# **H8BDA: Business Data Analysis**

| Module Code:  |                           | H8BDA   |  |  |  |  |  |
|---|---------------------------|---|--|--|--|--|--|
| Long Title  |                           | Business Data Analysis APPROVED   |  |  |  |  |  |
| Title   |                           | Business Data Analysis  |  |  |  |  |  |
| Module Level:   |                           | EVEL 8  |  |  |  |  |  |
| EQF Level:  |                           |   |  |  |  |  |  |
| EHEA Level:   |                           | st Cycle  |  |  |  |  |  |
| Credits:  |                           |   |  |  |  |  |  |
| Module Coordinator:   |                           | EUGENE O'LOUGHLIN   |  |  |  |  |  |
| Module Author:  |                           | NE O'LOUGHLIN   |  |  |  |  |  |
| Departments:  |                           | hool of Computing   |  |  |  |  |  |
| Specifications of the qualifications and experience required of staff |                           |   |  |  |  |  |  |
| Learning Outcomes   |                           |   |  |  |  |  |  |
| On successfu  | l completion of this modu | ule the learner will be able to:  |  |  |  |  |  |
| #   | Learning Outcome          | Description   |  |  |  |  |  |
| LO1   | Explain the principles    | and uses of descriptive statistics and inferential statistics.            |  |  |  |  |  |
| LO2   | Use Principles of sta     | stical Inquiry  |  |  |  |  |  |
| LO3   | Carry out analyses b      | pased on descriptive and inferential statistics within a business context |  |  |  |  |  |
| LO4   | Demonstrate the usa       | ge of methodologies applied in prediction (forecasting)                   |  |  |  |  |  |
| LO5   | Use and understand        | nd 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  |                           |   |  |  |  |  |  |

# **H8BDA: Business Data Analysis**

## Module Content & Assessment

## Indicative Content

Descriptive Statistics/Data Presentation (30 %)

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 (35 %)
Standard Errors Hypothesis Testing Parametric Tests (e.g., T-Test, ANOVA, regression) Non-parametric Tests (e.g., chi-square tests)

Prediction/Forecasting (35 %)

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:

Assignment **Assessment Date:** 

Outcome addressed:

1,2,3,4,5

Non-Marked: No

**Assessment Description:** 

Assessment will consist of week graded tutorials to carry our statistical analysis on sample data sets using tools such as Excel, R, and SPSS.

End of Module Assessment

Assessment Type: **Assessment Date:** 

Terminal Exam

% of total:

% of total:

50

Non-Marked:

End-of-Semester

Outcome addressed:

1,2

Assessment Description: End-of-Semester Final Examination

No Workplace Assessment

#### Reassessment Requirement

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.

# **H8BDA: Business Data Analysis**

| Module Workload   |                      |      |       |               |                                    |  |  |  |
|---|----------------------|------|-------|---------------|------------------------------------|--|--|--|
| Module Target Workload Hours 0 Hours  Workload: Full Time |                      |      |       |               |                                    |  |  |  |
|   |                      |      |       |               |                                    |  |  |  |
| Lecture   | No Description       |      | 2     | Every<br>Week | 2.00                               |  |  |  |
| Tutorial  | No Description       |      | 1     | Every<br>Week | 1.00                               |  |  |  |
| Independent Learning                                      | No Description       |      | 7.5   | Every<br>Week | 7.50                               |  |  |  |
|   | ontact Hours         | 3.00 |       |               |                                    |  |  |  |
| Workload: Part Time                                       |                      |      |       |               |                                    |  |  |  |
| Workload Type   | Workload Description |      | Hours | Frequency     | Average Weekly<br>Learner Workload |  |  |  |
| Lecture   | No Description       |      | 2     | Every<br>Week | 2.00                               |  |  |  |
| Total Weekly Contact Hours                                |                      |      |       |               |                                    |  |  |  |

# **Module Resources**

## Recommended Book Resources

Neil J. Salkind. (2014), Statistics for People Who (Think They) Hate Statistics, 5th. Sage Publications, Inc, Thousand Oaks, p.483, [ISBN: 978-1-4522-77]. McClave, James & Sincich, Terry. (2012), Statistics, 12th edition.. Pearson.

## Supplementary Book Resources

Andy Field. (2013), Discovering Statistics Using IBM SPSS Statistics, 4th. Sage Publications Inc, London, p.915, [ISBN: 978-1-4462-49].

Peter Dalgaard. Introductory Statistics with R, 2008. Springer, p.364, [ISBN: 9780387790534].

 $Main donald\ John.\ (2008), John Using\ R\ for\ data\ analysis\ and\ graphics.\ Introduction,\ code\ and\ commentary http; \\ // cran.r-project.org/doc/contrib./using\ R.pdf.\ ...$ 

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

This module does not have any article/paper resources

This module does not have any other resources

Discussion Note: