# BSc Business Statistics and Marketing For students entering Part 1 in 2011/2

Awarding Institution: University of Reading Teaching Institution: University of Reading

Relevant QAA subject Benchmarking group(s): Mathematics, Statistics and Operational Research

UCAS code: GN35

Faculty: Science Faculty

Programme length:3 yearsDate of specification:15/May/2013Programme Director:Dr Karen AyresProgramme Advisor:Dr Karen Ayres

Board of Studies: School of Mathematical and Physical Sciences

Undergraduate

Accreditation: Royal Statistical Society

## Summary of programme aims

The programme aims to provide a thorough degree-level education in statistics, relevant for those students interested in business, marketing, finance and industry. This is achieved by providing modules which cover the basic principles of summarising, presenting and drawing conclusions from data. Strong emphasis is given to practical applications of the subject, and the use of statistical software in data analysis. This programme also enables students to acquire a sound education in those concepts that will be useful in the business world. This is achieved by taking modules in economics and econometrics, marketing, management of resources, and statistical techniques relevant to business problems.

#### Transferable skills

During the course of their studies at Reading, all students will be expected to enhance their academic and personal transferable skills. In following this programme, students will have had the opportunity to develop such skills, in particular relating to career management, communication (both written and oral), information handling, numeracy, problem-solving, team working and use of information technology and will have been encouraged to further develop and enhance the full set of skills through a variety of opportunities available outside their curriculum.

As part of this programme students are expected to have gained experience and show competence in the following transferable skills: IT (word processing, spreadsheet, database and statistical software), scientific writing, oral presentation, team-working, problem-solving, use of library and internet resources, time-management, and career planning.

## **Programme content**

The profile which follows states which modules must be taken (the compulsory part), together with one or more lists of modules from which the student must make a selection (the optional modules). Students must choose such additional modules as they wish, in consultation with their programme advisor, to make 120 credits in each Part. The number of credits for each module is shown after its title.

## Part 1 (three terms)

Compulsory modules

Code	Module title	Credits	Level
AS1E	Exploring Your Data	10	4
AS1F	Statistical Inference	10	4
AS1G	Probability	10	4
AS1H	Statistical Methods	10	4
AP1SB1	Introduction to Management	10	4
AP1EM1	Introduction to Marketing	10	4

Selected modules chosen from the following three options:

## Option 1:

EC104	Economics for Managers	20 4	ļ

AS1C	Mathematical Methods for Statistics	20	4
and one of			
AS1D MM1F2 LA1XX1 MA115 MM1F10 LW1ELB	Data Analysis Introductory Financial Accounting Institution Wide Language Programme Codes and Code Breaking Student Enterprise Principles of Law and Business	20 20 20 20 20 20 20	4 4 4 4 4
OR any other ap	proved module(s)		
Option 2:			
EC104 MA1CAL MA1OD1 MA1VM	Economics for Managers Calculus Methods Ordinary Differential Equations I Vectors and Matricies	20 20 10 10	4 4 4 4
Option 3:			
EC101 EC102 AS1C	Principles of Microeconomics Principles of Macroeconomics Mathematical Methods for Statistics	20 20 20	4 4 4
Part 2 (three te			
Code AS2A AS2B AS2G AP2SB1 AP2EM1 EC203	Module title Statistical Theory and Methods Linear Models Skills for Statisticians Business Management Marketing Management Introductory Econometrics (BA)	Credits 20 20 20 10 10 20	Level 5 5 5 5 5 5 5 5
Optional module	es s		
Choose 20 credi AP2SB2 AP2EC1 AP2EB3 AP2EM3 MM270 LA1XX1 OR Any other ap	Financial Management Consumer Behaviour Management of the Non-Profit Organisations Internet Marketing The Practice of Entrepreneurship Institution Wide Language Programme approved module(s)	10 10 10 10 20 20	5 5 5 5 5 4
Part 3 (three te			

