

Module Specification

Module Summary Information

1	Module Title	Applied Statistics
2	Module Credits	20
3	Module Level	7
4	Module Code	CMP7205

5	Module Overview
<p>Information from data is required by many organisations and this module focuses on the application of statistical techniques to data sets primary using statistical and data analytics software. Hence a mixed learning and teaching approach is proposed that consists of both computer lab work with applying theory in practice through the use of specialist software and interactive taught sessions in a seminar room where you can work together putting theory into organisational context.</p> <p>Learning and Teaching</p> <p>This module will introduce statistical methods and techniques through practice based activities associated with real world issues. You will gain knowledge pertaining to the application of statistical techniques through practical experience, theory in practice and by exploring 'real world' issues via a range of software including statistics and data analytics tools.</p> <p>The module is designed as a series of pre-reading and discussions, interactive-taught lectures with breakout sessions and workshop/lab exercises using a variety of tools and techniques. You are expected to investigate the topics before sessions. This approach will enable you to gain an insight into how specific statistical techniques are being used in organisations before you learn supporting theory and practical application through the use of statistical software. You are expected to come to sessions prepared and having completed all the exercises and activities set.</p> <p>This module is very practical and you will be expected to complete all set exercises in the order which they are presented. This approach will enable you to build your knowledge, skills and practice the embedded transferable employability skills.</p>	

6	Indicative Content
Descriptive Statistics Probability Distributions Probability Density Functions Sampling and Surveying Hypothesis Testing Correlation and Covariance Linear Regression Time Series	

7		Module Learning Outcomes
On successful completion of the module, students will be able to:		
	1	Analyse and examine a variety of statistical techniques that can be applied to the extraction of information from data sets.
	2	Plan, select and employ a variety of statistical techniques and where appropriate, use a data analytics or statistical software tool.
	3	Evaluate the results of statistical techniques and a statistics or data analytics tool to a given scenario.
	4	Communicate effectively in a professionally prepared report which meets the needs of an organisation.

8				Module Assessment
Learning Outcome		Coursework	Exam	In-Person
1-4		X		

9		Breakdown Learning and Teaching Activities
Learning Activities	Hours	
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	48	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	112	
Private Study (PS) includes preparation for exams	40	
Total Study Hours:	200	