Nottingham Trent University Course Specification

Basic Course Information

1. Awarding Institution: Nottingham Trent University

2. School/Campus: Animal, Rural and Environmental

Sciences / Brackenhurst Campus

3. Final Award, Course Title and BSc (Hons) Food Science and

Modes of Study: Technology, (Full-Time; Sandwich)

4. Normal Duration: Full Time (3 years); Sandwich (4 years)

5. UCAS Code: D892; D893

6. Overview and general educational aims of the course

The BSc (Hons) in Food Science and Technology is an undergraduate award that has been designed to ensure that you develop knowledge, understanding and skills that are commensurate with a career in the food industry.

The honours degree has the following educational aims:

- To foster and develop a knowledge and understanding of the microbiology, chemistry, physical properties and nutritional and eating qualities of food and the impact of food storage and processing
- To develop analytical, evaluating, reasoning, communication and problem solving abilities.
- To foster and develop a knowledge and understanding of the needs of society and industry for sustainable food quality, safety and security of supply.
- To develop the scientific and technical knowledge and skills to tackle the challenge of producing and manufacturing food for a growing population.
- To develop an innovative, creative and enterprising attitude to address the developing needs of the food industry.
- To develop the skills necessary for self-management and lifelong learning and to provide transferable skills that will support the student's personal, academic and career development.

7. Course outcomes

Course outcomes describe what you should know and be able to do by the end of your course if you take advantage of the opportunities for learning that we provide.

Knowledge and understanding

By the end of the course you should be able to:

- Demonstrate comprehensive knowledge and understanding of the biochemical, chemical, physical and biological factors underlying the synthesis and metabolism of food materials and apply such knowledge to the processing of foods (B)
- Describe the main aspects of the business and regulatory environment in which

- food businesses operate and recognise, explain and critically evaluate the political and ethical issues associated with the food industry (B)
- Demonstrate the capacity for independent critical thought, rational inquiry and self-directed learning (B)
- Demonstrate comprehensive knowledge and understanding of the food law framework within which food businesses operate (B)
- Demonstrate a critical understanding of issues of sustainability and the needs of society for sustainable food quality, safety and security of supply (B)
- Critically review the global, regional and local contexts of the food industry (B)

Skills, qualities and attributes

By the end of the course you should be able to:

- Utilise and critically evaluate a range of food manufacturing processing operations, food technologies and food preservation systems (B)
- Demonstrate inter-personal, people and project management competencies required in professional working life (B)
- Demonstrate a range of skills and competencies required for a career in food industry management. (B)
- Collect, analyse and evaluate appropriate qualitative and quantitative information and use it creatively and imaginatively to solve problems, introduce and develop innovations, and make decisions
- Critically apply and communicate knowledge of food science and technology to meet the needs of society and industry for sustainable food quality, safety and security of supply (B)
- (B) indicates outcomes that are aligned to the QAA Benchmark Statement for Agriculture, horticulture, forestry, food and consumer sciences (2016)

8. Teaching and learning methods

You will experience a range of learning and teaching methods to enable you to achieve the required outcomes. Emphasis is placed on underpinning principles and practical skills, delivered by a combination of lectures, group activities, seminars and laboratory practical sessions.

A vocational approach to learning is at the core of this course; it is integrated into study, with work-related activity in teaching sessions in the form of simulation and visits to commercial businesses.

You will be encouraged to develop your communication skills through participation in presentations, discussions and the production of written reports.

Apart from those already mentioned the teaching and learning methods you will encounter include seminars, workshops and library research. All modules are supported by web based learning materials, including lecture heading slides and supporting

reading. Specialist e-learning materials will be integrated into your learning experience where appropriate.

All modules are designed to develop skills and competencies that will assist your career in the food industry. Learning and teaching support is comprehensive; all modules are supported by dedicated pages on the University's on-line workspace (NOW); members of staff are available for you to seek individual assistance and you are also encouraged to use electronic communication with tutors and fellow students. Your feedback is actively sought and your comments inform future development of the modules.

9. Assessment methods

The assessment strategy adopted by the course team provides diverse, wide-ranging and challenging approaches to assessment. Save for the Dissertation module, all of the modules are 20-credit points. The modes of assessment do vary but assessment equivalence between modules is ensured.

General criteria for assessment are published annually and module specific criteria are published on each module's dedicated NOW page at the start of the module. These are guided by both University and the Schools' statements on levels of achievement, but are defined for each module in relation to specific learning outcomes. You are assessed on the basis of your knowledge and understanding, discipline-specific skills, intellectual skills and key skills. Module teams annually review assessment tasks, and all assessments are internally moderated. All modules include elements of formative and summative assessment and you are expected to pass all summative elements. At the start of each level of study you will be provided with an assessment schedule, enabling you to plan your workload.

Assessment methods include a range of examinations, written coursework, scientific reports and presentations. Formative assessment methods such as debate and case studies are also included to ensure that you develop a wide range of transferable skills relevant to the workplace. Each assessment is designed to support learning and to assess skills at the appropriate level for the module whilst providing a valid and reliable process to gauge your ability.

Feedback is provided through both annotations on your work and a coversheet returned with further formative comments. Coursework and examinations are anonymously marked. Standards are quality assured by an external examiner who moderates all modules.

