BSc Business Statistics and Marketing **UCAS code: GN35**
For students entering Part 1 in 2012/3

Awarding Institution:	University of Reading
Teaching Institution:	University of Reading
Relevant QAA subject Benchmarking group(s):	Mathematics, Statistics and Operational Research
Faculty:	Science Faculty
Programme length:	3 years
Date of specification:	14/May/2014
Programme Director:	Dr Karen Ayres
Programme 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*
AP1EM1	Introduction to Marketing	10	4
AP1SB1	Introduction to Management	10	4
ST1PD	Probability and Distributions	10	4
ST1ST	Statistical Techniques	10	4
ST1SIM	Statistical Inference and Methods	10	4
ST1DA1	Data Analysis	10	4
EC104	Economics for Managers	20	4
MA1CAL	Calculus and Methods	20	4
MA1OD1	Ordinary Differential Equations	10	4
MA1VM	Vectors and Matrices	10	4

Part 2 (three terms)
Compulsory modules

Code	*Module title*	*Credits*	*Level*
ST2STM	Statistical Theory and Methods	20	5
AS2B	Linear Models	20	5
AS2G	Skills for Statisticians	20	5
AP2SB1	Business Management	10	5
AP2EM1	Marketing Management	10	5
EC203	Introductory Econometrics (BA)	20	5

Modules to the value of 20 credits from:

MA2OD2	Ordinary Differential Equations II	10	5
MA2VC	Vector Calculus	10	5
AP2EC1	Consumer Behaviour	10	5
AP2SB2	Financial Management	10	5
AP2EM3	Internet Marketing	10	5
MM270	The Practice of Entrepreneurship	20	5
LA1XX1	Institution Wide Language Programme	20	4

OR Any other approved module(s)

Part 3 (three terms)
Compulsory modules

Code	*Module title*	*Credits*	*Level*
AS3A	Advanced Statistical Modelling	20	6
AS3F1	Time Series Project	20	6
AP3EM1	Marketing Strategy	10	6
AP3EM2	Marketing Research Methods	10	6
ST3OR	Operational Research	10	6

At least 20 credits from:

ST3BDA	Bayesian Data Analysis	10	6
ST3MVA	Multivariate Data Analysis	10	6
ST3MSD	Modelling Structured Data	10	6
ST3SM	Sampling Methods	10	6
ST3ED	Experimental Design	10	6

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

AP3EB1	Business Strategy	10	6
AP3A64	Human Resource Management	10	6
MM301	Effectual Entrepreneurship	20	6
MM302	Entrepreneurial Project	20	6
MM270	Practice of Entrepreneurship	20	5
LA1XX1	Institution Wide Language Programme	20	4

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 ST1PD, ST1ST, ST1SIM, AP1EM1, AP1SB1.

To gain a threshold performance at Part 2, a student shall normally be required to achieve:
(i) a weighted average of 40% over 120 credits taken at Part 2;
(ii) marks of at least 40% in individual modules amounting to not less than 80 credits; and
(iii) marks of at least 30% in individual modules amounting to not less than 120 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	*Interpretation*
70% - 100%	First class
60% - 69%	Upper Second class
50% - 59%	Lower Second class
40% - 49%	Third class
35% - 39%	Below Honours Standard
0% - 34%	Fail

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

Three-year programmes
Part 2 one-third
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: 320 points including at least grade B in A-level Mathematics; or
International Baccalaureate: 6, 6, 5 including 5 in Mathematics or equivalent

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 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	The knowledge required for the basic topics is 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:*	**Teaching/learning methods and strategies**
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	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,

in data analysis 6. Plan, conduct and write a report on an independent project	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.
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	**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.
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** 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.