

Programme Specification

MSc in Food Science (full-time)

PFTFOODSCM

MSc in Food Science (part-time)

PPTFOODSCM

For students entering in 2027/28

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	MSc in Food Science (full-time) - 1 years MSc in Food Science (part-time) - 2 years
Accreditation	N/A
Programme Start Dates	September
QAA Subject Benchmarking Group	N/A

Programme information and content

The purpose of this MSc Food Science programme is to develop students' 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 chemical composition.

The programme uses a variety of innovative teaching and assessment approaches to develop MSc students that can:

- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences
- demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level
- continue to advance their knowledge and understanding, and to develop new skills to a high level.

In the Department of Food and Nutritional Sciences, our mission is to maintain Food and Nutritional Sciences at Reading as the equal of any in the world in terms of the relevance, impact and excellence of our teaching and research, our quality of support and facilities, and the learning opportunities and working experience we offer.

We are guided by our shared values to be an inclusive community of staff and students who share a passion for a scientific and evidence-based approach to the study of food and nutrition for the improvement of the quality and sustainability of food and diet to deliver benefits for society.

Programme Learning Outcomes

-MSc in Food Science (full-time)

During the course of the Programme, you will have the opportunity to develop a range of skills, knowledge and attributes (known as learning outcomes) For this programme, these are:

Learning outcomes	
1	Demonstrate the ability to assess overall (chemical, microbiological and sensorial) food quality and understand the science behind the production and preservation of foods.
2	Explain how diet and health issues can influence decisions by the food industry.
3	Develop and perform chemical, microbiological, physical and sensory tests to assess the quality and safety of foods and consumer preference of reformulated food products.
4	Apply chemical and physical analyses of food components to qualitatively evaluate the performance of the principal food processing operations used by industry and ensure that manufactured foods are safe, of high quality, and with good nutritional and sensorial properties.
5	Illustrate the principles of food chemistry as they are applied in food manufacture and apply them to produce safe foods, meeting quality and legal requirements.
6	Demonstrate effective communication, presentational and inter-personal skills, including accurate recording of results and critical interpretation of observations and data.
7	Develop self-awareness, critical decision making skills, and time management skills through effectively working within or leading a team.
8	Demonstrate a capacity to undertake research into the science of foods.

You will be expected to engage in learning activities to achieve these Programme learning outcomes. Assessment of your modules will reflect these learning outcomes and test how far you have met the requirements for your degree.

To pass the Programme, you will be required to meet the progression or accreditation and award criteria set out below.

Module information

The programme comprises 180 credits of compulsory modules as shown below.

Compulsory modules

Module	Name	Credits	Level
FBMAFQ	Applied Food Quality and Safety	20	M
FBMC20	Food Chemistry: Structure, Flavour and Colour	20	M
FBMMPD	Sustainable Food Manufacturing and Process Design	20	M
FBMMSH	Microbes, Food Safety and Health	20	M
FBMPRE	Food Product Reformulation	20	M
FBMRSP	Research Skills and Project	60	M

FBMSFS	Applied Sensory and Flavour Science	20	M
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Part-time or flexible modular arrangements

The programme can be taken part-time over two years. In the first year of study, a student will normally be required to complete compulsory modules totalling no less than 60 credits and no more than 80 credits. In the second year of study, a student will normally be required to complete the compulsory module FBMRSP Research Skills and Project. The programme may not be completed over more than two years.

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, finding a suitable placement, and appropriate supervisory arrangements being in place.

Study abroad opportunities

N/A

Optional modules

N/A

Teaching and learning delivery

Full-time enrolled students are introduced in Semester 1 with modules that deliver core-competences within their programme, whereas Semester 2 consists of problem-based learning modules, designed to require the integration and application of principles covered in earlier modules in a multi-disciplinary manner. Food Science is a multi-disciplinary field, and graduates must be able to apply and incorporate the principles of the disciplines in practical, real-world situations. Therefore, within the problem-based modules, you will be required to analyse, synthesise, and evaluate problems and case studies. These modules are designed to require the integration and application of nutrition food science principles (public health, food reformulation, clinical nutrition) in a multi-disciplinary manner to solve complex problems, either independently or in a team. The programme also enables inter-professional learning opportunities as the module on food product reformulation is common across all FNS post-graduate taught programmes. The Research Skills and Project module is also designed to enhance your self-awareness and personal effectiveness while developing strategies to facilitate decision making processes to enhance career development. Strong links and continuous engagement with industry allows the development of research projects, for which you would have both an industrial and academic supervisor.

