



BSc (Hons) Food and Consumer Studies

UCAS code	D641
Institution code	H12
Duration	4 years (full-time) including a one-year work placement. A three year programme is available for applicants with at least two years, full-time relevant work experience.
Start date	September 2021
Accredited by	Institute of Food Science and Technology (IFST)
Location	Harper Adams University campus (and location of work placement)

The course

In western societies consumers are dependent on the agricultural and food processing industries, and the food retail and food service sectors, for the foodstuffs that sustain their lives.

Modern consumers take food very much for granted, giving little thought to what it is and where it has come from. Food is produced by people with specialist know-how, and the food industry has a constant need for appropriately qualified graduates.

You will gain a detailed understanding of the food industry, its place in society and relationship to consumers. You will explore the nature of food and how food ingredients behave when processed. You will learn what food is, why we eat it, how it is produced and processed, how the food supply chain operates, food trends, and consumer behaviour.

The course will equip you with the knowledge and skills needed to develop a career in the industry; anywhere from food processing and manufacture to food retailing.

Duration

4 years (full-time) including a one-year work placement. A three year programme is available for applicants with at least two years, full-time relevant work experience. Please contact [Admissions](#) for further information on this option.

A-level entry requirements

- Offers tend to be in the region of **88 - 104** UCAS points
- Students should typically be studying **3 subjects at A2 level** to be considered
- No more than 2 arts-based subjects out of 3 A levels
- Science A Level **is not required**
- **4 GCSEs at grade C/4 or above**, including English Language, Maths and a Science
- **Food Technology** at GCSE and/or A Level preferred (but not mandatory)
- Applicants can expect to receive offers including specific grades in specific subjects (for example, a B or C at A level, or an M or D for BTEC modules)
- Key Skills (and other level 2 variants) and First Certificates/Diplomas are not accepted in place of

GCSE passes

- General Studies and Critical Thinking are encouraged but **not** included in grades required
- Applicants are encouraged to gain relevant **work experience**
- Overseas applicants please check our [English Language Requirements](#)
- The majority of candidates will not be called for an interview and a decision will be made via UCAS Track. However, for some students a telephone interview or campus based guidance session will be required. We will simply want to meet you to understand if the course is the right choice for you and to discuss your application in more detail. We will be keen to know your reasons for choosing the course and your career aspirations.
- We have developed a range of measures and initiatives to give everyone the best chance to access our undergraduate degree programmes. The main feature of **Access to Harper** is our contextualised offer scheme. A contextualised offer is an offer which is reduced, by one grade or more from the standard entry requirement and is made to those applicants who may have experienced personal circumstances which put them at a disadvantage during their education, such as attending a low achieving school, living in an area of low participation in Higher Education or being a Care Leaver. The aim of this is to make the University more accessible for those applicants who may not have previously thought that they were eligible to apply. We have also introduced reduced entry requirements for those applicants who are over 21 years of age and further initiatives to make the application process easier for those applicants who need it.

To check if you qualify please visit the [Access to Harper](#) page.

Note: Entry Requirements are for guidance only, please check the UCAS website or contact Admissions for further information.

Work placement

Your third year will be spent on placement, where you will gain first-hand experience and develop the personal skills and characteristics needed to work with others. Employment may be in any part of the food industry, from food processing and manufacturing through to retailing and buying, and even in specialist media. Placement employment is usually paid and positions may be taken in the UK or abroad.

Accreditation



This course is accredited by the Institute of Food Science and Technology.

Teaching and learning

What you study

All Food students share a common first year, studying the same modules. In your second and final years you will focus on your chosen specialism. You will cover subjects such as farm assurance and quality, commodity crops and fresh produce, food product development and sensory evaluation in the supply chain as well as food quality management and food product manufacture and supply.

Teaching and learning

Learning at Higher Education level is a big step up from further education so we make sure you get lots of advice and support. Everyone learns differently and in the workplace you'll need to work in different ways, so we make sure our courses test you in every way possible. Therefore, you will attend lectures and tutorials, undertake regular hands-on practical work in the laboratories or on the farm, sit exams, and complete

coursework assignments. Guest speakers and visits to industry all support the learning. All students undertake a major project in their final year concentrating on a topic that is of particular interest to them.

