

**MSc in Food Quality and Health (part-time modular)**  
**For students entering in 2012/3**

Awarding Institution:	University of Reading and University of Birmingham
Teaching Institution:	University of Reading and University of Birmingham
Relevant QAA subject Benchmarking group(s):	
Faculty:	Life Sciences Faculty
Programme length:	6 years
Date of specification:	24/Aug/2012
Programme Director:	Dr Richard Frazier
Programme Advisor:	Ms Madeleine Smith
Board of Studies:	University of Reading and University of Birmingham
Birmingham Joint Board of Studies for Food Advanced Training Partnership Programmes	
Accreditation:	

**Summary of programme aims**

This part-time modular programme is structured to deliver advanced knowledge and understanding of in the subject area of Food Quality and Health to food and agricultural industry employees in issues relevant to their professional careers. The programme aims to provide a depth of understanding across a broad base of issues while examining developments at the cutting edge of current knowledge relevant to overlapping sub-themes of nutrition, health and the consumer, food quality and regulation, food manufacture, and sustainable food production. The programme will deliver training that crosses traditional skill disciplines within the fields of food and agricultural science and aims to encourage critical reflection upon existing professional practice. Thus, study approaches used in the social sciences and business as well as natural or applied sciences are applied to encourage a holistic approach. Research skills training is also fundamental to this programme, particularly the critical evaluation of research findings and the planning and execution of original research appropriate to a professional context.

A key aspect is that the programme is sufficiently flexible to cater for the varying needs of the industry employees, particularly to enable them to pursue their course of study without the need to leave employment. Consequently, contact time for modules will be delivered as intensive study weeks together with distance learning as appropriate to learning outcomes.

*Advanced training partnership background:* This programme will be delivered by the Food Advanced Training Partnership (Food ATP). The Food ATP is one of four ATPs that have been established with funding from the Biotechnology and Biological Sciences Research Council (BBSRC). An ATP operates under the leadership of an academic institution and is a formal collaboration between users (i.e. industry) and providers (i.e. universities and other research/training organisations) of high-level skills in the agri-food sector with the aim to train industry professionals to equip them with skills to ensure that the UK continues to make significant contributions towards national and global food security. The Food ATP is led by the University of Reading in partnership with the University of Birmingham, Leatherhead Food Research and Rothamsted Research.

*Joint degree programme and CPD accreditation:* This programme leads to MSc, PGDip and PGCert qualifications that are jointly accredited and awarded by the University of Reading and University of Birmingham. In addition to joint degree accreditation, individual modules delivered as part of this programme can be taken as standalone continuing professional development (CPD).

**Transferable skills**

The Food ATP programme brings together leading experts, training providers and successful companies to deliver a unique training experience that will enhance and strengthen the UK food and agricultural industry skills base. The mission of the Food ATP is to adopt a without boundaries approach to developing the advanced skills required to develop the leaders of a sustainable food industry. By integrating all aspects of the food chain the ATP will breakdown traditional barriers between food production, processing, retailing, food service, nutrition and the consumer to address major issues at the heart of food security. Within this interdisciplinary context there will be considerable scope for the development of the following transferable skills:

- Critical evaluation of information from a variety of sources to develop understanding and make decisions
- Collaboration with experts and policy makers across a wide range of disciplines and organisations
- Designing and executing an independent research project based on an original hypothesis
- Effective and scientifically rigorous communication of scientific information in oral and written formats
- Monitoring and self-evaluation of learning and development

### Programme content

For the award of MSc, students will follow the modules given below making 180 credits; to qualify for the award of PGDip, students will have taken 120 credits (typically comprising taught modules only, however there is also the option of 60 credits for taught modules plus 60 credits for the Project on agreement with the ATP Director); to qualify for the award of PGCert students may have taken any combination of 60 credits (normally excluding the Project). Modules will be delivered in an intensive study week delivery format (typically 1 week for a 10 credit module) combined with distance learning as outlined in individual module descriptions. Distance learning via a virtual learning environment (VLE) will be used to deliver learning materials prior to contact time and to support directed private study and coursework assignments taken prior to and after contact time. Compulsory modules comprise 50 taught credits and a research project for the award of MSc, and 40 taught credits for the award of PGDip. Optional modules are grouped into four themes and students will be required to take 80 taught credits to include at least 10 taught credits from each theme.

