**Programme Specification**

MSc in Food Science (full time)     **PFTFOODSCM**
MSc in Food Science (part time)     **PPTFOODSCM**

**For students entering in September** 2019

**This document sets out key information about your Programme and forms part of your Terms and Conditions with the University of Reading.**

| Awarding Institution | University of Reading |
|---|---|
| Teaching Institution | University of Reading |
| Length of Programme | 12 months (full-time), 24 months (part-time) |
| Accreditation | n/a |
| Programme Start Dates | September |

| **Programme information and content** |
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The purpose of the course is to develop an understanding of the chemical behaviour and physical properties of food constituents in the context of their manufacture and storage, particularly from the standpoints of safety and nutritional attributes.

The expected outcomes are that students should acquire and demonstrate:

- an understanding of the science base for the production and preservation of foods;
- an understanding of methods for the assessment and control of food safety;
- an understanding of the science base of diet and health issues as they impinge on the food industry;
- an ability to elaborate methods for the assessment of food quality by means of chemical, microbiological and sensory analysis techniques;
- a capacity to undertake research in food science.

Educational aims of the programme:

- Food chemistry: Apply and increase knowledge of the chemical and physical behaviour of food constituents with particular reference to their safety and nutritional attributes;
- Laboratory work: Acquire and use practical skills to develop and perform chemical, physical and microbiological laboratory tests for the assessment of food quality and consumer preference;
- Hazard control: Participate in the assessment of a food production process by the use of techniques such as Hazard Analysis and Critical Control Points so as to ensure the hygienic production of safe and wholesome foods;
- Food processing: Qualitatively evaluate the performance of the principal food processing operations used by industry, and use quantitative techniques to evaluate safety factors;
- Food microbiology: Identify and establish control procedures for all important food pathogens, food spoilage microorganisms and food fermentation microorganisms;

- Human nutrition: Develop an understanding of the science base of diet / health issues that impinge on the food industry, specifically in the area of product reformulation;
- Sensory attributes: Acquire and apply knowledge of sensory tests for the assessment of food quality and consumer preference.

## Module information

The programme comprises of 180 credits, allocated across a range of compulsory and optional modules. Compulsory modules are listed.

### Compulsory Modules:

| Module | Name | Credits | Level |
|--------|------|---------|-------|
| FBMMSH | Microbes, Food Safety and Health | 20 | 7 |
| FBMC20 | Food Chemistry: Structure, Flavour and Colour | 20 | 7 |
| FBMMPD | Food Manufacturing and Process Design | 20 | 7 |
| FBMSSC | Sensory Science | 10 | 7 |
| FBMPRF | Food Product Reformulation | 20 | 7 |
| FBMAQS | Applied Food Quality and Safety | 10 | 7 |
| FBMTOO | Taints and Off-odours: Industrial Challenges | 10 | 7 |
| FBMFPR | Research Project | 60 | 7 |
| FBMRSD | Research Skills and Professional Development | 10 | 7 |

## Part-time or flexible modular arrangements

The modules are may be taken on a part-time basis over a maximum of two years. The taught modules may be taken in any order agreed with the Head of School.

## Additional costs of the programme

Print of practical handbooks (~ £2.50 each), scientific calculator (~£10) If a student elects to undertake a project at an approved institution or an appropriate industrial concern additional costs may be incurred.

Costs are indicative and may vary according to optional modules chosen and are subject to inflation and other price fluctuations.

The estimates were calculated in 2017.

## Optional modules:

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your Programme is set out in the Further Programme Information.

Details of any additional costs associated with the optional modules, will be made available to you prior to the beginning of the programme. Entry to optional modules will be at the discretion of the University and subject to availability. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

**Placement opportunities**

Students will be able to undertake the 60 credit project module at an approved institution or an appropriate industrial concern, but this will depend on having the necessary linguistic skills and finding a suitable placement, and appropriate supervisory arrangements being in place.

**Teaching and learning delivery:**

Teaching and learning is delivered in a variety of ways, including interactive lectures, laboratory practical classes, case study based learning, group work, online learning, and seminars.

Total study hours for your programme will be 1800 hours. The contact hours for your programme will depend upon your module combination; an average for a typical set of modules on this programme is – 280 hours. In addition to your scheduled contact hours, you will be expected to undertake guided independent study. Information about module contact hours and the amount of independent study which a student is normally expected to undertake for a module is indicated in the relevant module description.

**Accreditation details**

not applicable

**Assessment**
The programme will be assessed through a combination of written assignments, in-class tests and oral presentations.

**Progression**

**Part-time and modular progression requirements**

Diploma/MSc students gaining an average mark of 50 or more overall in the taught modules and have no mark below 40, plus all the modules below 50 must be less than 60 credits, may proceed to the MSc at the discretion of the Head of School.

**Classification**

The University's taught postgraduate marks classification is as follows:

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

**Failing categories**:
40 - 49% Work below threshold standard
0 - 39% Unsatisfactory Work

*For Masters Degree*

To qualify for **Distinction**, students must
  (i)    gain an overall average of 70 or more over 180 credits; and
  (ii)   a mark of 60 or more for the dissertation; and
  (iii)  the total credit value of all modules marked below 50 must not exceed 55 credits; and
  (iv)   students must not have any mark below 40.

To qualify for **Merit**, students must
  (i)  gain an overall average of 60 or more over 180 credits; and
  (ii) a mark of 50 or more for the dissertation; and
  (iii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
  (iv) students must not have any mark below 40.

To qualify for **Passed**, students must
  (i)  gain an overall average of 50 or more over 180 credits; and
  (ii) a mark of 50 or more for the dissertation; and
  (iii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
  (iv) the total credit value of all modules marked below 40 must not exceed 30 credits.

In addition, for all classifications above, students must obtain a combined average mark of at least 40% in FBMC20 & FBMMSH.

*For PG Diploma*

To qualify for **Distinction**, students must
  (i)  gain an overall average of 70 or more over 120 credits; and
  (ii) In addition, the total credit value of all modules marked below 50 must not exceed 55 credits; and
  (iii) students must not have any mark below 40.

To qualify for **Merit**, students must
  (i)  gain an overall average of 60 or more over 120 credits; and
  (ii) the total credit value of all modules marked below 50 must not exceed 55 credits; and
  (iii) students must not have any mark below 40.

To qualify for **Passed**, students must

(i) gain an overall average of 50 or more over 120 credits; and

(ii) the total credit value of all modules marked below 50 must not exceed 55 credits; and

(iii) the total credit value of all modules marked below 40 must not exceed 30 credits.

*For PG Certificate*

To qualify for a **Postgraduate Certificate**, students must

(i) gain an overall average of 50 or more over 60 credits; and

(ii) the total credit value of all modules marked below 40 must not exceed 10 credits.