Assessment methods

Assessment is via a balance of course work and examination. Students receive written feedback on all course work to help them improve. In addition, first year students undertake examinations in two subjects at the end of the first term to enable them to gauge how they are progressing and feedback is provided on these exams. Examples of assessments may include a group of three students present on a specific issue in food production – e.g. pesticide residues in crops / fresh produce – and how the relevant farm assurance schemes requirements effectively manages the risk to levels which remove the problem / risk from the food chain.

Careers

Graduates can expect to find job opportunities in the diverse food industry and associated fields.

You may wish to work in food processing and manufacture, food product development, technical management, quality management, food business management or food retail management. Other options include careers in buying food products, in sales and marketing, or setting up your own business. This course gives you the opportunity to become knowledgeable, skilled, adaptable, versatile and able to take command of your own life and career.

What will I study?

Year	Study time (The percentage of time spent in different learning activities)			Assessment methods (This is the breakdown of assessment methods)		
	% time in lectures, seminars and similar	% time in independent study	% time on placement	Written exams	Practical exams	Coursework
1	38%	62%	0%	19%	2%	79%
2	32%	68%	0%	45%	0%	55%
3	0%	0%	100%	0%	0%	100%
4	25%	75%	0%	19%	0%	81%

Year 1	Year 2	Year 3	Year 4
Academic and Professional Skills for the Food Industry (F4001C17) 15	Research Methods (Food, Marketing and Business) (F5007C17) 15	Placement year	Honours Research Project (HRPROJC17) 30
Introduction to Food Science (F4002C17) 15	Farm Assurance and Quality (F5003C17) 15		Food Policy and Ethics (F6001C17) 15
Issues in Global Food Production (F4004C17) 15	Commodity Crop and Fresh Produce Processing (C5019C17) 15		Supply Chain Management (F6016) 15
Marketing Principles (R4009C17) 15	Animal Product Processing (F5006C17) 15		Food Quality Management (F6010C17) 15
Logistics and Distribution (F4006C17) 15	Food Product Development and Sensory Evaluation in Supply Chains (F5011C17) 15		Food Product Manufacture (F6009C17) 15
Nature of Food (F4007C17) 15	Marketing Communications (F5002C17) 15		Consumer Behaviour (F6008) 15
Introduction to Food Service and Retail (F4003C17) 15	Hygiene and Food Safety (F5012C17) 15		Leadership and People Management (R6016C17) 15
Wellbeing Through the Lifecycle (F4008C17) 15	Food Biotechnology and Food Processing (F5013C17) 15		
Options	Options		
Language I (French, German or Spanish) (B3001/2) 15	Language II (French, German or Spanish) (B4015/17) 15		

Academic and Professional Skills for the Food Industry

Year of study 1

Code F4001C17

Credits 15

Core/option Core

Module contact [Dr Helen Pittson](#)

This module supports the student in adapting to and learning how to maximise their potential during their time at University. It aims to help the student develop skills that will be of benefit to them during their academic career as well as in their professional development in the future. The module supports the student's development of written and oral communication skills whilst enabling the student to become an increasingly independent learner. The module will provide the student with opportunities to learn relevant skills including, independent learning and group working, specific skills such as report writing with consideration for sector specific requirements and preparing a range of different report formats which are critical to the success of their studies. Students are required to develop skills in preparation of a curriculum vitae (CV) enabling identification and recording of their developing individual skills, experiences and

attributes in preparation for placement and applications for full-time employment following graduation. This module will also introduce the concept of continuing professional development (CPD) and how this can be applied to a student's development throughout their higher education experience as well as their future career development. In support of this students will have the opportunity to undertake additional certification opportunities (e.g. food hygiene, HACCP at different levels) throughout the course of their studies that will further enhance their potential employability.

Introduction to Food Science

Year of study 1
Code F4002C17
Credits 15
Core/option Core
Module contact [Professor Frank Vriesekoop](#)

Food production occurs in a fast moving environment which demands continuous optimisation and innovation in order to remain economically and environmentally sustainable. Most of these innovations and optimisations require a solid foundation of the underlying sciences that are required to understand the impact on both safety and quality of food products.

This module will develop an understanding of the basic scientific principles that underpin a range of aspects of food sciences and technologies. These include introductory concepts of biology, chemistry and physics and how they apply to foods and humans who consume these foods. In addition, this module provides an introduction to basic laboratory skills.

