



Postgraduate Prospectus





Contents

Introduction

Welcome from the Principal
Why study at SAC?
Why Study a Postgraduate Qualification in Scotland?
SAC Locations: Aberdeen, Ayr and Edinburgh
Resources and Facilities
How to Apply
Fees and Funding
International Students
Undergraduate Courses at SAC
Postgraduate Research Opportunities at SAC
Taught Postgraduate Courses at SAC
Contact Details
Useful Websites

Course Information

Applied Animal Behaviour and Animal Welfare
Applied Poultry Science
Countryside Management
Ecological Economics
Environmental Protection and Management
Food Security
Organic Farming





Welcome from the Principal



The land-based and rural industries need the support of a knowledgeable and well-skilled workforce. Their future sustainability and development relies on managers, researchers, and practitioners to anticipate and respond to the challenges of the 21st century.

I am therefore delighted that you are considering pursuing postgraduate study with SAC. We are a small specialist higher education institute committed to providing teaching and research opportunities in disciplines that support, sustain, and develop the rural sector and its economy.

The decision to pursue a postgraduate degree is one not to be taken lightly – continuing with your academic study or returning to learning requires dedication, enthusiasm and the overwhelming desire to further your own, and through your study and research, the knowledge of others.

SAC is proud of its postgraduate successes. Working with the Universities of Edinburgh and Glasgow, we aim to provide taught and research opportunities designed to enable you to maximise your future employment or research choices. Our taught courses make increasing use of flexible learning technology enabling advanced study to be combined with existing personal commitment, whilst our applied research activity is internationally recognised for its innovation and contribution to the land-based sector.

I look forward to welcoming you soon to SAC.

A handwritten signature in black ink, appearing to read 'W A C McKelvey', with a horizontal line underneath.

Professor W A C McKelvey
BVMS, PhD, MRCVS, CBiol, FIBiol, FRAGs
Principal and Chief Executive

Why study at SAC?

- ❖ SAC is Scotland's specialist land-based higher education institution
- ❖ A friendly, supportive college with over 100 years of experience
- ❖ Degrees awarded by the University of Edinburgh and the University of Glasgow.
- ❖ Lecturing staff who use their industrial and research experience in their teaching
- ❖ SAC offers high quality courses designed in consultation with industry
- ❖ All SAC's postgraduate courses place a strong emphasis on developing the transferable skills and knowledge particularly valued by employers
- ❖ Award winning student Virtual Learning Environment
- ❖ Diverse student population
- ❖ SAC's postgraduate employment rate is excellent
- ❖ SAC has an enviable staff to student ratio. This ensures that teaching staff get to know you and can support you throughout your course.





Why Study a Postgraduate Qualification in Scotland?

Scotland's tradition of excellence in education is world-renowned. Four of the six oldest Universities are located in Scotland and Scottish education enjoys a reputation of unsurpassed quality throughout the world.

There are many reasons to undertake postgraduate study: whether to continue work on a subject area about which you have become passionate through undergraduate study or research, to embark on a change of direction, or to further your career opportunities.

SAC – the Scottish Agricultural College – is Scotland's specialist higher education institution for courses that relate to the existing and emerging land-based industries and pursuits, applied food, plant and animal sciences and sustainable land-use.

In addition to its role in education, SAC has an innovative and leading research and development programme and runs an international advisory and consultancy service. This all means that as a student at SAC you are taught by a team of staff including lecturers, researchers, advisers and consultants. They will provide up-to-the-minute information and insight into the commercial world beyond the College environment. We believe no other education institution can offer this combination of expertise and experience. All of our courses aim to provide you with the necessary science, business, research and personal knowledge and skills for your future success.



SAC Locations

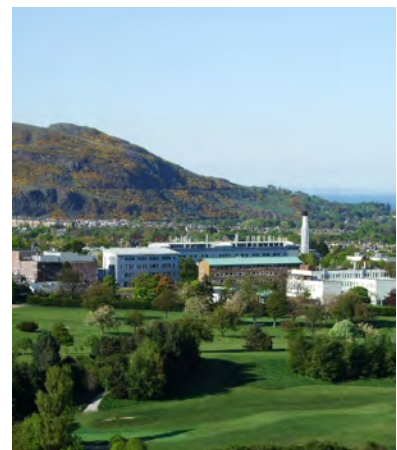
SAC has three campuses located across Scotland, in Aberdeen, Ayr, and Edinburgh.



Aberdeen



Ayr



Edinburgh

For further information please visit our web site: www.sac.ac.uk/learning/aboutcollege/campus





Resources and Facilities

As a postgraduate student at SAC you will have access to a large number of resources and facilities. It is important not to overlook the benefits of our strong community atmosphere: you have the freedom to be yourself, but with the reassurance of close staff-student links and a friendly supportive environment. For more information, visit www.sac.ac.uk/learning/aboutcollege/facilities

Libraries and Independent Learning

Each campus has a modern, well-equipped library with suitable areas for private study, student group work and IT-based learning.

The combined resources of the libraries make up a substantial collection of approximately 50,000 books and materials, in addition to more than 670 current journal titles, in both print and electronic format. The collection can be accessed using the online library catalogues, and an interlibrary loan service operates among the three campus libraries. Access to major scientific databases, including CAB Abstracts and Web of Knowledge, is available throughout each campus.

The SAC Library is a member of UK Libraries Plus, giving our distance-learning students borrowing rights at participating HE libraries. Throughout the library network, there is a strong emphasis on developing independent learning skills. Professional library staff can help you with enquiries, with introductory tours and study skills guides ensuring you can use library services and resources effectively.

