

BSc Nutrition with Food Consumer Sciences with Professional Training UCAS code: B4DP
For students entering Part 1 in 2014/5

Awarding Institution:	University of Reading
Teaching Institution:	University of Reading
Relevant QAA subject Benchmarking group(s):	i) Biosciences and ii) Agriculture, Forestry, Agricultural and Food Sciences
Faculty:	Life Sciences Faculty
Programme length:	4 years
Date of specification:	10/Sep/2014
Programme Director:	Dr Daniel Commane
Programme Advisor:	
Board of Studies:	Food and Nutritional Sciences
Accreditation:	Not applicable

Summary of programme aims

The aim is to provide a programme of education which can enable graduates to enter a career in government, the food industry or other sectors involved in the food chain, education, science communication or health, as scientists, and to develop their capacity to critically evaluate research into the science of food and health. Graduates should be able to provide advice and leadership in meeting public health / policy challenges in food reformulation and behaviour change challenges from a consumer perspective.

The testable learning outcomes will be the ability to:

- Integrate the scientific disciplines relevant to nutrition, food, aspects of consumer science relevant to food, psychology and health;
- Communicate and apply scientific knowledge in nutrition, food, selected aspects of consumer science, psychology and health to meet the needs of consumers, industry and food regulatory authorities for the development and evaluation of safe and quality foods.

The programme aims to:

- Provide a programme of education which can enable its graduates to enter a career in a wide range of public and private organisations, as scientists, capable of supporting the relation between food and health through product development and evaluation of consumer acceptance of quality food;
- Provide a broadly based scientific education whose graduates can also enter into employment in related scientific sectors where they can apply their scientific skills;
- Allow individuals to develop their capacity to critically evaluate research into the science of food and health;
- Provide students with an opportunity to experience the application of their course work through a short placement in industry or relevant institution;
- Provide undergraduates with opportunities to develop their inter-personal and communication skills;
- Enable graduates from the course to meet the qualification and curriculum requirements for postgraduate qualification as 'Registered Nutritionist'.

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 Durign 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 communication (both written and oral), interpersonal skills, learning skills, numeracy, self-management, use of information technology and problem-solving and will have been encouraged to further develop and enhance the full set of skills through a variety of opportunities available outside their curriculum. and will have been encouraged to further develop and enhance the full set of skills through a variety of opportunities available outside their curriculum. Students will also have had the opportunity to enhance their skills relating to career management and team working.

Programme content

The Nutrition and Food Science programme provides an opportunity for students to follow a core curriculum that will allow them to gain post graduation registration as a 'Registered Nutritionist' with opportunity to diversify their subject knowledge through selection of specified optional modules. The programme is also designed to allow graduates from the course to be recognised as competent nutrition scientists with

understanding of food consumer sciences to function within the food and health industries in technical, development, advisory and marketing roles.

The profile which follows states which modules must be taken (the core Nutrition with Food Consumer Sciences modules) and the lists of modules from which the student must make a selection (the optional modules).

The fundamental science modules in Part 1 have been selected to ensure students gain a thorough grounding in biology, chemistry, microbiology, quantitative skills, food processing and physiology and nutrition necessary to form the basis for further study in Nutrition and Food Consumer Sciences. The Human Physiology & Nutrition, Cell Biology and Biochemistry and Metabolism modules provide an essential base for the health related and mechanistic aspects of nutrition that will be studied later in the course. The Fundamental Science for Food and Nutrition modules help provide knowledge of the chemistry of food components, whereas the Food Processing material ensures that this group of students has sufficient skills to underpin their later studies involving food processing and product development. Farm to Fork will provide students with the business awareness they need to satisfy future employment in the food industry. For the optional modules, students are free to select any module that is not a compulsory module so as to make 120 credits in Parts 2 and 3.

Part 1 (three terms)

Compulsory modules

<i>Code</i>	<i>Module title</i>	<i>Credits</i>	<i>Level</i>
BI1BA1	The Living Cell	10	4
BI1BB2	Biochemistry and Metabolism	10	4
CH1FC3	Molecular Studies for the Life Sciences	10	4
FB1AG2	Farm to Fork	20	4
BI1S1	Introductory Microbiology	10	4
FB1EP2	Introduction to Food Processing	20	4
FB1PN	Introduction to human physiology and nutrition	20	4
FB1MB1	Introduction to Food Microbiology	10	4

The following module is **compulsory** for students who have lower than a B grade in Chemistry A level.

