

# Food Quality and Safety (Nutrition)

# **Programme Information**

2022.01, Approved

## Overview

Programme Code	46433
Programme Title	Food Quality and Safety (Nutrition)
Awarding Institution	Liverpool John Moores University
Programme Type	Degree with Foundation

#### Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Science with Honours (Fnd) - BSHF	N/A
Recruitable Target	Certificate of Higher Education - CHE	Demonstrate knowledge of the underlying concepts and principles associated with the study of Food Quality and Safety and demonstrate an ability to evaluate and interpret these within context. Recognise the appropriateness of different approaches to solving problems related to Food Quality and Safety. Communicate the results of study accurately and reliably, and with structured and coherent arguments. Undertake training and develop new skills within a structured and managed environment. Demonstrate the qualities and transferable skills necessary for employment in the area of Food Quality and Safety. Use a range of established techniques to initiate and undertake analysis of information, and to propose solutions to problems arising from that analysis.

Alternative Exit	Certificate of Higher Education - CHE	Demonstrate knowledge of the underlying concepts and principles associated with the study of Food Quality and Safety and demonstrate an ability to evaluate and interpret these within context. Recognise the appropriateness of different approaches to solving problems related to Food Quality and Safety. Communicate the results of study accurately and reliably, and with structured and coherent arguments. Undertake training and develop new skills within a structured and managed environment. Demonstrate the qualities and transferable skills necessary for employment in the area of Food Quality and Safety. Use a range of established techniques to initiate and undertake analysis of information, and to propose solutions to problems arising from that analysis. Demonstrate knowledge of the underlying concepts and principles associated with the study of Food Quality and Safety and demonstrate an ability to evaluate and interpret these within context. Recognise the appropriateness of different approaches to solving problems related to Food Quality and Safety. Communicate the results of study accurately and reliably, and with structured and coherent arguments. Undertake training and develop new skills within a structured and managed environment. Demonstrate the qualities and transferable skills necessary for employment in the area of Food Quality and Safety. Use a range of established techniques to initiate and undertake analysis of information, and to propose solutions to problems arising from that analysis.
Recruitable Target	Diploma of Higher Education - DHE	Apply knowledge and critical understanding of the well-established principles of Food Quality and Safety, and of the way in which they have developed. Apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context. Analyse the main methods of enquiry in Food Quality and Safety and the ability to critically evaluate the appropriateness of different approaches to solving problems. Effectively communicate information, arguments, and analysis, in a variety of forms, to specialist and non-specialist audiences, and deploy key techniques of Food Qaulity and Safety effectively. Undertake further training, develop existing skills, and acquire new competences that will enable them to assume significant responsibility within a Food Quality and Safety organisation. Apply the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making. Present, evaluate, and interpret qualitative and quantitative data, to develop lines of argument and make sound judgements in accordance with basic theories and concepts of Food Qaulity and Safety.

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Partner Name	Partnership Type
Yunnan Agricultural University	Dual

# External Benchmarks

Subject Benchmark Statement	UG-Agriculture, Horticulture, Forestry, Food and Consumer Sciences (2019)
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# Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length Programme Length Unit
Full-Time, Face to Face	September	Yunnan Agricultural University	4 Years

## Aims and Outcomes

Educational Aims of the Programme	To prepare students for employment and/or further academic study via a comprehensive understanding of the core subject matter of Food Science, Food Quality and Food Safety. To enable students to acquire a high level of practical, analytical and research skills in Food Science, Quality and Safety. To provide opportunity for its students to achieve full academic potential through honours degree level study which encourages a high degree of initiative, independent judgement, self-motivation and critical self-awareness. To develop students' abilities in selection, organisation, analysis and evaluation which can be fully utilised in application of their skills and competencies within the field of Food Quality and Safety. To facilitate the development of graduates with an understanding of social, technological, environmental, global, sustainable and economic issues that affect the food industry. To prepare graduates to be able to function competently as communicators and professionals within their chosen fields.
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### Learning Outcomes