Laboratories

Science courses at SAC are supported by modern, well-equipped teaching laboratories. In addition, SAC's strong research base means that you have access to specialised laboratories and equipment and the benefits of studying in a research environment.

IT Facilities

All SAC IT facilities are designed with the students' individual education requirements in mind - whether accessing their data remotely via the internet or from one of SAC's modern IT classrooms. Considerable investment is being made in this area.

Expert Teaching Staff

Staff teaching on SAC's postgraduate courses are experts in their respective fields. There is also a team of researchers and consultants who continually provide up to date knowledge to course participants through specialist lectures and tutorials.

Accommodation

Each campus has its own arrangements for accommodation. Further information can be found on our web site: www.sac.ac.uk/learning/aboutcollege/accommodation





How to Apply

For further details on how to apply for SAC's Postgraduate Courses, please refer to the individual course fact sheets. For some courses, application is made to SAC, for other courses, application should be made to our partner University.

Fees and Funding

For further information on course fees and funding available, please refer to the individual course fact sheets.

International Students







International students should also download SAC's International Student Guide which offers further information about studying at SAC, and in the UK. This can be downloaded or requested from our web site at www.sac.ac.uk/learning/prospective/international.

English Language Requirement

Please refer to the individual course information for further details. SAC prefers students to have obtained the IELTS exam, and exact requirements vary from course to course. Typically students will need to have achieved a level of IELTS 6.5 or 7.0.

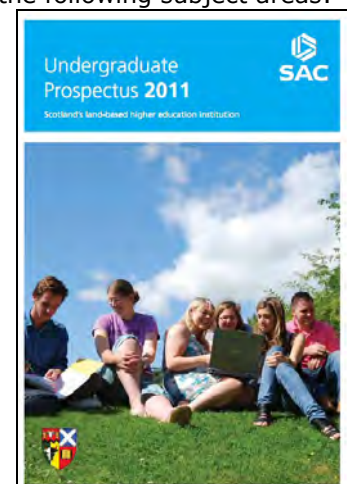
Undergraduate Courses at SAC

SAC offers a range of undergraduate courses, from degree to HND / HNC, in the following subject areas:

-  Agriculture and Poultry
-  Applied Science and Technology
-  Business Management
-  Environment and the Countryside
-  Horticulture and Garden Design
-  Sport, Tourism and Outdoor Pursuits

For further information, please contact us to request a prospectus by emailing: recruitment@sac.ac.uk

Information is also available on our web site:
www.sac.ac.uk/learning/courses





Research Opportunities at SAC

SAC is a Higher Education Institute that offers excellent opportunities for research leading to a higher degree – usually a Doctor of Philosophy (PhD).

There are a number of areas in which PG research may be possible:

- 🔍 Land Economy and Environment
- 🔍 Crop and Soil systems
- 🔍 Animal Health
- 🔍 Sustainable Livestock Systems



If you are studying full time, it is possible to achieve a PhD in 3 years. However, it is difficult to predict the progress of a research project and may take longer.



If you are interested in pursuing a research degree at SAC, you will need to provide the following information:

- 🔍 A CV, including your qualifications (for a PhD you will be expected to have an upper second class or first class honours degree).
- 🔍 Evidence of proficiency in English e.g. TOEFL at 580 (paper based), or 237 (computer based), IELTS at 6.5, or CPE
- 🔍 Proof of funding e.g. a letter from a funding agency confirming the award of a scholarship
- 🔍 Reports from two academic referees.
- 🔍 Some indication of your research interests. Ideally, students would provide a one page description of the topic they wish to pursue

For further information, please contact:

Professor Dale Walters,
Manager of Research PG Studies,
SAC Edinburgh, West Mains Road, Edinburgh EH9 3JG.

Tel: +44 (0)131 535 4020
Email: dale.walters@sac.ac.uk

More information can also be found at:
www.sac.ac.uk/research/postgraduate/degrees





Taught Postgraduate Courses at SAC

In association with its partner universities, SAC offers the following taught courses, leading to the award of Masters Degrees and Postgraduate Diplomas.

- MSc/Pg Dip Applied Animal Behaviour and Animal Welfare
- MSc/Pg Dip Applied Poultry Science
- MSc/Pg Dip Countryside Management
- MSc/Pg Dip Ecological Economics
- MSc/Pg Dip Environmental Protection and Management
- MSc/Pg Dip Food Security
- MSc/Pg Dip Organic Farming

SAC's postgraduate programmes are awarded by the Universities of Edinburgh and Glasgow.

We are proud of our close links with these universities, and students can take our postgraduate courses in the knowledge that they will graduate with a world-wide respected University Degree.



University of Glasgow



University of Edinburgh

Contact Details

For further information, please contact:
Postgraduate Student Recruitment
SAC Aberdeen
Craibstone Estate
Bucksburn
Aberdeen
AB21 9YA

Phone: +44(0)1224 711189

Fax: +44(0)1224 711273

*Faxes should be marked for the attention of
Postgraduate Student Recruitment*

Email: aberdeen@sac.ac.uk

Useful Web Sites

SAC
The University of Glasgow
The University of Edinburgh
Careers Advice
British Council
UKCISA

www.sac.ac.uk/learning/courses

www.gla.ac.uk

www.ed.ac.uk

nextstep.direct.gov.uk

www.britishcouncil.org

www.ukcisa.org.uk





**Applied
Animal
Behaviour
and
Animal
Welfare**



Applied Animal Behaviour and Animal Welfare



Awards Available: MSc / PG Dip
Awarding University: The University of Edinburgh
Mode of study available: Full Time / Part Time
Start Dates: September



Course Overview

This course aims to enhance the knowledge and understanding of the scientific study of animal behaviour and animal welfare that can be applied effectively in science and practice.

