

## Overview

<b>Programme Code</b>	35954
<b>Programme Title</b>	Sustainable Food and Natural Resources
<b>Awarding Institution</b>	Liverpool John Moores University
<b>Programme Type</b>	Masters
<b>Language of Programme</b>	All LJMU programmes are delivered and assessed in English
<b>Programme Leader</b>	
<b>Link Tutor(s)</b>	Sarah Dalrymple

<b>Partner Name</b>	<b>Partnership Type</b>
Centre for Alternative Technology	Validated

## Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Master of Science - MS	See Learning Outcomes Below
Recruitable Target	Postgraduate Diploma - PD	See Learning Outcomes Below
Recruitable Target	Postgraduate Certificate - PC	See Learning Outcomes Below
Alternative Exit	Postgraduate Certificate - PC	Understand the broad concepts of sustainability and adaptation in the context of sustainable food production and the management of natural resources. They will be able to engage with and take an informed position on theories and practice in relation to the field of sustainable food and natural resource management.
Alternative Exit	Postgraduate Diploma - PD	Engage with and take an informed position on advanced levels of theories and practice in relation to the field of sustainable food and natural resource management. Students will be able to explore, test, identify and apply appropriate research methodologies and they will be able to demonstrate appropriate levels of critical analysis, reflection and contextual awareness in a range of modules associated with the field of study.

Alternate Award Names

## External Benchmarks

Subject Benchmark Statement

## Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	September	Centre for Alternative Technology	18 Months

## Aims and Outcomes

### Educational Aims of the Programme

To provide students with an advanced understanding of the importance of, and approaches to, sustainable food production and natural resource management within the context of wider sustainability and adaptation to global environmental issues. The specific aims of the programme are: • To critically reflect upon the causes, seriousness, and urgency of environmental and climatic change with respect to how these factors influence sustainability thinking and adaptation; • To hone the ability to identify and appraise the complex influences that technical, political, legal, social, cultural and non-cultural factors have on the provision, supply, demand and use of food and natural resources; • To develop technical evaluation skills to become systematic, logically iterative and imaginative, in order to make sound judgements within the limits of uncertainty and incomplete data, and communicate evidence and conclusions clearly to specialist and non-specialist audiences; • To carry out an extended independent piece of original research and writing on a topic of the students' choosing within the field of sustainable food production, the food supply chain, the management of natural resources, land and environmental management or the social, political or economic contexts of food and natural resource management; • To develop the self-confidence and ability to act on initiative, to prepare for the rigours and demands of employment or further postgraduate study in areas related to sustainability, food and natural resource management; • To make informed decisions based on an appraisal of academic evidence combined with practical experience and directed research, in order that the ability to synergise theory and practical knowledge into a deep understanding may be developed; • To understand and analyse individual strengths and competencies and fulfil each student's potential for self-development into an independent self-reflective learner and practitioner in their chosen area of interest.

### Learning Outcomes

Code	Description
PLO1	Demonstrate a holistic, systematic and sophisticated understanding of the concepts, issues, and theories of sustainable food and natural resource management within the context of environmental, social and economic sustainability (e.g. urgency of environmental change, population pressures, ecosystem services, adaptation capacity and resilience building);
PLO2	Demonstrate a thorough understanding of the logistical issues involved in planning and conducting scientific research and study;
PLO3	Collate and handle data, carry out statistical analyses and modelling where appropriate.
PLO4	Communicate effectively in written and oral forms to a wider audience;
PLO5	Use IT to gather and use evidence and data to find, retrieve, organise and exchange new information;
PLO6	Demonstrate clarity, fluency, and coherence in a variety of written forms and expression;
PLO7	Organise tasks and manage time effectively;
PLO8	Design, investigate, and present an extended and independently-conceived piece of research;
PLO9	Work in a team, identifying individual and collective goals and responsibilities and performing in a manner appropriate to these roles.
PLO10	Present a sophisticated appreciation of the influence that technical, engineering, legal, political, social and cultural perspectives can have on food production and the management of natural resources;
PLO11	Gain specialist knowledge of sustainable food and natural resource management, attitudinal and behavioural issues surrounding food and resource use and management;

<b>Code</b>	<b>Description</b>
PLO12	Gain experience in techniques to assess, measure and monitor natural resource use and the impacts of food production and supply and the use of natural resources on the natural environment built environment and on human societies.
PLO13	Develop and sustain arguments in a variety of written and numerical forms, formulating appropriate questions and utilising primary and secondary evidence;
PLO14	Critically evaluate the methodologies, analysis, conclusions and relevance, and where appropriate, propose new hypotheses from congruent argument, of current research and advanced scholarship;
PLO15	Synthesise a clear understanding of the various attitudinal, legal, institutional and ethical considerations and developments associated with sustainability and adaptation in an area of practice;
PLO16	Display a holistic and sophisticated understanding of how knowledge is advanced through research, and produce clear, logically argued and original written work.
PLO17	Analyse food production and natural resource management and use, attitudes and demand in a variety of environments;

## Programme Structure

### Programme Structure Description

The MSc (180 credits) Sustainable Food and Natural Resources is achieved via completion of the 30-credit introductory core module 7501CATSCI, the four 15-credit core modules 7503CATSCI, 7506CATSCI, 7121CATSCI and 7510CATSCI, two optional 15-credit modules and the 60-credit dissertation module 7520CATSCI. Students completing the MSc programme full time will complete 120 credits in year 1 of their studies and 60 credits (dissertation) in year 2. The PgDip (120 credits) Sustainable Food and Natural Resources exit award is achieved via completion of the 30-credit introductory core module 7501CATSCI, the four 15-credit core modules 7503CATSCI, 7506CATSCI, 7521CATSCI and 7510CATSCI plus two other 15-credit modules. The PgCert (60 credits) Sustainable Food and Natural Resources exit award is achieved via completion of the 30-credit introductory core module 7501CATSCI and the two 15-credit modules, Food production and consumption 7503CATSCI and The science of sustainable food production 7510CATSCI. Students who joined the programme prior to September 2022 have the option of taking 7500CATSCI and an additional option module instead of 7520CATSCI and 7521CATSCI. In addition for those students 7508CATSCI was offered as an alternative to 7509CATSCI.

