# Programme Specification BSc Food Science with Business For students entering Part 1 in September 2022

# 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	3 years
e e	BSc Food Science with Business with Industrial Training - 4 years (UCAS Code: D691)
Accreditation	Institute of Food Science and Technology (IFST)

## Programme information and content

The programme, offered in collaboration with Henley Business School and School of Agriculture Policy and Development, aims to provide a degree-level education from which graduates can enter a career in the food industry (or employment in other sectors of the food chain, or related scientific and marketing sectors) as professionals capable of assisting in the scientific evaluation of food, and of undertaking analysis of the economics and marketing of safe and quality foods. Students will learn to integrate the scientific disciplines relevant to food and to undertake research into problems relating to the science, economics and marketing of food. Acquisition of such a unique set of skills is envisaged to transform them into a very powerful, highly sought-after professional able to accelerate the effectiveness of innovation and profitability in any company within the food supply chain.

The Food Science with Business programme aims to:

- Provide a programme of education which enables its graduates to enter a career in the food industry as professionals capable of assisting in the scientific evaluation of food, and of undertaking analysis of the economics and marketing of safe and quality foods.
- Provide a broad-based education combining science and business, whose graduates can also enter into employment in other sectors of the food chain, or related scientific and marketing sectors, where they can apply their skills.
- Allow individuals to develop their capacity to undertake research into the science of foods and their economics and marketing.
- Provide undergraduates with opportunities to develop their inter-personal and communication skills.
- Enable graduates to meet the entry requirements of the Institute of Food Science and Technology (IFST)

Part 1:	Introduces students to the foundations of the degree, with a strong focus
Fall I.	on economics and marketing, as well fundamental science modules and

	awareness of the food chain and food industry. The modules in Part 1 ensure that students have sufficient knowledge to underpin their later studies.
Part 2:	Part 2 provides you with a focus on economic and financial aspects of food science, in particular marketing and financial management. Moreover, Part 2 gives an introduction to food processing and composition, sensory concepts, food quality and safety, to provide the crucial link between the economic and scientific aspects of the programme.
Placement/Study abroad year:	The placement year normally takes place between Parts 2 and 3 of this degree programme. It is an opportunity for you to apply your skills in an 'real-world' environment and gain invaluable experiences.
Part 3:	Part 3 gives you the opportunity the opportunity to apply their knowledge to the development of a food-science related venture project. You will also conduct your research project (dissertation) and deepen your knowledge of business and marketing strategy, as well as advanced sensory concepts and approaches, food flavour chemistry, food quality systems, including application of HACCP safety system and legal aspects of foods. This last multidisciplinary part in your education will allow you to successfully embark in step-change innovation and/or creating new innovation-rich business opportunities within the food supply chain.

#### Module information

Each part comprises 120 credits, allocated across a range of compulsory and optional modules as shown below. Compulsory modules are listed.

## Part 1 Modules:

Module	Name	Credits	Level
AP1EM2	The Fundamentals of Business and Marketing	20	4
BI1S1	Introductory Microbiology	10	4
CH1FC3	Molecular Studies for the Life Sciences	10	4
FB1AG2	Farm to Fork	20	4
FB1EP2	Introduction to Food Processing and Engineering	20	4
FB1MB1	Introduction to Food Microbiology	10	4
MM1F10	Student Enterprise	20	4

Students must select a further 10 credits from a list of optional modules provided by the Department of Food and Nutritional Sciences.

CH1FC1: Fundamental Concepts in Chemistry module is compulsory for students who have not obtained a minimum of a C grade in A-level Chemistry.

Part 2 Module	s:
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Module	Name		Level
FB1PN	Introduction to Human Physiology and Nutrition	20	4
FB2C20	Composition and Properties of Foods	20	5
FB2EFP	Food Processing	20	5
FB2FQS	Food Quality and Sensory Science	10	5
FB2MF2	Microbiological Hazards in Foods	10	5
FB2PYA	Industrial Training Preparation	0	5

In Part 2 students will select one of the three alternatives routes within the programme:

The Marketing Route:

MM260	Innovation and Market Entry	20	5
AP2SB3	Applied Marketing and Management	20	5

The Financial Route:

AP2EM5	Digital Marketing	20	5
AP2SB3	Applied Marketing and Management	20	5

#### Modules during a placement year or study year (if applicable):

Module	Name	Credits	Level
FB2PLY	Placement Year	120	5

If you take a year-long placement or study abroad, Part 3 as described below may be subject to variation.

#### Part 3 Modules:

Module	Name	Credits	Level
AD3FPS	Food Policy and Supply Chain Management	20	6
FB3AQS	Advanced Food Quality and Safety	20	6
FB3NPD	New Product Development	20	6
FB3PFB	Research Project	40	6
MM399	Digital Entrepreneurship	20	6

All modules at Part 3 of the programme are compulsory.