Code	Number	Description
PLO1	1	Appreciate fundamental concepts, principles and theories relevant to food quality and safety encompassing molecular, cellular and physiological processes, food science, nutrition, health, microbiology, biochemistry, food standards, biotechnology and immunology.
PLO2	2	Obtain and integrate several lines of subject specific evidence to formulate and test hypotheses.
PLO3	3	Apply subject knowledge and understanding to address familiar and unfamiliar problems.
PLO4	4	Apply appropriate concepts from social science and management discourse.
PLO5	5	Recognise the moral and ethical issues of investigations and appreciate the need for ethical standards and professional codes of conduct.
PLO6	6	Demonstrate competence and progressive development in the basic and core experimental skills appropriate to the study of food quality and safety.
PLO7	7	Design, plan, conduct and report on investigations which may involve primary or secondary data.
PLO8	8	Obtain, record, collate and analyse data using appropriate techniques working either individually or within a group.
PLO9	9	Comply with health and safety policies, Good Laboratory Practice (GLP), risk and Control of Substances Hazardous to Health (COSHH) assessments and recognise the importance of quality control and quality assurances.
PLO10	10	To recognise and apply safe professional working practices.
PLO11	11	Use and interpret a variety of sources of information: textual, numerical, verbal and graphical within the laboratory setting.

PLO12	12	Appreciate the scientific and technological paradigms which underpin the interdisciplinary nature of food quality and safety.
PLO13	13	Understand the need when undertaking sample selection to ensure validity, accuracy, calibration, precision, reproducibility and the need to highlight uncertainty and potential sources of bias during data collection.
PLO14	14	Prepare, process, interpret and present data using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets, and programmes for presenting data visually.
PLO15	15	Communicate scientific information effectively in written, verbal, and visual forms.
PLO16	16	Use information technology to prepare, process and present information.
PLO17	17	Identify and work towards targets for personal, academic, professional and career development.
PLO18	18	Develop skills necessary for independent life-long learning (for example working independently, working as part of a team, time management, problem solving, organisational and enterprise skills).
PLO19	19	Demonstrate competence in core experimental skills applicable to the food science sector, including data analysis and interpretation of results with a critical understanding of the appropriate contexts for their use through the study of texts, original papers and reports.
PLO20	20	Engage with current developments in the field of food science and their applications.
PLO21	21	Critically evaluate current research in the field of food quality and safety.
PLO22	22	Analyse, synthesise and summarise information critically from a variety of sources including published research or reports.
PLO23	23	Develop the necessary skills to function effectively within the food sector, including the application of theoretical perspectives to practical situations and to the work environment.
PLO24	24	Construct grammatically correct documents in an appropriate academic style and format, using and referencing relevant ideas and evidence.
PLO25	25	Understand the importance of academic and research integrity.

## **Course Structure**

Programme Structure Description

Programme Structure - 360 credit points	
Level 3 - 120 credit points	
Level 3 Core - 120 credit points	CORE
[MODULE] 3501YAUGEN Anatomy and Physiology Approved 2022.01 - 20 credit points	
[MODULE] 3501YAUNUT Quantitative Analytical Chemistry Approved 2022.01 - 20 credit points	
[MODULE] 3502YAUGEN Skills and Presentations Approved 2022.01 - 20 credit points	
[MODULE] 3502YAUNUT Organic Chemistry Approved 2022.01 - 20 credit points	
[MODULE] 3503YAUNUT Experimental Organic Chemistry Approved 2022.01 - 20 credit points	
[MODULE] 3503YAUZOO General Mathematics Approved 2022.01 - 20 credit points	
Level 4 - 120 credit points	
Level 4 Core - 120 credit points	CORE
[MODULE] 4501YAUGEN Fundamentals of Scientific Research Approved 2022.01 - 20 credit points	
[MODULE] 4501YAUNUT Basic Biochemistry Approved 2022.01 - 20 credit points	
[MODULE] 4502YAUNUT Introduction to Management and Entrepreneurship Approved 2022.01 - 20 credit points	
[MODULE] 4503YAUGEN Nutrition Approved 2022.01 - 20 credit points	
[MODULE] 4503YAUNUT Knowledge of Food Safety and Control Approved 2022.01 - 20 credit points	
[MODULE] 4504YAUNUT Principle of Food Processing Approved 2022.01 - 20 credit points	
Level 5 - 120 credit points	
Level 5 Core - 120 credit points	CORE
[MODULE] 5501YAUGEN Research Methods Approved 2022.01 - 20 credit points	
[MODULE] 5501YAUNUT Food Biotechnology Approved 2022.01 - 20 credit points	
[MODULE] 5502YAUNUT Food Analysis Approved 2022.01 - 20 credit points	
[MODULE] 5503YAUNUT Expanding the Applied Knowledge of Food Approved 2022.01 - 20 credit points	
[MODULE] 5504YAUNUT Food Safety Control Approved 2022.01 - 20 credit points	
[MODULE] 5505YAUNUT Food Processing and Evaluation Approved 2022.01 - 20 credit points	
Level 6 - 120 credit points	
Level 6 Core - 120 credit points	CORE
[MODULE] 6501YAUGEN Dissertation-Research Project Approved 2022.01 - 40 credit points	
[MODULE] 6501YAUNUT Nutrition Future Challenges Approved 2022.01 - 20 credit points	