- Examine the underpinning biological, physical and chemical principles of food science and technology.
- Explain the principles of the main biochemical and physiological processes contributing to growth of micro-organisms, food plants and food animals.
- Explain the human interaction with food in relation to nutritional requirements and sensory perception.
- Assess the basic "farm-to-fork" processes involved in the production of a range of food commodities.
- Apply basic laboratory techniques in the study of food.

Issues in Global Food Production

Year of study 1
Code F4004C17
Credits 15
Core/option Core
Module contact [Dr Wilatsana Posri](#)

Food supply and security, the provision of high quality foods, safe foods and access to diets that provide good nutrition are key challenges for the world in the 21st century. Currently agriculture provides much of the world population's need for food, though not everyone has access to food of the right quantity or quality. Even though the structures and dynamics of the global food supply system are complex, an understanding of how the system operates and how issues of food production, food security, quality and safety, etc., interact and are resolved is fundamental to the study of food and the pursuit of careers in the food industry.

This module introduces students to the issues associated with global food supply within the context of human dietary needs, agricultural production systems, agricultural biotechnology and concepts of food security and sustainability, and quality and food safety.

Marketing Principles

Year of study 1
Code R4009C17
Credits 15
Core/option Core
Module contact [Mrs Claire Robertson-Bennett](#)

Effective marketing is central to the success of individuals and organisations. All managers need to contribute to developing and delivering products and services which meet the actual or potential needs of customers more effectively than competitors. This module covers the role of marketing and its underpinning theories. It then examines the range and integration of activities required to implement the marketing concept in various business contexts. There will be a strong focus on reviewing real world examples and on appropriate application of marketing practice principles and practice. The module will establish a broad appreciation of the discipline as preparation for placement work. Specialist marketing students will study various aspects in more depth in modules which concentrate on component areas, for example New Product Development and Sales and Customer Service.

Logistics and Distribution

Year of study 1
Code F4006C17
Credits 15
Core/option Core
Module contact [Dr James Bell](#)

Logistics focuses on the flow of goods, services and related information along chains linking primary producers, processors, manufacturers, retailers and consumers. It aims to get the right thing, in the right quantities, to the right place, at the right time and cost, to meet the demands of successive customers, sustainably. The module will examine how logistics activities are integrated to provide the required quality and customer service for the minimum possible cost. This involves planning, implementing and controlling efficient and effective movement and storage, including the return of materials for reuse, recycling or disposal. By providing an introductory understanding of the role of logistics and distribution, this module will lay the foundation for further studies in subjects such as Supply Chain Management.

Nature of Food

Year of study 1
Code F4007C17
Credits 15
Core/option Core
Module contact [Mrs Lucy Catley](#)

Food is fundamental to the existence, health and well-being of humans. The characteristics, quality and value of any food or food ingredient is the result of its composition, structure, and technical functionality. Functionality is considered in relation to health related qualities in addition to any nutritional value.

The module provides students with a foundation for developing their understanding of foods, food ingredients, functionality and technical attributes. It enables students to relate scientific principles to the nature of food, the physical and technical properties of foods and food materials, and their value as sources of nutrition.

Introduction to Food Service and Retail

Year of study 1
Code F4003C17
Credits 15
Core/option Core
Module contact [Alastair Boot](#)

The retailing of food has become a very complex activity, with the increasingly sophisticated consumer tastes and a diversity in how food is delivered to the consumer. In food retailing, consumers are becoming more diverse in terms of tastes, attributes, costs, lifestyle and cultural background; resulting in a demand for an ever more diverse food retail and service delivery formats and marketing channels. This module is designed to develop both an understanding of the drivers of consumer behaviour and the operational constraints of the varied delivery formats in both the food retail and service sectors. The module aims to facilitate the students' appreciation of the issues facing the food supply chain in supplying these sectors.

Wellbeing Through the Lifecycle

Year of study 1
Code F4008C17
Credits 15
Core/option Core
Module contact [Dr Helen Pittson](#)

This module provides an understanding of the impact of nutrition on the requirements of growth, development and aging in humans. It will also look at the relationship between diet and health at different points in the life cycle as well as how dietary interventions can provide long-term benefits to individuals and populations. The module will also consider environmental and physiological factors which may impact on food throughout the lifecycle.