*Compulsory modules (MSc 30 taught credits + research project / PGDip 30 taught credits):*

<i>Code</i>	<i>Title</i>	<i>Credits</i>	<i>Level</i>
FZMATPR01	Sustainable supply systems	10	7
FZMATPB02	Fundamentals of food processing science	10	7
FZMATPR05	Research methods and project management	10	7
FZMATPP01	Research project	60	7

*Optional modules (90 taught credits):*

<i>Code</i>	<i>Title</i>	<i>Credits</i>	<i>Level</i>
	<i>Nutrition health and the consumer theme:</i>		
FZMATPR02	Diet quality and health	10	7
FZMATPR04	Consumer behaviour and food marketing	10	7
	<i>Food quality and regulation theme:</i>		
FZMATPB05	Food flavour	10	7
FZMATPB07	Food standards and labelling	10	7
	<i>Food manufacture theme:</i>		
FZMATPB01	Food hygiene legislation for the food industry	10	7
FZMATPB03	Developing food structure by processing	10	7
FZMATPB04	Hygienic food processing	10	7
	<i>Sustainable food production theme:</i>		
FZMATPR03	Risk analysis in the food chain	10	7
FZMATPB06	Food chain security	10	7

### Part-time or modular arrangements

The MSc programme can be taken on a part-time basis over a maximum of six years; however, the typical duration of study will be 3 years. The taught modules may be taken in any order agreed with the Programme Director. The compulsory taught modules are normally completed before the project module is taken, and draw together programme participants to facilitate peer network development. The total credit weighting of the MSc programme is 180 credits, where 1 credit represents 10 hours of student effort spent on learning activities, which includes all forms of study, taught contact time, preparation of assignments, revision and assessment. Individual modules are available to be taken as standalone CPD activities.

### Progression requirements

The progression of students registered on the programme will depend on their accrual of sufficient credits at a satisfactory level of attainment. An annual review will be undertaken to monitor the progress of each student and to advise them on their options with respect to continued progression. The annual review will monitor progress with respect to taught modules and the research project (where relevant). The annual review panel has the option to refer cases of neglect of work or unsatisfactory progress to the appropriate University-level Committee should progress not be satisfactory. In this eventuality, the Committee will decide the most appropriate course of action and will follow normal University procedures. The Committee could recommend eligibility for a lesser award.

Students may leave the programme with one of the three awards of PGCert, PGDip or MSc. A student who has accrued 60 taught credits from any combination of ATP modules may qualify for the award of PGCert subject to having achieved an overall average of 50 and having no module mark below 40. To progress from PGCert to PGDip, students must have achieved an overall average of 50 and have no module mark below 40. Progression

from PGDip to MSc requires on overall average of 50 in 120 taught module credits with no module mark below 40. The 120 credits must include the three core taught modules.

Students who successfully complete the MSc programme are qualified to progress to the related Professional Doctorate in Agriculture and Food (DAgriFood); however, they may leave the Food ATP programme only with one qualification.

### **Summary of Teaching and Assessment**

The teaching is organised in taught modules (totalling 120 credits) and a research project module (60 credits). Taught modules involve a combination of lectures, tutorials, workshops, seminars, practical sessions, all delivered as an intensive study week blended with distance learning where appropriate to learning outcomes. Taught modules are assessed by coursework assignments, including essays, case studies, oral presentations and module examinations, as specified in individual module descriptions. The assessment of the research project module is based on a written report and presentation of the work undertaken.

Feedback on assessment will be provided by variety of means dependent on the context of the assignment. For example, written feedback on distance learning modules will be provided via virtual learning environment assessment tools, whereas feedback on oral presentations will be a mix of verbal and written feedback. However, in all cases feedback will address performance against assessment criteria, including transferable skills.

#### *Mark Interpretation:*

70-100%	Distinction
60-69%	Merit
50-59%	Good standard (Pass)

#### *Failing categories:*

40-49%	Below threshold standard
0-39%	Unsatisfactory

#### *For Masters Degree:*

To qualify for Distinction, students must pass all modules and gain an overall weighted mean mark of 70 or more over 180 credits, a weighted mean mark of 65 or more in the taught module components, and a mark of 65 or more for the dissertation.

To qualify for Merit, students must pass all modules and gain an overall weighted mean mark of 60 or more over 180 credits, a weighted mean mark of 55 or more in the taught module components, and a mark of 55 or more for the dissertation.

To qualify for Passed, students must gain an overall weighted mean mark of 50 or more over 180 credits and a mark of 50 or more for the dissertation, and must not have any module mark below 40.

#### *For Postgraduate Diploma:*

To qualify for Distinction, students must pass all modules and gain an overall average of 70 or more over 120 credits.

To qualify for Merit, students must pass all modules and gain an overall average of 60 or more over 120 credits.

To qualify for Passed, students must gain an overall average of 50 or more over 120 credits, and must not have any module mark below 40.

#### *For Postgraduate Certificate:*

To qualify for a Postgraduate Certificate, students must gain an overall average of 50 or more over 60 credits, and must not have any module mark below 40.

### **Admission requirements**

Entrants to this programme are normally required to have obtained a 2(i) class honours first degree or better; or an alternative qualification of equivalent academic standing; in a relevant science or engineering subject.

All applicants will be interviewed by the programme director or deputy programme director prior to admission. For applicants with prior learning and prior experiential learning the policy and procedure for the Assessment of Prior (Experiential) Learning (AP(E)L) will be followed. Applicants who do not meet the requirement of a 2(i) class honours degree, but can demonstrate commensurate professional experience will be considered for admission.