For part-time students, your learning journey embarks with pre-defined modules taken in Year 1 and 2, which enable the delivery of discipline-specific principles and support you in integrating and applying those principles within problem-based modules.

Additionally, employability skills are embedded at the core of the programme and are practised through a variety of formative and summative types of assessment, enhancing employability of programme graduates.

Elements of your programme will be delivered via digital technology.

The scheduled teaching and learning activity hours and amount of technology enhanced learning activity for your programme will depend upon your module combination. In addition, you will undertake some self-scheduled teaching and learning activities, designed by and/or involving staff, which give some flexibility for you to choose when to complete them. You will also be expected to undertake guided independent study. Information about module study hours including 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
N/A

Assessment
The programme will be assessed through a combination of coursework, oral examinations and practical examinations

Progression
N/A

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 Master's Degree The following conditions must be satisfied for the award of a Master's degree: Award of a Master's degree

- (i) an overall weighted average of 50% or more over 180 credits
- (ii) a mark of 50% or more in at least 120 credits
- (iii) no credits with a mark below 40%
- (iv) a mark of 50% or more for the Dissertation

In addition to the threshold conditions for the award of a Master's degree, the following **further** conditions must be satisfied for a classification of Distinction or Merit:

Distinction

An overall weighted average of 70% or more over 180 credits

OR

an overall weighted average of 68% or more over 180 credits and marks of 70% in at least 90 credits

AND

Where the dissertation is included in the conditions for the award of a Master's degree, a mark of at least 60% in the dissertation

AND

No marks below 40%.

Merit

An overall weighted average of 60% or more over 180 credits

OR

an overall average of 58% or more over 180 credits and marks of 60% in at least 90 credits

AND

No marks below 40%.

For Postgraduate Diploma

The following conditions must be satisfied for the award of a Postgraduate Diploma:

Award of a Postgraduate Diploma

- (i) an overall weighted average of 50% or more over 120 credits
- (ii) a mark of 50% or more in at least 80 credits
- (iii) no credits with a mark below 40%

In addition to the threshold conditions for the award of a Postgraduate Diploma, the following further conditions must be satisfied for a classification of Distinction or Merit:

Distinction

An overall weighted average of 70% or more over 120 credits

OR

an overall weighted average of 68% or more over 120 credits and marks of 70% in at least 60 credits

AND

No marks below 40%.

Merit

An overall weighted average of 60% or more over 120 credits

OR

an overall average of 58% or more over 120 credits and marks of 60% in at least 60 credits
AND

No marks below 40%.

For Postgraduate Certificate

The following conditions must be satisfied for the award of a Postgraduate Certificate:

Award of a Postgraduate Certificate

(i) an overall weighted average of 50% or more over 60 credits

(ii) No credits with a mark below 40%.

Details of the classification method is given in detail in the [Assessment Handbook](#) under:

- Section 19: Awards: Postgraduate Master's, Postgraduate Diploma, Postgraduate Certificate

Please note that there may be a specific version for your year of entry.

Additional costs of the programme

Estimated costs for printing and binding of practical class handbooks: £10.

Costs are indicative and may vary according to optional modules chosen and are subject to inflation and other price fluctuations. Estimates were calculated in 2026.

Students may consider purchasing a laptop to help support their learning. Information on recommended device specifications can be found on the [DTS Student Hub](#).

For further information about your Programme please refer to the Programme Handbook and the relevant module descriptions, which are available at <http://www.reading.ac.uk/module/>. The Programme Handbook and the relevant module descriptions do not form part of your Terms and Conditions with the University of Reading.

MSc in Food Science (full-time) for students entering in session 2027/28

28 July 2026

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