Language I (French, German or Spanish)

Year of study 1
Code B3001/2
Credits 15
Core/option Option
Module contact [Zorka Besevic](#)

The purpose of this module is to develop the ability and confidence of students to use French, German or Spanish effectively for the purposes of practical communication and the exchange of information. The module aims to form a sound base of skills language and attitudes appropriate to individual interests for further study, vocational and leisure based purposes. The module outcomes reflect the module aims concerned with providing students with the basic communication skills in French, German or Spanish to fulfill realistic tasks.

Research Methods (Food, Marketing and Business)

Year of study 2
Code F5007C17
Credits 15
Core/option Core
Module contact [Dr Karim Farag](#)

Research Methods is taken by all Honours Degree students. The module particularly develops the skills and knowledge necessary to successfully complete the Honours Research Project. However, enhanced research confidence will also be an employability skill for the placement period and careers on graduation.

The module will cover the key elements of the research process, set in the context of the student's own course discipline. Students will examine the academic role of research and how it informs professional and managerial practice. They will enhance their ability to locate, select and critically evaluate information associated with a particular problem, using a range of sources and particularly peer reviewed empirical studies. By carrying out statistical analysis using appropriate software, the students will develop their ICT skills and further their understanding of the role of statistics in the research process.

- Critically assess information and research quality, in the context of its value and limitations for advancing knowledge and making decisions on design, production, welfare, resource management, marketing, sustainability and policy.

- Plan, test and evaluate research designs, including problem definition, data collection sampling and analysis methods.
- Apply statistical principles and analysis techniques to identify patterns, relationships and trends in data and make qualified predictions.
- Effectively interpret data using inferential statistics to test hypotheses and draw valid and appropriately qualified conclusions.
- Competently use and critically evaluate computer-based systems for secondary research, data collection, entry and processing, statistical analysis and communication of results.

Farm Assurance and Quality

Year of study 2
Code F5003C17
Credits 15
Core/option Core
Module contact [Mr Martin Anderson](#)

The food supply system is now recognised as an entity structured and organised to meet the needs of the consumer marketplace, with emphasis placed on issues of food quality and safety at every level of the food chain. As a consequence of supermarkets taking vertically integrated control of the food supply system, the ability of agriculture to conform to quality and food safety standards is increasingly being scrutinised. To help ensure that farm produce is able to meet the technical needs of food processors, manufacturers, retailers and consumers, third party and private farm assurance standards have been used as approaches to ensure food safety and quality assurance is appropriately applied at farm level. These stakeholders have integrated concerns for farm animal welfare and environmental sustainability into these standards. This module exists to provide students with an understanding of the concept, principles and practice of farm assurance, and the way in which different farm assurance schemes are operated, validated and verified.

Commodity Crop and Fresh Produce Processing

Year of study 2
Code C5019C17
Credits 15
Core/option Core
Module contact [Dr Laura Vickers](#)

Commodity and fresh produce crops fulfil a variety of needs within the food market, from providing a source of food material for processing into food products to the supply of materials which, often with only minimal processing, are consumed as foods in their own right.

This module provides students with an understanding of the range and diversity of commodity and fresh produce crop materials available to the food industry and the market, and of the different strategies by which they are processed into food products or prepared for the marketplace, such that the nutritional benefits are preserved, quality is maintained or enhanced and consumer requirements are met.

- Distinguish between food products derived from commodity and fresh produce crops.
- Identify and contrast the processes involved in the processing and production of food materials derived from commodity and fresh produce crops.
- Illustrate the factors affecting the nutrition value and quality of commodity crops and processed fresh produce.
- Relate how production and processing systems of commodity and fresh produce crops interact with food safety and Quality Assurance schemes.

Animal Product Processing

Year of study 2
Code F5006C17
Credits 15
Core/option Core
Module contact [Dr Karim Farag](#)

This module provides students with an understanding of food producing animals (milk and eggs) and animals as food. Scope includes primary processing of milk, milk products, eggs and egg products and primary and secondary processing of meat producing animals. Consideration of the factors affecting food quality and the changing utilisation and value of animal products for the food industry and consumers.