Credits Level

6

20

 $Module\ title$ 

Advanced Statistical Modelling

Code

AS3A

AS3F1	Time Series Project	20	6
AP3EM1	Marketing Strategy	10	6
AP3EM2	Marketing Research Methods	10	6
ST3OR	Operational Research	10	6
Optional modul At least 20 crea	lits from:		
ST3MVA	Multivariate Data Analysis	10	6
ST3MSD	Modelling Structured Data	10	6
ST3SM	Sampling Methods	10	6
ST3ED	Experimental Design	10	6
ST3BDA	Bayesian Data Analysis	10	6

And selected modules to make a total of 120 credits, of which 100 must be at level 6, chosen from the following:

AP3EM3	Advertising and Branding	10	6
AP3EB1	Business Strategy	20	6
AP3A64	Human Resource Management	10	6
MM379	Social Enterprise	20	6
MM270	The Practice of Entrepreneurship	20	5

*OR* any other approved module(s)

## **Progression requirements**

To gain a threshold performance at Part 1 a student shall normally be required to achieve an overall weighted average of 40% over 120 credits taken in Part 1, and a mark of at least 30% in individual modules amounting to not less than 100 credits. In order to progress from Part 1 to Part 2, a student shall normally be required to achieve a threshold performance at Part 1 and to obtain a weighted average of at least 40% in the four compulsory Statistics modules taken together, and at least 30% in each of the six compulsory modules.

To gain a threshold performance at Part 2 and qualify for the DipHE a student shall normally be required to achieve an overall weighted average of 40% over 120 credits taken in Part 2, and a mark of at least 30% in individual modules amounting to not less than 100 credits. In order to progress from Part 2 to Part 3, a student shall normally be required to achieve a threshold performance at Part 2.

## Assessment and classification

The University's honours classification scheme is:

Mark

70% - 100%

First class

60% - 69%

Upper Second class

50% - 59%

Lower Second class

40% - 49%

Third class

35% - 39%

Below Honours Standard

For the University-wide framework for classification, which includes details of the classification method, please see: www.reading.ac.uk/internal/exams/Policies/exa-class.aspx

The weighting of the Parts/Years in the calculation of the degree classification is

Fail

## Three-year programmes

Part 2 one-third

0% - 34%

#### Part 3 two-thirds

Teaching is organised in modules that typically involve both lectures and practicals. The assessment is carried out within the University's degree classification scheme, details of which are in the programme handbook. The pass mark in each module is 40%. Modules are normally assessed by a mixture of coursework and formal examination, although some are assessed wholly by coursework. The Part 3 project is essentially self-study, supported by a series of tutorials, and is assessed as coursework. Part 2 contributes one third of the final assessment and Part 3 the remaining two thirds.

## **Admission requirements**

Entrants to this programme are normally required to have obtained:

UCAS Tariff: A Level: 300 points including at least grade C in AS Mathematics or grade B in A-level Statistics;

or

International Baccalaureate: 29 points including 5 in Mathematics; or

Irish Highers: BBBBB, including Mathematics.

In computing your UCAS points total, we will count all A levels and any additional AS levels excluding Key

Skills and General Studies.

Admissions Tutor: Dr Steve Langdon

## Support for students and their learning

University support for students and their learning falls into two categories. Learning support is provided by a wide array of services across the University, including: the University Library, the Careers, Placement and Experience Centre (CPEC), In-sessional English Support Programme, the Study Advice and Mathematics Support Centre teams, IT Services and the Student Access to Independent Learning (S@il) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language Programme. Student guidance and welfare support is provided by Personal Tutors, School Senior Tutors, the Students' Union, the Medical Practice and advisers in the Student Services Centre. The Student Services Centre is housed in the Carrington Building and offers advice on accommodation, careers, disability, finance, and wellbeing, academic issues (eg problems with module selection) and exam related queries. Students can get key information and guidance from the team of Helpdesk Advisers, or make an appointment with a specialist adviser; Student Services also offer drop-in sessions and runs workshops and seminars on a range of topics. For more information see www.reading.ac.uk/student

Within the providing departments additional support is given though practical classes, and the development of problem-solving skills is assisted by provision of model solutions to exercises. Advice on statistical computing is available from lecturers. There is a Programme Adviser to offer advice on the choice of modules within the programme.

