

## H8STATS: Statistics

<b>Module Code:</b>	H8STATS
<b>Long Title</b>	Statistics <b>APPROVED</b>
<b>Title</b>	Statistics
<b>Module Level:</b>	LEVEL 8
<b>EQF Level:</b>	6
<b>EHEA Level:</b>	First Cycle
<b>Credits:</b>	5
<b>Module Coordinator:</b>	
<b>Module Author:</b>	Isabel O'Connor
<b>Departments:</b>	School of Computing
<b>Specifications of the qualifications and experience required of staff</b>	Master's and/or PhD degree in computing or cognate discipline. May have industry experience also.
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner will be able to:</i>	
<b>#</b>	<b>Learning Outcome Description</b>
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)
<b>Dependencies</b>	
<b>Module Recommendations</b>	
No recommendations listed	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Entry requirements</b>	See section 4.2 Entry procedures and criteria for the programme including procedures recognition of prior learning.

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Module Content & Assessment	
<b>Indicative Content</b>	
<b>Descriptive Statistics/Data Presentation</b> 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)	
<b>Inference Statistics</b> Standard Errors Hypothesis Testing Parametric Tests (e.g., T-Test, ANOVA, regression) Non-parametric Tests (e.g., chi-square tests)	
<b>Prediction/Forecasting</b> Simple Linear Regression Correlation Smoothing and filtering of data Nature of time series	
Assessment Breakdown	%
Coursework	50.00%
End of Module Assessment	50.00%
<b>Assessments</b>	
Full Time	
Coursework	
<b>Assessment Type:</b>	Formative Assessment
<b>Assessment Date:</b>	n/a
<b>Non-Marked:</b>	Yes
<b>Assessment Description:</b>	Formative assessment will be provided on the in-class individual or group activities.
<b>Assessment Type:</b>	Continuous Assessment
<b>Assessment Date:</b>	n/a
<b>Non-Marked:</b>	No
<b>Assessment Description:</b>	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	
<b>Assessment Type:</b>	Terminal Exam
<b>Assessment Date:</b>	End-of-Semester
<b>Non-Marked:</b>	No
<b>Assessment Description:</b>	End-of-Semester Final Examination
No Workplace Assessment	
Reassessment Requirement	
<b>Repeat examination</b>	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.
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## H8STATS: Statistics

<b>Module Workload</b>				
<b>Module Target Workload Hours 0 Hours</b>				
<b>Workload: Full Time</b>				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
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
<b>Workload: Online</b>				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
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
<b>Workload: Part Time</b>				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
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

### *Recommended Book Resources*

James T. McClave, Terry T. Sincich. *Statistics, Global Edition, 13th Edition*. [ISBN: 9781292161556].

Neil J. Salkind. (2016), *Statistics for People Who (Think They) Hate Statistics (International Student Edition)*, Sage Publications, Incorporated, p.552, [ISBN: 9781506361161].

### *Supplementary Book Resources*

Maindonald John,. (2008), , *Using R for data analysis and graphics*, r-project, Introduction, code and commentary, [http://cran](http://cran.r-project.org/web/packages/usingR/index.html).

Andy Field, 2013,. *Discovering Statistics Using IBM SPSS Statistics, 4th*, Sage Publications Inc, London, p.915,.

McClave, James T., Benson, George & Sincich, Terry,. (2013), , *Statistics for Business and Economics, 12th*, Prentice Hall.

Peter Dalgaard. (2008), *Introductory Statistics with R*, Springer Science & Business Media, p.364, [ISBN: 9780387790534].

*This module does not have any article/paper resources*

*This module does not have any other resources*

### **Discussion Note:**

Approved on behalf of SoC to allow for approval of parent programmes.