

H8STATS: Statistics

Module Code:	H8STATS
Long Title	Statistics APPROVED
Title	Statistics
Module Level:	LEVEL 8
EQF Level:	6
EHEA Level:	First Cycle
Credits:	5
Module Coordinator:	
Module Author:	Isabel O'Connor
Departments:	School of Computing
Specifications of the qualifications and experience required of staff	Master's and/or PhD degree in computing or cognate discipline. May have industry experience also.
Learning Outcomes	
<i>On successful completion of this module the learner will be able to:</i>	
#	Learning Outcome Description
LO1	Explain the principles and uses of descriptive statistics and inferential statistics.
LO2	Use Principles of statistical Inquiry
LO3	Carry out analyses based on descriptive and inferential statistics within a business context
LO4	Demonstrate the usage of methodologies applied in prediction (forecasting)
LO5	Use and understand software tools for business data analysis (e.g. SPSS, R, Excel)
Dependencies	
Module Recommendations	
No recommendations listed	
Co-requisite Modules	
No Co-requisite modules listed	
Entry requirements	See section 4.2 Entry procedures and criteria for the programme including procedures recognition of prior learning.

H8STATS: Statistics

Module Content & Assessment			
Indicative Content			
Descriptive Statistics/Data Presentation Arrangement, pre-processing and representation of data Measures of central tendency (mode, median, mean) Measures of dispersion (range, variance, standard deviation) Scales of Variables Statistical graphics & figures (e.g., pie chart, bar chart)			
Inference Statistics Standard Errors Hypothesis Testing Parametric Tests (e.g., T-Test, ANOVA, regression) Non-parametric Tests (e.g., chi-square tests)			
Prediction/Forecasting Simple Linear Regression Correlation Smoothing and filtering of data Nature of time series			
Assessment Breakdown			%
Coursework			50.00%
End of Module Assessment			50.00%
Assessments			
Full Time			
Coursework			
Assessment Type:	Formative Assessment	% of total:	Non-Marked
Assessment Date:	n/a	Outcome addressed:	1,2,3,4,5
Non-Marked:	Yes		
Assessment Description: Formative assessment will be provided on the in-class individual or group activities.			
Assessment Type:	Continuous Assessment	% of total:	50
Assessment Date:	n/a	Outcome addressed:	1,2,3,4,5
Non-Marked:	No		
Assessment Description: Assessment will consist of week graded tutorials to carry out statistical analysis on sample data sets using tools such as Excel, R, and SPSS.			
End of Module Assessment			
Assessment Type:	Terminal Exam	% of total:	50
Assessment Date:	End-of-Semester	Outcome addressed:	1,2
Non-Marked:	No		
Assessment Description: End-of-Semester Final Examination			
No Workplace Assessment			
Reassessment Requirement			
Repeat examination <i>Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.</i>			
Reassessment Description Repeat examination Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.			

H8STATS: Statistics

Module Workload				
Module Target Workload Hours 0 Hours				
Workload: Full Time				
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	No Description	24	Per Semester	2.00
Tutorial	No Description	12	Per Semester	1.00
Independent Learning	No Description	89	Per Semester	7.42
Total Weekly Contact Hours				3.00
Workload: Online				
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	No Description	12	Per Semester	1.00
Tutorial	No Description	12	Per Semester	1.00
Directed Learning	No Description	12	Per Semester	1.00
Independent Learning	No Description	89	Per Semester	7.42
Total Weekly Contact Hours				3.00
Workload: Part Time				
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	No Description	24	Per Semester	2.00
Tutorial	No Description	12	Per Semester	1.00
Independent Learning	No Description	89	Per Semester	7.42
Total Weekly Contact Hours				3.00

Module Resources	
<i>Recommended Book Resources</i>	
<p>James T. McClave, Terry T. Sincich. Statistics, Global Edition, 13th Edition. [ISBN: 9781292161556].</p> <p>Neil J. Salkind. (2016), Statistics for People Who (Think They) Hate Statistics (International Student Edition), Sage Publications, Incorporated, p.552, [ISBN: 9781506361161].</p>	
<i>Supplementary Book Resources</i>	
<p>Maindonald John,. (2008), , Using R for data analysis and graphics, r-project, Introduction, code and commentary, http://cran.r-project.org/.</p> <p>Andy Field, 2013,. Discovering Statistics Using IBM SPSS Statistics, 4th, Sage Publications Inc, London, p.915,.</p> <p>McClave, James T., Benson, George & Sincich, Terry,. (2013), , Statistics for Business and Economics, 12th, Prentice Hall.</p> <p>Peter Dalgaard. (2008), Introductory Statistics with R, Springer Science & Business Media, p.364, [ISBN: 9780387790534].</p>	
<i>This module does not have any article/paper resources</i>	
<i>This module does not have any other resources</i>	
Discussion Note:	Approved on behalf of SoC to allow for approval of parent programmes.