This course is run in conjunction with The Dick Vet, which has an impressive international reputation in Animal Welfare. This creates a solid platform for education and research opportunities.

At the end of the course, graduates will be able to:

- ▶ have an increased understanding and awareness of the application of scientific principles to the study of animal behaviour and welfare, using farm animals;
- ▶ the ability to utilise effective, modern methods for describing and analysing scientific data;
- ▶ the ability to assess the welfare of animals in captivity and in the natural environment;
- ▶ the skills (dependent on practical experience) to be able to offer advice on applied animal behaviour and animal welfare issues;
- ▶ the capacity for considering philosophical debate relating to the use of animals by humans;
- ▶ awareness of the global issues that have an impact on animal welfare.

Almost 100% of the teaching is done at the Easter Bush Veterinary Centre (EBVC), which is situated 10km south of the city centre.





Modules and Descriptors

Introduction to Applied Animal Behaviour and Animal Welfare

This module will introduce the concept of Tinbergen's "4 whys" and will then demonstrate how the study of behaviour can be applied to animal welfare. The module will also provide an understanding of the application of behaviour to common practical problems. The second part of this module will give the basis of current issues relating to animal welfare. The development of UK/EU animal welfare legislation will be put in a global context. Animal welfare will be discussed from an economics perspective and in the context of global trade issues. Emerging issues will also be tackled.

Biology of Suffering

The importance of an understanding of the principles of endocrinology and neuroscience will be highlighted in relation to behaviour. Students will be made aware of the impact of genes, genetics and breeding on behaviour expression. In addition an understanding of how the environment, as well as experience may affect behavioural biology will be discussed, so that an understanding of how different biological factors integrate to produce behaviour is formed. Students will learn what is meant by stress and the relationship between stress and animal welfare. Attention will be given to physiological and behavioural responses to a range of stressors, pain in particular. The module will discuss the scientific measurement of these responses and how they can be used in animal welfare assessment.

Animal Cognition and Consciousness

Motivation, learning and cognition are all fields that provide an underpinning to the study of animal behaviour and animal welfare. The students will be presented with the scientific basis of these areas, with particular reference to animal welfare. This module will also focus on historical and current interpretations of the concept of animal consciousness as well as on experimental approaches to the study of animal consciousness. Implications of the study of animal consciousness for models of animal welfare will be studied as well as basic principles of the moral evaluation of animal use.

Scientific Methodology

Topics include: scientific methodology, experimentation, use of Minitab, data summary and distribution and both parametric and non-parametric statistical methods. At the end of this module, students will be able to apply scientific and statistical methods to actual research projects. Students will also be able to discuss reasonably complex statistical issues with a statistician. Attention will also be given to communication skills (oral and written).

Farm and Laboratory Animal Welfare

Topics covered in relation to farm animal welfare are: animal production and economics; legislation; welfare issues; welfare assessment and quality assurance schemes; environment and housing; health; management; breeding; genetics; behaviour; transport; handling; markets; slaughter; cattle, sheep, pigs and poultry. This module will also discuss the uses of animals in the laboratory and the associated benefits, animal welfare costs and ethical dilemmas. Students will learn how to use reference materials critically and construct a concise, logical and balanced argument. Students will be given the opportunity to practice debating controversial issues in laboratory animal science and in expressing coherent opinions and appreciating diverse points of view. An overview of laboratory animal welfare related organisations, publications, qualifications and careers will be given.

Companion, Zoo and Wild Animal Welfare

The following topics will be covered in this module: Effects of environmental experience and the human-animal bond on behaviour and welfare, effects of selective breeding on physiology and behaviour, clinical causes of behaviour problems, methods involved in behaviour therapy, training and welfare of human assistance animals, national and global welfare issues. Companion animals include dogs, cats, horses, small mammals and exotic species commonly kept as pets. This module also provides an overview of the interacting ethical, welfare and conservation issues of topical interest in the management of wildlife. A key theme relates to the dilemmas that can arise from conflicting concerns for individual animal welfare and the conservation of species, populations or communities. The lecture material addresses topics from a wide range of disciplines (e.g. conservation biology, population biology, veterinary medicine, economics) which aims to provide the student with a context for evaluating welfare and conservation priorities.





Methods and Delivery

The taught part of the MSc consists of 6 modules taught over 3 blocks of 5 weeks plus a research project for award of the MSc. Each module contains a mixture of lectures, seminars, practical and visits. Students will also be expected to spend a large proportion of time in 'out of class' study.

Entry Qualifications

A good honours degree (first or 2:1), or equivalent in Animal Science, Biology, Psychology, Zoology or Veterinary Science. Evidence of proficiency in English must be provided by those for whom English is not their first language (IELTS 6.5 or equivalent).

Application Details

Applications for this course should be made on-line at through the University of Edinburgh at:
www.ed.ac.uk/studying/postgraduate/applying

For each coming academic year, applications are reviewed from January through to mid July. Please note that this course can take a maximum of 25 students and is often oversubscribed therefore you may find yourself on a reserve list for the following year.

Fees and Funding (2011-12)

UK and EU students	£5300
Overseas students	£16050
Additional course costs (all students)	£1600

Information on funding and possible studentships can be found on the web site:
www.ed.ac.uk/studying/postgraduate/fees-finance

Career Opportunities

On the completion of this course, many students will continue to study for a PhD, become research assistants, work for the government or welfare charities, become a lecturer or set up their own business.