10. Course structure and curriculum

The course comprises 360 credit points and contains the following modules:

Level 4

Food Chemistry (20cp)

Food Raw Materials (20cp)

Food Safety (20cp)

Quality Assurance (20cp)

Principles of Product Development (20cp)

Food Product Manufacture (20cp)

Level 5

Microbiology of Food Processing (20cp)

Food Technology (20cp)

Food Industry Employability (20cp)

Sustainable Food Production (20cp)

Consumer Nutrition and Health (20cp)

Experimental Design and Analysis (20cp)

Level 6

Advances in Food Processing and Technology (20cp)

Food Biochemistry (20cp)

Product Innovation (20cp)

Food Industry Management (20cp)

Dissertation (40cp)

The curriculum reflects the competencies required for a career in the food industry and aims to provide a qualification that meets employer demands. The curriculum seeks to achieve a balance between knowledge, behaviours and practical skills.

All modules are core modules.

Placement Learning

You have the opportunity of taking a placement for one year between years two and three with a food industry employer. The placements focus on developing employment skills and a deeper understanding of the chosen sector of industry. You will acquire employability skills through placement work, as well as the chance to achieve a professional development qualification.

Students who undertake the sandwich placement will be eligible for a Placement Diploma in Professional Practice award if they:

- a) satisfactorily complete at least 36 weeks of supervised work experience;
- b) receive satisfactory reports from the placement tutor and/or workplace supervisor in respect of the competencies or learning outcomes or experience gained;
- c) submit all required tasks for the award

Students who satisfactorily complete between 6 and 35 weeks of supervised work experience and who satisfy points b) and c) above will be eligible for a Placement Certificate in Professional Practice.

These arrangements are consistent with the University's guidelines on the certification of placement activity.

Interim Awards

At the end of level 4 students completing all modules successfully but not progressing further are eligible for the Certificate of Higher Education. Those completing level 5 successfully but not progressing further are awarded the Diploma in Higher Education.

Students who successfully complete levels 4 and 5 of the course and 60 credit points at level 6 are awarded an ordinary degree.

11. Admission to the course

Entry requirements

For current information regarding all entry requirements for this course, please see the course information web page.

12. Support for learning

The School has a well-established system of support for students. The system of support includes:

Advice and guidance pre-entry

Prospective students are invited to the Brackenhurst Campus to talk to lecturers about the course and see the facilities available

• Comprehensive induction courses

The academic year begins with a 'pre-teaching' "Welcome week", which includes induction to the course at the start of the first year. This gives an overview of the way your course runs and includes introductions to IT and library resources and to the range of student support services. You will be provided with a course handbook which gives essential information about the course and the support that is provided. When fully enrolled you will have a personal password to the University's On-line Workspace (NOW), which gives you access to comprehensive current information on both module support and University regulations.

Study skills at all levels

Students have access to the NOW and are also able to access a specific IT helpline for assistance concerning use of the computers. In addition a small team of on-site IT specialists are available for help, as are the library staff in the resource rooms.

Personal and Group Tutorials

As part of the induction process you will be allocated a personal tutor. Individual personal tutorials are held two or three times each academic year and are used to monitor your progress. They also provide an opportunity for you to discuss any academic issues that may be of concern to you. Group tutorials provide study skills

support, explore career opportunities and discuss other issues that may be of general concern.

Tutor Feedback Reports

Tutors provide written feedback on all assessed coursework. Where appropriate, this may be supplemented by oral feedback. Wherever possible, generic or individual feedback will be provided within 3 weeks of the submission of your work.

Clear and effective links with Student Support Services

The University Student Support Services offer extensive advice and guidance on a range of issues, e.g. financial problems, dyslexia and disability and personal problems.

• http://www4.ntu.ac.uk/student_services/index.html

13. Graduate destinations/employability

In addition to the expertise available within the School, the University has a comprehensive careers service open to all students to assist in securing employment. http://www.ntu.ac.uk/careers

The qualification will be appropriate to a wide range of jobs within the food industry including quality assurance, technical, production and new product development. progression.

14. Course standards and quality

The quality of courses is monitored through induction, mid-year and end-of-year reviews, module and course Evasys questionnaires, module achievement data and external examiner reports. The outcomes inform course committees, Academic Team meetings, and the School and NTU committees responsible for academic standards and quality, through the annual reporting process and inform action plans for the following year, curriculum modifications and development. In addition, student feedback is obtained during tutorials which help to address concerns as they arise. Standards are maintained through these quality processes, which culminate in the publishing of the Interim Course Report and, ultimately, the School Academic Standards and Quality Report. This summarises the findings of the team, students and External Examiners and includes an action plan that provides a focus for the course teams and the School. The action plan is monitored through the course and academic standards and quality committees (with integrated Induction, Mid-Year and End of Year-reviews) to ensure that the action loops are closed and there are no outstanding issues.

Staff development and the dissemination of good practice is enhanced through peer observation of teaching by course teams.

The links developed with external agencies and employers are used to continually

improve the provision, with annual meetings to consider the content and delivery and to ensure the needs of employers are addressed in the course.

The course was devised with reference to the Quality Assurance Agency for Higher Education (QAA) subject benchmark statement for Agriculture, forestry, agricultural sciences, food and consumer sciences subject benchmarks (indicated by (B).

15. **Assessment regulations**

This course is subject to the University's Common Assessment Regulations (located in Section 16 of the Quality Handbook). Any course specific assessment features are described below:

This course is bound by the University Common Assessment Regulations.

The award classification will be calculated by using 100% of the aggregate mark for level 6.

Additional Information 16.

Collaborative partner(s):

Course referenced to national QAA Benchmark Statements:

Course recognised by:

Date this course specification approved:

Any additional information:

Agriculture, horticulture, forestry, food and consumer sciences (2016) Institute of Food Science and

Technology May 2017