CH1FC1	Fundamental Concepts in Chemistry	10	4
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Plus 10 credits from the following modules for students with a B grade and higher in Chemistry at A level.

CH1FC1 is optional:

CH1FC1	Fundamental Concepts in Chemistry	10	4
PY1PC	Perception	10	4
PY1IN	Introduction to Neuroscience	10	4
AP1EE3	Economics 1	10	4
AP1EM1	Introduction to Marketing	10	4
AP1SB1	Introduction to Management	10	4

Part 2 (three terms)

Compulsory modules

<i>Code</i>	<i>Module title</i>	<i>Credits</i>	<i>Level</i>
BI1BE2	Pathology: Introduction to Human Disease	10	4
AP2EC1	Consumer Behaviour	10	5
FB1PH1	Public Health Nutrition 1	10	5
FB1SEN	Sport and Exercise Nutrition	10	5
ST2S1	Statistics for the Life Sciences	10	5
FB2BBE	Biochemistry and Enzymology	10	5
FB2GPD	Basic Product Development	10	5
FB2FC1	Food Choice and Regulation	10	5
FB2EFA	Food Processing A	10	5
PY2CN1	Cognition 1	10	5

PY2CN2	Cognition 2	10	5
FB2MF1	Microbiology of Food Spoilage and Preservation	10	5
FB2PYA	Industrial Training Preparation	0	5

Year abroad/Year away/Additional year (three terms)

Compulsory modules

<i>Mod Code</i>	<i>Module Title</i>	<i>Credits</i>	<i>Level</i>
FB2PYB	Industrial Training Year	120	5

Part 3 (three terms)

Compulsory modules

<i>Code</i>	<i>Module title</i>	<i>Credits</i>	<i>Level</i>
FB3GPD	Food Product Development	10	6
FB3GSE	Sensory Evaluation	10	6
FB3N2A	Diet and Disease	10	6
FB3N2B	Genes, Lifestyle and Nutrition	10	6
FB3GSA	Consumer Attitudes to Food Quality	10	6
FB3RP	Research Project	40	6
FB3PN2	Public Health Nutrition 3	10	6

Optional modules (20 credits):

FB3CF1	Special Topics in Food and Toxicology	10	6
FB3CF2	Selected Topics in Food Chemistry	10	6
FB3QAS	Food Quality Assurance and Safety	20	6
MM270	Practice of Entrepreneurship	20	5
LA1XX1	Institution Wide Language Programme	20	4

Progression requirements

To gain a threshold performance at Part 1 and qualify for the CertHE a student shall normally be required to achieve an overall average of 40% over 120 credits taken in Part 1, where all the credits are at level 4 or above, 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 have marks of at least 40% in CH1FC3 and an overall 40% average in each of the Themes 4, Food Processing and Engineering [FB1EB2] and Theme 6, Human Physiology and Nutrition [FB1PN].

To gain a threshold performance at Part 2 and qualify for the DipHE a student shall normally be required to achieve an overall average of 40% over 120 credits taken in Part 2.

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 must achieve a threshold performance and a minimum of 30% average mark across Themes 6, Human Physiology and Nutrition and Theme 8, Perception, Choice and Quality and also achieve a mark of at least 40% in the Professional Training Year. Students who fail the Professional Training Year will be required to transfer to the 3 year Programme.

To obtain the degree at the end of Part 3, students must obtain an overall average of 40%.

In order to achieve a BSc Honours degree, students are required to achieve a mark of at least 30% in the final year project modules FB3PFA and FB3RP combined. Students who fail to achieve this mark will qualify for a PASS degree if they meet the other criteria.

Assessment and classification

The University's honours classification scheme is:

<i>Mark</i>	<i>Interpretation</i>
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

Four-year programmes, including placement year: Normally:

Part 2 23%

Placement 10%

Part 3 67%

Teaching is organised into modules - each module will consist of lectures, practicals, or a combination of these. Students are assessed on each module, usually by a formal examination, although modules consisting only of practicals (or similar coursework) may not have a formal examination. All coursework is assessed and the assessment contributes towards the modular marks. The Part 3 project is an individual study requiring the submission of formal report for assessment.