Course Contact Details

For further information, please contact:
Dr Christine Moinard, MSc Course Director
Tel: 0131 535 3214
Email: Christine.Moinard@sac.ac.uk



www.link.vet.ed.ac.uk/animalbehaviour/index.htm



www.sac.ac.uk/learning/courses/postgraduatetaught/mscanimal





Applied Poultry Science





Applied Poultry Science



Awards Available: MSc / PG Dip / PG Cert
Modules for CPD
Awarding University: The University of Glasgow
Mode of study available: Distance Learning
Start Dates: September

Course Overview

In the absence of subsidy, the EU poultry sector relies on highly efficient production systems, with successful companies often using sophisticated technologies. This is reflected in the integrated structure of most poultry companies and the number of graduates and postgraduates employed by them. Many companies have responded to the pressure on financial margins by setting up operations world wide. There continues to be a good demand for suitably trained graduate and postgraduate level entrants into the sector. The skills and knowledge delivered by the Applied Poultry Science programme are highly relevant to companies using intensive methods of production and those responding to retailer demand for extensive systems. This enables both new entrants and existing employees wishing to build on their expertise and aspirations, to enhance their career opportunities within the poultry sector.

The Applied Poultry Science course is offered on a part-time distance learning basis. It is designed to suit those in continuing employment or with other commitments. Participants come from a wide range of backgrounds, including nutritionists, breeders, vets and other poultry sector workers, all of whom wish to develop their career and businesses.

Specific course objectives are to provide graduates with:

-  A sound knowledge of the underlying science of poultry production.
-  A good understanding of the issues underpinning poultry production systems.
-  A wide range of specialist skills appropriate to poultry science professionals.
-  The ability to critically evaluate developments in poultry science, including nutritional, genetic, welfare, quality assurance and environmental issues.
-  The ability to produce professional level recommendations and reports.
-  Research skills (MSc only).





Modules and Descriptors

The programme is a mix of technical, scientific, environmental and management skill development modules. It is taught largely by staff from the SAC Avian Science Research Centre who are involved in poultry research studies on a daily basis and who aim to provide up to the minute, highly relevant knowledge transfer into the Applied Poultry Science programme.

The Avian Science Research Centre has a full range of facilities for those wishing to study or carry out research with SAC ranging from a hatchery to a processing plant and a good range of different poultry production systems.



Further details of the staff involved in programme delivery can be found at:
www.sac.ac.uk/research/centres/avianresearch/team

Poultry Production Systems

This module studies the poultry meat and poultry egg industry in terms of its structure and sectors including intensive and non-intensive systems. It includes global export and import markets for the major poultry meat and egg products and evaluates their quality assurance systems. It will examine the requirements for optimal performance within the various systems and investigate factors affecting performance.

Poultry Nutrition and Growth

Poultry nutrition and growth examines the principles of poultry nutrition, particularly the importance of different nutrients in terms of growth and production and how they are processed in the avian body. It includes a study of the major anatomical and physiological systems in poultry and describes the role of nutrition in poultry health in different production environments, with particular regard to nutrient deficiencies. The partitioning of energy and nutrients into the growth and development of the whole body and different components of the body will also be examined, as will methods of describing different growth patterns.

Incubation and Hatchery Practice

This module develops knowledge and an understanding of the science and technology that underpins the production of day-old stock. Students study embryo-genesis in poultry and how this is exploited by the poultry sector to maximise the production of viable hatchlings. At the conclusion of the module students will be able to critically evaluate poultry hatchery practices, where appropriate, from an international perspective.





Housing and the Environment

Large scale poultry production seeks to manage the birds' environment to optimise the competing demands of welfare, productivity, quality and environmental protection in an economically viable way. Recognising the impacts of different housing alternatives, the relationship to environmental emissions, and the sustainability of systems are therefore essential skills for those engaged in the industry that this module addresses. The approach will initially be one of directed study in order that the full range of issues are covered; but later in the module, students will be asked to do a case study on a real poultry enterprise with the coursework being centred on the completion of the IPPC application form for an intensive poultry enterprise. Even though some students may not be familiar with large scale poultry enterprises, the structured approach required to carry out the IPPC assessment process, and the wealth of information available in the relevant technical document will give a sound basis for understanding the range of housing and environmental issues involved.

Poultry Behaviour and Welfare

This module explains the general principles of poultry behaviour and welfare and studies sensory perception, motivation and learning in poultry. It evaluates the behavioural and physiological indicators that are used to assess welfare in given circumstances. It examines current practice with respect to welfare and current welfare legislation.

Poultry Health and Hygiene

A range of different infectious and non-infectious diseases will be covered in depth, mostly affecting chickens and turkeys but with specific sessions on diseases of game birds and diseases of pigeons. The importance of notifiable diseases such as Newcastle Disease and highly pathogenic avian influenza will be emphasised, and the significance of other potentially zoonotic organisms such as Salmonella, Campylobacter, Chlamydia Psittaci and West Nile Virus will be discussed.

Advanced Poultry Nutrition

Advanced poultry nutrition builds on the poultry nutrition and growth module and examines theoretical and practical poultry nutrition in greater depth. It links current nutritional theories, (eg. amino acid balance and requirements or the anti-nutrient and toxic properties of feedstuffs) with methods of alleviation. These are integrated with classical nutrition-balance studies and proximate analyses, exposing students to all aspects of a nutritional study. It also involves a detailed study of nutrition with respect to bird growth and health and the environmental constraints imposed on the system.

Experimental Design

This module aims to develop statistical skills to aid the technical, scientific and management decisions. It explores a range of statistical processes from the collection of data and its interpretation to the production of information charts, diagrams and tables and the analysis of data looking at differences, significance and trends.