Food Product Development and Sensory Evaluation in Supply Chains

Year of study 2
Code F5011C17
Credits 15
Core/option Core
Module contact [Rachel Hilton](#)

Food Product Development (FPD) is an activity fundamental to the organic growth and security of food businesses and is constantly reflected in the ever-changing product lines of food retailers. It is a strategic activity that requires knowledge, data, planning and organisation if it is to be successful as evidenced by the translation of ideas into products desired by consumers. To turn a new product concept into a successfully selling new product requires the integration of most food business activities amongst all stakeholders in the supply chain from producers onwards to suppliers, manufacturers, retailers and consumers.

Great food products delight many senses at once. How do consumers perceive the quality of food through their senses? What criteria do they use in making judgements about which product to buy? How are sensations perceived from food packaging? These are but a few of the many aspects of sensory evaluation science and its application in food product development contributing to successful product launches.

The module will introduce and demonstrate sensory evaluation as a fundamental practice in FPD. Application of appropriate testing techniques used in different stages in the FPD process, from concept through to design and development, to factory scale up and market launch, including raw materials selection, quality control of manufactured products and packaging and labelling design, will be explained and demonstrated. Theoretical best practice can be very different from reality where a range of pressurising stakeholders with differing goals are present, as are often the financial pressures of high volume low cost products. This difference is often accentuated in a Fast Moving Consumer Goods (FMCG) environment, so it is important for students to experience FPD first hand to aid their understanding and application of the process.

Marketing Communications

Year of study 2
Code F5002C17
Credits 15
Core/option Core
Module contact [Mary Munley](#)

This module covers the issues, activities and planning involved in marketing ideas, products, places and services. The focus will be on selecting and combining the most appropriate and cost-effective methods and media into an integrated and coherent marketing communications strategy. It will evaluate branding and communications with emphasis on developing skills in planning, design, communication, internet and mobile technology. These skills will be particularly useful for placement employment.

Hygiene and Food Safety

Year of study 2
Code F5012C17
Credits 15
Core/option Core
Module contact [Dr Lynn McIntyre](#)

Food businesses must provide consumers with food that is of suitable quality and is safe to eat. Hygiene and food safety are critical issues for all food businesses. This module provides students with an understanding of the need for food businesses to actively manage hygiene and food safety, in order to satisfy the requirements of customers, consumers and the law. It also provides them with the ability to evaluate the causes and implications of food spoilage and food hazards, and to develop a knowledge of the management techniques required to control hygiene and food safety within a food business context.

Food Biotechnology and Food Processing

Year of study 2
Code F5013C17
Credits 15
Core/option Core
Module contact [Professor Frank Vriesekoop](#)

Food technology graduates need to be skilled in formulating food products, this skill is developed by understanding how food raw materials behave when subject to differing production processes.

A significant group of production processes are focused on the use of food biotechnology. The use of biotechnology is evident in many sectors of the food industry. Traditional biotechnologies such as fermentation have become commonplace but increasingly modern methods in the applications of biotechnology and related processes are key to the future development of the food industry. This module introduces students to the principles of food processing across a range of raw materials and to both traditional and modern methods of food biotechnology. It assesses biotechnologies based on fermentations, the use of enzymes, genetic engineering and nuclear transfer and considers them as resources for the modern food industry, as adding value to both raw materials and finished food products.

Language II (French, German or Spanish)

Year of study 2
Code B4015/17
Credits 15
Core/option Option
Module contact [Zorka Besevic](#)

The purpose of this module is to develop further the level of competence in French, German or Spanish to enable students to function in a vocational or academic context such as a study placement. The module aims to increase students knowledge and application of language in terms of complexity, grammatical accuracy and range of structures, vocabulary and idiom. Through the development of a greater awareness of the nature of language and language learning the module seeks to encourage positive attitudes to speakers of foreign languages and other cultures, employment thereby facilitating future mobility. The module Language I or equivalent is considered a desirable pre-requisite.

Placement year

Year of study 3
Core/option Core

Read our dedicated [Placement Learning](#) pages for information on the many benefits of the placement year.

Honours Research Project

Year of study 4
Code HRPROJC17
Credits 30
Core/option Core

To qualify for an honours degree a student must demonstrate the capacity for sustained, independent and high quality work. One of the most important vehicles for the demonstration of this capacity, and for developing the necessary skills, is the individual Honours Research Project. Each student will therefore be required to complete such a project under the general supervision of a member of staff and present the results in a project report and in a viva voce exam, with two tutors, which will also test to a high level, skills of communication and rational argument. This major exercise represents one-quarter of the final year studies and will therefore have an important influence on the classification of award.

