatPro, an Excel Add-In. Emphasis will be placed on the selection of the appropriate statistical technique to solve business problems and the interpretation of the associated theory.

### Topics include:

- Overview of Course
- StatTools™ Tour
- Unit 1: Descriptive Statistics
- Unit 2: Continuous Random Variables
- Unit 3: Hypothesis Testing and Confidence Intervals
- Unit 4: Simple Linear Regression Models Part I
- Unit 5: Simple Linear Regression Models Part II
- Unit 6: Multiple Regression Models
- Unit 7: Time Series Analysis
- Unit 8: Models with Both Time Series & Regression Variables
- Unit 9: Course Summary
- Exam Review