Management Skills

With the labour market becoming more competitive there is a real need for today's graduates to develop skills beyond academic knowledge in order to thrive. This module introduces various management skills which include communication, teamworking, leadership, time management, decision-making, empowerment and motivation. It aims therefore to improve the student's knowledge and ability to manage. A range of practical methods and approaches will be used to enable the students to better organise and motivate themselves and others.

MSc Project (taken following successful completion of taught modules)

The project provides an opportunity for in-depth individual research on a topic related to poultry science.





Time Commitment

The PgDip is a high level learning course taught at university post-graduate level. Students are required to complete all taught modules detailed above. Typically a student will study 4 modules per year and complete the PgDip in two years. This would normally take an average of 12 to 15 hours study time a week during 'term' time. The time taken to complete the study is flexible but must be completed in 5 years.

Students wishing to complete the MSc will then go on to complete a research project following successful completion of all the taught modules.

Students may graduate with a PgCert on completion of four modules (Experimental design and Management skill count as one module for these purposes).

Modules may also be studied individually for general interest or for CPD purposes.

Methods and Delivery

Our Applied Poultry Science programme is studied by part-time distance learning. The learning material is presented on-line using SAC's web learning environment, allowing students to undertake the course from their own home or workplace. Chat and threaded discussion facilities are used, as well as static and other interactive programme learning material. Other on-line communication media, such as Learnlinc and Flashmeeting are also used for tutorial and presentation purposes. Guidance is provided to students on home computer requirements to successfully undertake the course.

Every term there is one weekend school where students come to SAC Ayr for seminars, practical sessions and farm visits.

Entry Qualifications

The normal entry for the PG Diploma is a degree in a science or technology relevant to the sector, however acceptance onto the programme is essentially based on an assessment of candidate's ability to benefit from the studies. While an adequate indication of ability to carry out academic study is essential, no absolute academic prerequisites are laid down. Applications from mature candidates with extensive work experience are particularly welcome.

The course is taught in English and students for whom it is not their first language must have achieved a minimum score of IELTS 6.5 or equivalent recognised English language qualification.





Application Details

All students should send a completed SAC postgraduate application form to:
The Postgraduate Admissions Office, SAC Aberdeen, Craibstone Estate, Bucksburn, Aberdeen, AB21 9YA.

Please consult the SAC website or postgraduate prospectus for further details.











Fees and Funding (2010-11)

For UK and EU students, fees for 2010-11 are £1,950 per year for the PgDip, payable in instalments if you wish. The PgDip which runs over 2 years will cost £3,900 in total. The fee for the MSc year (year 3 of the programme) is £875 for 2010-11. A small increase in fees is likely for 2011-12.

For information on fees for non-EU students, please contact Dr Jill Offer or visit:
www.sac.ac.uk/learning/prospective/tuitionfees/

Career Opportunities

In recent years over 90% of graduates have found relevant employment before or soon after graduating. Career choices have included:

-  Management position in a breeding company
-  Management trainee in a production company
-  Lecturer
-  Government Inspector
-  Researcher
-  Development Officer
-  Farmer
-  Consultant
-  Poultry Veterinarian
-  Farm Manager

Student Profiles

"Distance learning gave me an opportunity to gain a post graduate qualification by fitting in my studying around a full time job and family demands. I found the part-time, distance aspect of learning suitable to all with busy lives and those who missed the opportunity in early life. The flexibility of the course and support from the college gave me a chance to successfully complete the course at my pace and convenience while meeting family and full time work demands. My job requires weekly travel and sometimes living away from home and so I could not attend lessons. I found distance learning the only way to further my studies. The defining feature of studying at a distance was that I did not need to attend live classes it also saved me from expenses associated with full board/studentship.

I found this course to be highly well designed and the syllabus/modules are wide enough to cover many aspects of avian sciences. The course is applied and does not only focus on production, health and epidemiology but research and quality matters too. I will not hesitate to recommend this course to prospective students especially international students."

Shepherd Mudpudzi





"I found the distance learning MSc a very rewarding experience and there was always someone I could telephone or email if I required any help or advice. The work requires dedication but the benefits gained in terms of knowledge and learning made this one of my best ever decisions. The subject material is excellent and always relevant to the poultry industry. Students completing the MSc will find themselves well equipped for a future within this diverse industry."

David Harrower

Course Contact Details

For further information, please contact:
Dr Jill Offer, Programme Leader
Tel: 01292 525101
Email: jill.offer@sac.ac.uk

www.sac.ac.uk/learning/courses/postgraduatetaught/mscpoultry





Countryside Management





Countryside Management

Awards Available:	MSc / PG Dip
Awarding University:	The University of Glasgow
Mode of study available:	Distance Learning
Start Dates:	September

Course Overview

The factors affecting the wider environment are constantly increasing and range from agriculture and forestry to recreation, urban development and population growth. These in turn have knock-on effects such as climate change, water and food shortages, habitat and species loss and the impact of non-native species. One of the areas where these factors come together is in the field of countryside management where the public use of the countryside interacts with professional land managers and can result in conflict.

In the context of this programme and the degree programme from which it has developed the term countryside management encompasses a broad range of topics and land uses ranging from conservation management to rural land use planning and interpretation to land use history. Students are expected to have a broad knowledge of how the countryside that we see around us has developed in a historical context and how this relates to factors such as climate, ecology and soils. This in turn helps to determine current land use practice whether it be for agriculture or forestry, conservation management or recreation. Inevitably these land uses are interlinked in complex ways and the countryside manager is expected to be able to identify the potential conflicts and to arrive at appropriate management options. Of course there is rarely a simple answer in such situations and the resulting decisions have to be based on an understanding of the competing claims and an awareness of how to work with individuals, interest groups and communities to ensure that stakeholders' views have been taken into account.