Programme Structure - 180 credit points	
Level 7 - 180 credit points	
Level 7 Core - 150 credit points	CORE
[MODULE] 7501CATSCI Sustainability and Adaptation: Concepts and Planning Approved 2022.01 - 30 credit points	
[MODULE] 7503CATSCI Food Production and Consumption Approved 2022.01 - 15 credit points	
[MODULE] 7506CATSCI Ecosystem Services, Land-use and Waste Management Approved 2022.01 - 15 credit points	
[MODULE] 7510CATSCI The Science of Sustainable Food Production Approved 2022.01 - 15 credit points	
[MODULE] 7520CATSCI Dissertation Approved 2022.01 - 60 credit points	
[MODULE] 7521CATSCI Applied Research Design Approved 2022.01 - 15 credit points	
Level 7 Optional - 30 credit points	OPTIONAL
[MODULE] 7502CATSCI Environmental Politics and Economics Approved 2022.01 - 15 credit points	
[MODULE] 7504CATSCI Cities and Communities Approved 2022.01 - 15 credit points	
[MODULE] 7507CATSCI Sustainable Materials in the Built Environment Approved 2022.01 - 15 credit points	
[MODULE] 7509CATSCI Work-based Project Approved 2022.01 - 15 credit points	
[MODULE] 7512CATSCI Theoretical Approaches to Transformational Social Change Approved 2022.01 - 15 credit points	
[MODULE] 7513CATSCI Restoration Ecology Approved 2022.01 - 15 credit points	

Module specifications may be accessed at <https://proformas.ljmu.ac.uk/Default.aspx>

### Approved variance from Academic Framework Regulations

Variance

Variance from PG.A4.2 (module-size requirements.) - 15-credit modules permitted Variance from PGA4.4 (semester credit balance) - A credit imbalance between semesters is permitted Note: Part-time students will be requested to do 60 credits of taught module in each academic year. The following variance applies only to students who joined the programme prior to September 2022. Variance from PG A4.3 (Ten credits of research skills) - This programme does not require the successful completion of a separate research skills module prior to submission of a dissertation (PGA4.3). All students must obtain a pass grade for the Research Design Proposal (10%) on 7500CATSCI before they are able to commence research on their dissertation.

## Teaching, Learning and Assessment

Teaching and learning will be via interactive lectures, workshops, discussion groups, seminars, oral presentations, and practical work. Assessments will be written, oral and practical assignments such as essays, project reports and presentations. Intellectual skills are developed through the teaching and learning programme. Critical analysis and problem solving skills are embedded in all modules and are taught, developed and practised through debate, workshops and all forms of practical work. Experimental, research and design skills are further developed and practised through a broad range of coursework activities and project work. Written or verbal individual feedback is given on all work submitted. Critical thinking and problem solving skills are assessed through written and oral assignments. Experimental research and design skills are assessed in the dissertation. Practical skills are taught during workshop and practical sessions. Experimental design is taught in the Dissertation module and is embedded thought the topic via lectures and workshops, and practical work. Practical skills are assessed via the dissertation and in core modules 'Ecosystem services; Land-use and Waste Management' and 'The Science of Sustainable Food Production' as well as in some of the optional modules. Transferable skills are taught, developed and practised through the teaching and learning programme. Numerical and statistical problem solving skills are taught on dissertation and in core modules 'Ecosystem services; Land-use and Waste Management' and 'The Science of Sustainable Food Production' as well as in some of the optional modules. Assessed through written and oral assessments.

## Opportunities for work related learning

The programme offers a specific period of work-related skills in the Dissertation module (7520CATSCI) such as planning, and managing and completing an independent piece of research. Students have the option of completing a module 'Work-based Project' which is an individual project based within the work-place (7509CATSCI). The use of practitioners from sustainable food and natural resource industries within module teaching will also enable students to learn first-hand about the industry and meet professionals.

## Entry Requirements

Type	Description
Alternative qualifications considered	Graduates: Normally entrants to the programme will have at least a second class degree in a subject appropriate to or compatible with food and natural resources. Non-graduates: Students who do not possess formal qualifications but who can demonstrate that they have gained appropriate knowledge and skills equivalent to degree standard and that they will benefit from and contribute to the programme may be accepted through the Recognised Prior (Experiential) Learning (RE(P)L) process. RE(P)L will be considered in accordance with University regulations.
Other international requirements	Normally a good degree (2ii equivalent) preferred with a recognised English language qualification (IELTS score of 6.5 with a minimum of 6 in each category) or Pearson score of 58-64 within 2 years prior to the programme start date (minimum score of 51 in each component for UKVI Purposes).

## Extra Entry Requirements