Food Policy and Ethics

Year of study 4
Code F6001C17
Credits 15
Core/option Core
Module contact [Dr Rounaq Nayak](#)

Food policy can be described as the policies and the policy-making processes that shape the food supply chain, food culture and who eats what, when and how and with what consequences. Policies and laws are established to moderate the conduct of food supply chain actors for the common good. Governments have a duty to ensure that citizens, no matter their income, have access to food of the right quality and quantity. They also have a duty to ensure that the food industry serves the needs of society and future generations by enabling sustainable food production. Food businesses have to address the needs of multiple stakeholders within the markets that they operate in, including the requirement to act morally and legally towards consumers. This can create conflict between different stakeholder agendas and this too will be explored in the module.

This module serves to bring together theory on the existing and emerging relationships between the food industry, society and consumers. The development of discourse around international and national food policy, food ethics the nexus of food governance forms underpinning elements of this module. Case studies will examine of the features and dynamics of food governance, as well as the ability to apply ethical theory to issues concerning the food industry and society.

This module sets out to explain how food policies have evolved over time and provides opportunity to reflect on the challenges for the future and addresses the key concerns impacting agri-food supply chains from social, economic, environmental and human health perspectives. The module also frames food policy in the context of the ethical and moral aspects of food supply through an examination of topics such as animal welfare, worker welfare, diet and health or the use of emerging technologies.

Supply Chain Management

Year of study 4
Code F6016
Credits 15
Core/option Core
Module contact [Dr Jane Eastham](#)

The supply chain constitutes a critical link between primary producers, processing and manufacturing businesses, retailers and the consumers. It is a link that must be structured, organised and managed successfully if businesses are to compete in a dynamic marketplace. Indeed, design and operation of supply chains are often decisive factors in the ability of businesses to achieve competitive advantage. This module examines the concept of the global supply chains and explores the many factors required to create, operate and control supply chains efficiently, effectively and sustainably.

Food Quality Management

Year of study 4
Code F6010C17
Credits 15
Core/option Core
Module contact [Mr Martin Anderson](#)

In the production and processing of foodstuffs, food quality and safety are integrated concepts which apply throughout the whole food chain. The effective management of food quality and safety are intrinsic to the success and security of food businesses. This module provides an understanding of quality assurance and quality management principles and practices as applied throughout the food processing, manufacturing and retailing industries.

The aim module is to provide students with key insights to the subject of quality management and knowledge that can be applied directly in the workplace. Specific attention is given to the theory and practice of quality assurance, quality management, food safety management, the use of quantitative methods, international quality system standards and the role of continuous quality improvement philosophy.

Food Product Manufacture

Year of study 4
Code F6009C17
Credits 15
Core/option Core

A wide range of food processing and preservation methods are used by the food industry today and any graduate of a food science/technology based degree programme ought to possess a competent understanding of the principal methods as well as an appreciation of new and innovative methods.

This module provides students with both a theoretical and an applied understanding of the key food processing, preservation and packaging technologies used in the manufacture of food products, and also comprehension through practical assessment of the ways in which the technologies affect the quality, safety and shelf-life of manufactured food products.

Consumer Behaviour

Year of study 4
Code F6008
Credits 15
Core/option Core
Module contact [Mary Munley](#)

An understanding of consumer behaviour is central to the study of marketing and will be of interest to any student considering a career in marketing as well as related disciplines in the farm to fork value chain such as product development and supply chain management. This module is designed to give the student an understanding of the behaviour of consumers using concepts and theories drawn from areas of relevant, contemporary study such as psychology, sociology, anthropology, neuroscience and behavioural economics. There is an applied emphasis to the module in terms of considering consumer behaviour in various modern contexts including the strategic management of consumer touchpoints and interfaces utilized by marketers.

Leadership and People Management

Year of study 4
Code R6016C17
Credits 15
Core/option Core

As prospective employees and managers in the business world, it is essential that students have an understanding of the effective management of people. This module is therefore designed to develop an understanding of human motivation and management style, the responsibilities of employer and employee and an appreciation of how to manage effective interpersonal relationships at work. This module is normally delivered post placement to build on placement experience, but may be studied pre-placement, referring to a student's pre-university or other work experience