Specific course objectives are to provide graduates with:

- the ability to critically appraise all elements of countryside management
- the ability to arrive at evidence-based decisions
- a sound knowledge of the science and sociology of countryside management
- the opportunity to develop skills in selected areas through a problem-solving approach using case studies
- well developed personal skills (management, computer, communication, etc.)
- Research skills (MSc only)

The course is accessible through its delivery by part-time on-line distance learning.





Modules and Descriptors

There are eight taught modules providing for the development of a range of technical, practical and professional skills. A study week is also used to deliver some of the practical aspects of the course. In the modules an element of student choice is often built in through the use of essay and other course work topics that cover areas of potential interest. The modules will be of value individually to those in employment who are looking for Continuing Professional Development.

Taught modules are:

Planning and the Legal Framework

This module will provide a background to the legislation and policy framework within which the countryside is managed. This will include planning, biodiversity and landscape and will focus on the role of EIA and SEA. The planning system is prone to conflicts between interest groups and students will look at case studies that highlight some of the main issues that arise.

Habitat and Species Management

Habitats and species have been the subject of management for centuries but only comparatively recently has there been a focus on their management for conservation reasons. In practice species management relies on appropriate habitat management although there are times when more specific prescriptions are appropriate.

This module will look at management through a number of case studies which will be examined in detail. The case studies will include both desk studies and field visits and students will be encouraged to research appropriate examples in their own areas.

Visitor Management

Visitor management is a crucial part of countryside management and should be integrated into area and site management plans. An understanding of visitor management and the opportunities for education, interpretation and marketing, is a requirement for senior countryside managers. Students will look at the full range of visitor management issues from visitor profiles and motivations to site design and the impacts on wildlife and the wider environment.

Species Identification and Familiarity

The ability to accurately identify a range of species is crucial to aid in species conservation and to properly evaluate an area for its biodiversity. Central to species identification is the use of field keys and identification guides. This course will be based around a week long, intensive series of practical and laboratory based sessions to provide participants with the necessary skills to implement habitat and species survey techniques. Training in computer recording packages will also be provided to ensure best practice in species recording is maintained.

Project Management for Countryside Professionals

Countryside Managers need to be able to effectively manage their own as well as the work of others. The skills of project planning/reporting/acquisition of funding and the proper upkeep of work related files and paperwork is fundamental to effective management. A strong component of this module will also involve the development of team management skills as well as health and safety awareness.





Integrated Planning Management

Multifunctional land use is a well recognised term. It is part of the planning system at differing scales and with multi-partnership and stakeholder involvement. The module will define both the industry organisations commonly involved in multifunctional land use planning and the other likely stakeholders. The land use changes proposed will take account of the historical and cultural aspects of the landscape.

Integrated planning management is undertaken at different scales ranging from individual project management plans and environmental statements to strategic planning at regional, national or European level. The module will look at how the production of these plans and strategies might be expected to integrate with other planning policy and legislation.

Integrated management systems are collective 'tools' which can range from feasibility stage to exit strategies and work on different scales of multi-functional land use. The module will look at some methods in use which utilise GIS and planning software systems commonly used in the industry.

Production and Implementation of Management Plans

The requirement for management plans is well recognised although such plans often reflect particular interests and are frequently not fully implemented and monitored.

Good forward planning is essential for coherent, coordinated management which is most likely to maximise the continuity of management on a site. However a good plan depends on a thorough understanding of the site, its features (including biodiversity, landscape, heritage, geodiversity and recreation), the national and organisation policy framework and the views of the stakeholders who know and use the site. Gathering this information is time consuming and if it truly reflects this range of interests it might mean that the site manager has to modify their objectives and management practices.

A management plan should obviously provide a template for the activities that take place but it should deliver more than that. If well prepared then it forms the basis for future work plans, provides a forward budget for the site and can generate annual and longer term reports on progress since it includes milestones against which such reports can be measured.

For many site managers a management plan is a chore that is carried out every five or 10 years. However the writing of a plan is merely the first part of a process that has no end. The plan is never final, it is always subject to modification as circumstances change, the prescriptions and project need to be actioned and reported on and they will in turn help to inform future management and plans.

Species and Habitat Evaluation Techniques

Survey, surveillance and monitoring techniques for a range of species and habitats of conservation interest are fundamental to the correct management of any population, community or habitat. With the focus on conservation management planning and with environmental awareness increasingly at the heart of the planning system, the ability to accurately identify a range of terrestrial and aquatic species and habitats, using both statutory and industry best practice guidance, is central to both good species and habitat management, as well as ensuring due diligence in ecological assessment work on behalf of developers and planners. Part of the module will require participants to deliver a survey to a professional standard for a wildlife related organisation. This module will build on the identification skills learnt as part of the first year Module - Species Identification and Familiarity

MSc Project (taken following successful completion of taught modules)

Provides an opportunity for in-depth individual research on a topic related to countryside management.





Methods and Delivery

This course is studied part time through on-line distance learning. This allows those in continuing employment or with family commitments to participate. With the exception of several weekend schools and a short study tour, the learning is carried out in the student's own home or workplace.

The learning material is presented using SAC's Moodle web learning environment. Moodle utilises threaded discussion facilities as well as static and interactive learning programmes. Other on-line communication media are used for tutorial support.

Once every term students attend a weekend school at SAC Ayr for seminars, tutorials, briefing sessions and farm visits and there is a one week field trip in each of the first two years.

The PGDip is assessed by a combination of module examination and coursework. Coursework takes the form of essays, case study reports, poster preparations, etc. The high emphasis on coursework for assessment reflects the vocational nature of the programme and encourages full development of integrative, analytical and inter-personal skills.