**Admissions Tutor:** Dr R. A. Frazier (Programme Director, University of Reading)

### **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 Student Employment,

Experience and Careers Centre (SEECC), 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. 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](http://www.reading.ac.uk/student)

University support for students and their learning falls into two categories and is provided at both Universities.  
*University of Reading:*

Learning support is provided by a wide array of services across the University of Reading, including: the University Library, the Student Employment, Experience and Careers Centre (SEECC), 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. 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](http://www.reading.ac.uk/student).

*University of Birmingham:*

Learning support is the responsibility of Academic Services at the University of Birmingham, which is responsible for providing support and advice to all students to enable them to undertake their responsibilities effectively and efficiently. Learning support available includes: Library Services, the Careers and Employability Centre, the Centre for Learning and Academic Development (CLAD), which provides a range of support including ICT training, in-sessional English support through the English for International Students Unit (EISU), and the Skills4Campus interactive study skills resource. Student guidance and welfare support is provided by a dedicated Student Support team and offers advice that includes: accommodation, disability support, emergencies and security, and money matters. For more information see [www.as.bham.ac.uk/support/index.shtml](http://www.as.bham.ac.uk/support/index.shtml).

### **Career prospects**

The Food ATP programmes offer an innovative approach to the delivery of training to the food and agricultural industries, and are intended for early to mid-career professionals seeking to deepen their understanding of scientific and technical issues relevant to their career progression. Food ATP participants will be employed in the food and agricultural industries and will remain in this employment throughout the course and thereafter. The skills and capabilities developed through the programme are expected to enhance career progression within their professions. Participants will benefit through access to the knowledge and skills base that underpins the development of the industry, and through establishing peer networks. This is increasingly important in maintaining the competitive edge of the UK food and agricultural industry as the market becomes more internationally competitive.

### **Opportunities for study abroad or for placements**

Participants will be able to undertake the 60 credit project module at any approved institutional or industrial participant in the Food ATP, dependent on appropriate supervisory arrangements being in place. The food and agricultural industry operates globally and therefore there may arise opportunities for study abroad within the context of the project module.

### **Programme Outcomes**

Typically, holders of the qualification will have the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in the food and agricultural industries or equivalent environments. In particular, successful ATP Associates will gain the following knowledge, understanding and skills:

#### **Knowledge and Understanding**

**A. Knowledge and understanding of:**

- A1. Advanced concepts and techniques in scientific disciplines relevant to the food and agricultural industries
- A2. Global food security issues and their impact on the food and agricultural industries
- A3. Background scientific, technical, commercial and policy literature
- A4. Research methods and study design
- A5. Project planning and management
- A6. Current professional developments within field of work

**Teaching/learning methods and strategies**

- Reflection on course materials and related research findings (A1-A6)
- Academic led teaching and supervision (A1-A6)
- Small group work discussion (A2, A6)
- Case studies and problem-based learning (A1-A6)
- Distance learning (A1-A3)
- Professional experiences (A5, A6)

*Assessment*

- Coursework assignments (A1-A6)
- Research project dissertation (A1-A6)

**Skills and other attributes****B. Intellectual skills - able to:**

- B1. Think logically and evaluate critically research and advanced scholarship across disciplines
- B2. Plan and implement tasks at a professional level to solve problems related to the agricultural and food industry sectors
- B3. Relate systematic evidence to issues arising in professional practice
- B4. Plan, conduct and write a report on an independent research project

**Teaching/learning methods and strategies**

- Activities based on taught course materials, related research, reading, participating in seminars and workshops (B1-B3)
- Research project (B4)

*Assessment*

- Coursework assignments (B1-B3)
- Research project dissertation (B1-B4)

**C. Practical skills - able to:**

- C1. Apply, or adapt, practical instructions safely and accurately
- C2. Interpret quantitatively the results of experiments undertaken by themselves or others
- C3. Devise experimental methods appropriate for tackling a particular problem
- C4. Use statistical and related methods in a professional context
- C5. Access wide range of literature and data using bibliographic and IT skills
- C6. Communicate ideas and conclusions clearly and effectively to specialist and non-specialist audiences

**Teaching/learning methods and strategies**

- Activities based on taught course materials and related research and readings (C1-C6)
- Assignment preparation for taught modules (C2-C6)
- Academic-led practical exercises (C1)

*Assessment*

- Assignments and dissertation will report the results of such activities (C1-C6)

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

- D1. Monitor own learning
- D2. Communicate orally and in writing with scientific rigour
- D3. Critically evaluate information from a variety of sources to develop understanding and make decisions
- D4. Project planning and management
- D5. Data analysis
- D6. Report writing

**Teaching/learning methods and strategies**

- Discussion with instructors, supervisors and peers (D1, D2)
- Taught course materials (D2-D6)
- Presentations at workshops (D2, D5)
- Research project (D1-D6)

*Assessment*

- Coursework assignments (D1-D3, D5)
- Literature reviews (D2, D3, D5)
- Project dissertation (D2-D6)

**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.**