[MODULE] 6502YAUNUT Nutrition Contemporary Practice Approved 2022.01 - 20 credit points	
[MODULE] 6503YAUNUT Functional Food Approved 2022.01 - 20 credit points	
[MODULE] 6504YAUNUT Technology of Soft Drinks Approved 2022.01 - 20 credit points	

### Teaching, Learning and Assessment

Teaching, Learning and Assessment	The acquisition of knowledge and skills are gained through a range of teaching and learning experiences depending on the nature of the subject matter and level of study e.g. structured lectures, practical classes, workshops and seminars. Group exercises, discussions and presentations ensure that students gain an understanding and experience of teamwork. Students will be taught in different sized groups depending on the nature of the activity. Practical activities will be supported and supplemented by theoretical sessions to ensure a rounded and comprehensive understanding of the subjects studied. Knowledge and understanding are assessed in a variety of ways. These include: examinations (essay style questions, MCQ, data analysis and short answers),laboratory reports, practical assessments (to assess both understanding and technical competence), essays and presentations. Verbal and written feedback foster reflective awareness and independent learning. Cognitive skills are developed in many areas of the programme. For example, the ability to synthesise and analyse information critically is developed in laboratory sessions from Level 4 to 6, including in the Research Project module. Applying subject knowledge and understanding to address unfamiliar problems is developed in workshops and practical sessions in many modules across all levels. Laboratory reports, scientific communication, essays and examinations allow students to demonstrate the full range of these skills and attributes. The programme emphasises student-centred learning, involving students in task-based activities followed by discussion, feedback and a wider application of the concepts. Practical and professional skills are taught during laboratory classes. Practical teaching is an important part of the curriculum. Students will take part in on-site and off-campus practice. Transferable and key skills are inherent within the programme, but specifically they are taught and suppleted by formal lectures, workshops and turbrial sessions. Students are encou
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#### Opportunities for work related learning

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In the programme curriculum, practical teaching is an important part. This programme will ensure that the practical teaching part accounts for more than 30% of the total, which is mainly implemented through the following specific links: Curriculum experiments: the vast majority of professional courses occupy about 1 / 3 of the experimental content, fully guaranteeing the combination of theory and practice. On-site visit and practice: a certain proportion of the on-site visit and practice is designed. At present, there are more than 10 off-campus practical teaching bases in our college, which will guarantee the normal visit and practice of students. In- school practice: except for the general scientific research platforms of YAU such as Agricultural Science Centre, College of Food Science and Technology also has our own scientific research platforms such as Animal Product Processing Engineering Centre, which is of more than 3000 square meters, and National Moringa Research Centre of more than 1000 square meters. These platforms can provide strong guarantee for the students to carry out practical teaching and learning as well as the Research Project. Research Project: In this programme, LJMU staff will provide online and remote guidance for the Research Project of the students, which lasts throughout the fourth academic year.

### **Entry Requirements**

Туре	Description
Other international requirements	Students will be recruited from the National Entrance Examination (Gao Kao). Minimum requirement for English must be 90 out of 150 for the exam in Gao Kao.

### **Programme Contacts**

**Programme Leader** 

### Contact Name

#### Link Tutor

Contact Name

Gus Ryrie