The MSc is assessed through submission of a project dissertation.

Entry Qualifications

The normal entry requirement for the PG Diploma is a degree in a relevant subject such as ecology or geography, or other science or technology subject relevant to the sector.

However, acceptance onto the programme is essentially based on an assessment of candidate's ability to benefit from studies. While an adequate indication of ability to carry out academic study is essential, no absolute academic prerequisites are laid down.

Applications from mature students with extensive work experience are particularly welcome. The course is taught in English and students for whom it is not their first language must have achieved a minimum score of IELTS 6.5 or equivalent recognised English language qualification.

Application Details

All students should send a completed SAC postgraduate application form to:
The Postgraduate Admissions Office, SAC Aberdeen, Craibstone Estate, Bucksburn, Aberdeen, AB21 9YA.

Please consult the SAC website or postgraduate prospectus for further details.

Fees and Funding (2010-11)

For UK and EU students, fees for 2010-11 are £1,950 per year for the PgDip, payable in instalments if you wish. The PgDip which runs over 2 years will cost £3,900 in total. The fee for the MSc year (year 3 of the programme) is £875 for 2010-11. A small increase in fees is likely for 2011-12.

For information on fees for non-EU students, please contact Dr Norman Stephen or visit:
www.sac.ac.uk/learning/prospective/tuitionfees/





Career Opportunities

In recent years over 90% of SAC graduates have found relevant employment before or soon after graduating. Career choices have included:

-  Project Manager
-  Countryside Manager
-  Countryside Ranger
-  Wildlife Manager
-  Conservation Advisor
-  Recreation Manager

Course Contact Details

For further information, please contact:

Mr Kev Theaker, Programme Leader

Tel: 01292 525298

Email: kev.theaker@sac.ac.uk

www.sac.ac.uk/learning/courses/postgraduatetaught/msccountryside





Ecological Economics





Ecological Economics

Awards Available:	MSc / PG Dip
Awarding University:	The University of Edinburgh
Mode of study available:	Full Time / Part Time
Start Dates:	September

Course Overview

This course links both the theory and practice of economics with that of natural ecosystems. The programme aims to give students the opportunity to learn about the role that economics can play in the design and implementation of sustainable policies for ecosystem management.

On completion of this course, students will gain:

- an understanding of the multi-dimensional nature of the environmental problems
- an appreciation of the interaction between ecology and economics
- the means to develop expertise in the design and implementation of sustainable environmental policies
- enhanced skills in specialist topics

Programme Structure

The MSc consists of 6 taught modules, followed by a period of dissertation project work. The study tour, which takes place in Spring, is also an integral part of the programme.

Two modules are compulsory:

Foundations in Ecological Economics

The aim of this module is to provide a theoretical grounding in economics from first principles, therein exploring the fundamental principles of efficiency in the distribution of resources in society. Virtually all decision-making in the socio-environmental domain is affected by these principles. The module covers not only conventional (neo-classical) economics but also criticisms of this dominant paradigm. In order to criticise, it is first important to understand: this module provides a conceptual understanding of economics and uses case studies to discuss applications in practice. No prior knowledge of economics is assumed.

Applications in Ecological Economics

The module is presented in four interlinked sections. 1) an introduction to the development and ideology of ecological economics 2) using modelling to analyse real world problems 3) sustainability and environmental valuation - how we achieve it and how we measure our achievement 4) case studies in ecological economics. The module aims to examine the links between economic and ecological systems in order to enhance economic and environmental policy; apply the economic tools and approaches to solve real world environmental problems; examine alternative approaches to the traditional neo-classical economic view of human interaction with the environment.





A further four modules are chosen from a range of options:

- 🔗 Project Appraisal
- 🔗 Environmental Impact Assessment
- 🔗 Culture, Ethics and Environment
- 🔗 Principles of Environmental Sustainability
- 🔗 Management of Sustainable Development
- 🔗 Environment and Development
- 🔗 International Development
- 🔗 Society and Development
- 🔗 Recent Global Environmental Change
- 🔗 Atmospheric Quality and Global Change
- 🔗 Principles of GIS
- 🔗 Water Resource Management
- 🔗 Waste Reduction and Recycling
- 🔗 Participation in Policy and Planning
- 🔗 Land Use/Environment Interactions
- 🔗 Rural Development

The above modules are delivered by a range of departments across the University of Edinburgh and SAC including The Centre for Environmental Change and Sustainability, the College of Humanities & Social Science, and the College of Science and Engineering.



Study Tour

A compulsory part of the Programme is the MSc study tour which normally takes place in April or May. The objectives of this study tour are:

- 🔗 to see conflict between ecosystem conservation and human development needs on the ground;
- 🔗 to discuss with local stakeholders why these conflicts have arisen and persisted;
- 🔗 to appraise the policy instruments and institutional structures that are in place/could be put in place to resolve these conflicts;
- 🔗 to link this appraisal with ecological economics theory.

In previous years the study tour has been in Wales, Greece, Morocco and lately to Kenya.

Methods and Delivery

The taught component of each course, leading to the Postgraduate Diploma, comprises 6 modules studied over a period of 9 months, starting in October. Each course is made up of core modules, together with recommended and elective modules chosen with the approval of the Director of the programme.

Students progressing to the MSc will undertake a further 3 month period of directed study leading to the production of a dissertation in late September. Each module will be assessed by a combination of course work and examination. The examination paper will take place at the end of each module. An oral examination may also be given. Each student will also be assessed on the written dissertation.