#### **Optional modules:**

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your programme can be found online in the Course Catalogue. Details of optional modules for each part, including any additional costs associated with the optional modules, will be made available to you prior to the beginning of the Part in which

they are to be taken and you will be given an opportunity to express interest in the optional modules that you would like to take. Entry to optional modules will be at the discretion of the University and subject to availability and may be subject to pre-requisites, such as completion of another module. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

#### Additional costs of the programme

During your programme of study you will incur some additional costs. For textbooks and similar learning resources, we recommend that you budget between  $\pounds 50$  to  $\pounds 150$  a year. Some books may be available second-hand, which will reduce costs. A range of resources to support your curriculum, including textbooks and electronic resources, are available through the library. Reading lists and module specific costs are listed on the individual module descriptions.

Costs are indicative, but will vary according to module choice and are subject to inflation and other price fluctuations. The estimates were calculated in 2021.

#### Placement opportunities

You will be provided with the opportunity to undertake a credit-bearing placement as part of your Programme. This will form all or part of an optional module. You will be required to find and secure a placement opportunity, with the support of the University.

#### Teaching and learning delivery:

You will be taught through a wide range of approaches to teaching and learning in our programmes, spanning from seminars to workshops, practical classes, but also problembased learning and flipped-classroom type methods. These aim to maximise your engagement and accommodate students with different learning styles. The latter ensures that our teaching is diverse and inclusive, as our students are from a wide variety of different backgrounds with very different learning experiences. Within the design of the programmes, we aim to incorporate time for you to reflect on your learning.

You are taught throughout the programme by highly research-active staff who are able to ensure that you learn about current research in their discipline. In the final year project, many of you will be involved in cutting-edge research projects and become an integral part of the different research groups within the department.

We use pedagogies appropriate to the discipline with a student-centred learning paradigm. This means that our main role is to guide and facilitate your learning and provide experience-based learning opportunities. In applied sciences, such as Food Science with Business, active learning has a crucial role. You are expected to be active learners and contribute to the learning process, building knowledge and understanding in response to opportunities provided. You will develop your existing knowledge in order to achieve deeper levels of understanding, allowing you to analyse, evaluate and synthesize ideas. Our teaching is informed by the concept of constructive alignment, ensuring that the components of the teaching system are aligned to each other.

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

This programme is accredited by the Institute of Food Science and Technology (IFST) for the purpose of eligibility to apply for associate level membership.

#### Assessment

The programme will be assessed through a combination of coursework, set exercises, inclass tests, oral assessments, artefact production, written examinations and a capstone project. Further information is contained in the individual module descriptions

#### Progression

The University-wide rules relating to 'threshold performance' as follows

#### Part 1

(i) obtain an overall average of 40% over 120 credits taken in Part 1; and(ii) obtain a mark of at least 30% in individual modules amounting to at least 100 credits taken in Part 1.

In order to progress from Part 1 to Part 2, a student must achieve a threshold performance; and

(iii) obtain at least 40% in Theme 1 (CH1FC3 and CH1FC1 where applicable); and

(iv) obtain at least 40 % in EACH module of Theme 7 (AP1EM2, MM1F10)

The achievement of a threshold performance at Part 1 qualifies a student for a Certificate of Higher Education if they leave the University before completing the subsequent Part.

Part 2

To gain a threshold performance at Part 2, a student shall normally be required to:

(i) obtain a weighted average of 40% over 120 credits taken at Part 2; and
(ii) obtain marks of at least 40% in individual modules amounting to at least 80 credits; and
(iii) obtain marks of at least 30% in individual modules amounting to at least 120 credits, except that a mark below 30% may be condoned in no more than 20 credits of modules owned by the Department of Mathematics and Statistics.

In order to progress from Part 2 to Part 3 in the **3 year programme**, a student must achieve a threshold performance and

(iv) obtain at least 40% in EACH module of Theme 1 (FB2C20) and Theme 4 (FB2EFP) and

(v) For the marketing route, obtain at least 40% in MM260 and AP2SB3; and for the financial route, obtain at least 40% in AP2EM5 and AP2SB3.

The achievement of a threshold performance at Part 2 qualifies a student for a Diploma of Higher Education if they leave the University before completing the subsequent Part.

Professional/placement year

Students are required to pass the professional placement year in order to progress on the programme which incorporates the professional placement year. Students who fail the professional placement year transfer to the non-placement year version of the programme.

## Classification

Bachelors' degrees The University's honours classification scheme is based on the following:

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

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

*Four year programmes, including professional/work placement or study abroad:* Part 2: one-third

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

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