## Career prospects

Students who follow this programme will have the skills necessary for careers as statisticians in financial institutions, insurance companies and industry.

## Opportunities for study abroad or for placements

A version of this programme to include a maxi placement is available. Students undertaking a maxi placement spend a year in industry between the second and third taught year. This year does not contribute to the final degree classification.

#### **Programme Outcomes**

The programme provides opportunities to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

## **Knowledge and Understanding**

## A. Knowledge and understanding of: Teaching/learning methods and strategies

1. The fundamental concepts and techniques of The knowledge required for the basic topics is

economics, business management, marketing, data summary and presentation, statistical inference and linear modelling

- 2. The application of statistics in business
- 3. A selection of more specialist optional topics
- 4. The use of statistical software in data analysis

delineated in formal lectures supported by problem sets for students to tackle on their own. In Part 1 these are supported by tutorials and practical classes through which students can obtain additional help and feedback on their work.

In the programme students are expected to work on practical problems on their own and seek help when required. Where appropriate, model solutions are provided for problems set.

#### Assessment

Most knowledge is tested through a combination of coursework and unseen formal examinations. Dissertations and oral presentations also contribute in other parts of the programme.

## Skills and other attributes

## **B.** Intellectual skills - able to:

- 1. Think logically
- 2. Analyse and solve problems
- 3. Organise tasks into a structured form
- 4. Transfer appropriate knowledge and methods from one topic within the subject to another
- 5. Recognise and use appropriate statistical methods in data analysis
- 6. Plan, conduct and write a report on an independent project

# C. Practical skills - able to:

- 1. Plan, conduct and report on the results of statistical investigations
- 2. Develop an understanding of business management
- 3. Use statistical software in an effective manner
- 4. Write and defend a report on a chosen topic

## **D.** Transferable skills - able to:

use IT (word-processing, spreadsheets and statistical software) communicate scientific ideas give oral presentations work effectively as part of a team use library and internet resources manage time plan their career.

## Teaching/learning methods and strategies

Logic is an essential part of the understanding of economic and statistical techniques, and the use of statistical software for data analysis is embedded throughout the programme. The quality of solutions to a problem is substantially determined by the structure of that response; analysis, synthesis, problem solving, integration of theory and application, and knowledge transfer from one topic to another are intrinsic to high-level performance in the programme.

#### Assessment

Skills 1-3 are assessed indirectly in most parts of the programme, while 4 contributes to the more successful work. Skill 5 is assessed in practical work in Parts 2 and 3, while 6 is assessed through the final year project.

# Teaching/learning methods and strategies

Lectures, seminars, practical work and assignments are designed to enhance skills 1-4.

## Assessment

Skills 1 and 2 are tested both formatively in coursework and summatively in examin-ations. Skill 3 is assessed in coursework that involves computer based analysis, and skill 4 is assessed through the project dissertation and its oral presentation.

# Teaching/learning methods and strategies

The use of IT is embedded throughout the programme, and in the packages Minitab and SAS taught in Parts 1 and 2. Team work and career planning feature in modules on Business Management and Marketing, and Skills for Statisticians. Communication skills are enhanced in Part 1, and are further deployed in modules in Parts 2 and 3. Time management is essential for the

timely and effective completion of the programme. Library and internet resources are required for certain assignments and the final year project, and contribute to the best performances throughout.

#### Assessment

Skills 1 and 2 are assessed through coursework. Skills 2-4 contribute assessed coursework towards the module Skills for Statisticians. Effective use of these skills will enhance performance in later modules.

Please note - This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module description and in the programme handbook. The University reserves the right to modify this specification in unforeseen circumstances, or where the process of academic development and feedback from students, quality assurance process or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.