Admission requirements

Entrants to this programme are normally required to have obtained:

GCSE: Grade C or better in Mathematics and English; and achieved

Advanced Level (AS and A2):

- Grades A,B,B at A2 with at least one science subject, including either chemistry, biology, physics or maths;
- UCAS grades equivalent to ABB.

Admissions Tutor: Dr Maria Jose Oruna-Concha

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-session 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

Career learning

Career prospects

There are many varied job opportunities for scientifically trained graduates in nutrition. This course specifically trains graduates who are equipped to operate in many organisations and industries involved in the development, supply and regulation of food and food products. Graduates are equipped to work in education, consumer information and government departments concerned with assurance of nutrition quality and health as well as in public health nutrition. Other opportunities arise in market research companies.

Opportunities for study abroad

As part of the degree programme students have the opportunity to study abroad at an institution with which the University has a valid agreement.

There are no formal arrangements for study abroad. Industrial training attachments may occasionally be found in other countries including the USA and Australia.

Placement opportunities

There are no formal arrangements for study abroad. Industrial training attachments may occasionally be found in other countries including the USA and Australia.

Programme Outcomes

Knowledge and Understanding

A. Knowledge and understanding of:

1. Food and nutrient composition, nutrient action, adaptation to food and nutrient supply;
2. Biological basis of the interaction between food and health;
3. Methods and data for acquiring and interpreting information about diet and health and evidence based food policy;
4. Role of agriculture, food production, marketing, economic, social and behavioural factors affecting dietary adequacy;
5. Consumer food choice and approaches to consumer and market research in food markets;
6. Concepts, theories and evidence in cognitive and social psychology.

Teaching/learning methods and strategies

Lectures and practical classes provide the basic knowledge. A variety of coursework gives opportunities for extending knowledge and techniques. Individual and group projects reinforce techniques and give experience of practical applications.

Assessment

Most knowledge is tested through a combination of coursework and unseen formal examinations. Project work, reports, oral presentations and computer-based exercises also contribute to the final assessment.

Skills and other attributes

B. Intellectual skills - able to:

1. Analyse and solve problems;
2. Critically evaluate scientific literature, recognising strengths and weaknesses in research findings;
3. Assess problems and design experiments to test hypotheses;
4. Apply knowledge to new problems;
5. Plan, conduct and report on an individual research project.

Teaching/learning methods and strategies

Topics 1 and 2 are essential components of the programme and are embedded in many parts of the programme. Topics 3 and 4 are introduced in Part 2 and Part 3 coursework. Topics 3, 4 and 5 are fully developed during product development module and the individual research project in Part 3 of the programme and for individual students in their industrial year.

Assessment

Coursework is structured to assess topics 1, 2, 3 and 4. Topics 3, 4 and 5 are assessed as components of

the individual research project and the Industry Year.

C. Practical skills - able to:

1. Perform chemical, nutritional, microbiological and sensory laboratory tests to assess the quality and safety of foods;
2. Appreciate principles associated with assessment and formulation of diets to meet specified requirements for individuals or populations;
3. Ability to record, collate and analyse nutrition related data using appropriate statistical methods.

D. Transferable skills - able to:

1. Work as an individual, in a small group or as part of a larger team;
2. Prepare reports and make presentations that effectively present the results of investigations carried out;
3. Make effective use of information technology;
4. Consider and manage career choice;
5. Digest, summarise and communicate information concerning food and nutrition at a level appropriate to the needs of both specialist and non-specialist target audiences.

Teaching/learning methods and strategies

Topic 1 is introduced by lectures but is developed fully by appropriate laboratory exercises during all Parts of the programme. Topics 2, 3 and 4 are developed during lectures, exercises and group work in Parts 2 and 3 of the programme.

Assessment

All topics will be assessed by coursework.

Teaching/learning methods and strategies

The development of transferable skills is integrated into many parts of the programme. Students are required to work both as individuals and as part of groups. Career skills (topic 4) are introduced in a Part 1 module and reinforced by the work experience period between Part 1 and Part 2 and more extensively during the Industry Year. Skills in communication and presentation are developed as part of seminar presentations (specialist and non-specialist), presentations of specialist material from laboratory classes, research project and Industry Year presentations.

Assessment

All topics are assessed both by coursework within the modules and in formal examinations.

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.