Entry Qualifications and Applications

Preferably a UK 2:1 honours degree, or its equivalent if outside the UK, or an equivalent qualification in any subject. Applicants holding a UK 2:2 honours degree, or its equivalent from outside the UK, may also be considered. Since there is an explicit ethicosocial element to the programme, students from a humanities or arts background are equally likely to gain entry as those from an economics, life sciences or engineering background. Students whose first language is not English must provide evidence of proficiency in English (IELTS 6.5 or equivalent).

Applications for this course should be made on-line through the University of Edinburgh at www.ed.ac.uk/studying/postgraduate/applying

Fees and Funding (2011-12)

UK and EU students	£5300
Overseas students	£16050
Additional course costs (all students)	£1600 (includes the 'Study Tour' cost)

Information on funding and possible studentships can be found on the web site: www.ed.ac.uk/studying/postgraduate/fees-finance

Career Opportunities

The programme has an excellent track record in terms of graduate employment. Economic principles of efficiency and cost-effectiveness are pervasive in decision-making and thus students with a postgraduate training in their application are sought after in the recruitment market.

Former students are working in a variety of fields such as environmental consultancies (e.g. Jacobs, ERM), international and governmental agencies (e.g. UNEP, World Agroforestry Centre), Non-Governmental Organisations (e.g. Friends of the Earth), Governmental Organisations (e.g. Canadian Environment Ministry, Scottish Executive), private sector financial institutions (e.g. AMP Capital Investors sustainable funds team, Swiss Re Insurance), private multinationals (e.g. BP, AngloGold), and environmental education and research.

Approximately 25% students go on to doctoral research programmes. The student's choice of course options and (in particular) the dissertation segment can be tailored toward their chosen career path.

Contact Details

For further information please contact:

Frances Stratford (Programme Administrator), SAC Edinburgh, West Mains Road, Edinburgh EH9 3JG
Tel: +44 (0)131 535 4198 Email: frances.stratford@sac.ac.uk



www.ed.ac.uk/schools-departments/geosciences/postgraduate/masters-programme/taught-masters/ecological-economics



www.sac.ac.uk/learning/courses/postgraduatetaught/mscecon





Environmental Protection and Management



Environmental Protection and Management



Awards Available:	MSc / PG Dip
Awarding University:	The University of Edinburgh
Mode of study available:	Full Time / Part Time
Start Dates:	September

Course Overview

This programme aims to provide both an understanding of the processes that give rise to environmental degradation and pollution problems, and a capability in management of natural resources. Climate change is a particularly important threat, and is an issue that is dealt with in-depth in a number of the course modules.

Graduates will become equipped to devise and enact strategies to protect and conserve environments that face a wide range of threats.

On completion of the course, students will

- develop a scientific understanding of some of the major processes which influence the quality of land, air and water resources;
- acquire knowledge of the most effective methods of environmental protection;
- develop expertise in the design and implementation of programmes of environmental protection;
- have the opportunity to study the integrated protection and management of particular ecosystems or resources.

Programme Structure

The MSc consists of 6 taught modules, followed by a period of dissertation project work. The study tour, which takes place in Spring, is also an integral part of the programme.

Two modules are compulsory:

Atmospheric Quality and Global Change

The module covers air chemistry, pollution, renewable energy, global change and impacts on marine and biological systems, transport and planning.

Land Use / Environmental Interactions

The module examines the effects of land use on water quality and wildlife, and covers pesticide management, catchment management, pollution control, acidification, and a variety of land uses.

A further four modules are chosen from a range of options (continued over):

- Waste Reduction and Recycling
- Water Resource Management
- Soil Protection and Management
- Environmental Impact Assessment
- Management of Sustainable Development
- Applications in Ecological Economics





- 🔗 Environmental Ethics
- 🔗 Conservation and use of Forest Resources
- 🔗 Forests and Environment
- 🔗 Foundations in Ecological Economics
- 🔗 Geographic Information Systems
- 🔗 Participation in Policy and Planning
- 🔗 Project Appraisal
- 🔗 Vegetation Management

The above modules are delivered by a range of departments across the University of Edinburgh and SAC including The Centre for Environmental Change and Sustainability, the College of Humanities & Social Science, and the College of Science and Engineering.



Study Tour

A field tour of about two weeks will be an integral part of the study programme. Recent study tours have been to France and Morocco. There is also usually a short pre-course tour and, by agreement, a dissertation write-up retreat, in late July.

Methods and Delivery

The taught component of each course, leading to the Postgraduate Diploma, comprises 6 modules studied over a period of 9 months, starting in October. Each course is made up of core modules, together with recommended and elective modules chosen with the approval of the Director of the programme.

Students progressing to the MSc will undertake a further 3 month period of directed study leading to the production of a dissertation in late September. Each module will be assessed by a combination of course work and examination. The examination paper will take place at the end of each module. An oral examination may also be given. Each student will also be assessed on the written dissertation.

Entry Qualifications and Applications

The course will be particularly attractive to:

- 🔗 graduates in natural sciences who wish to work in fields relating to environmental protection;
- 🔗 students from disciplines such as ecology, agriculture, forestry and related disciplines who are keen to understand the scientific basis of environmental management;
- 🔗 students from developing countries as well as from advanced economies.

Preferably a UK 2:1 honours degree, or its equivalent if outside of the UK, in a biological, environmental or physical science, geography, engineering, economics or other relevant subject. Applicants holding a UK 2:2 honours degree, or its equivalent from outside the UK, may also be considered. Students whose first language is not English must provide evidence of proficiency in English (IELTS 6.5 or equivalent).

Applications for this course should be made on-line through the University of Edinburgh at www.ed.ac.uk/studying/postgraduate/applying





Fees and Funding (2011-12)

UK and EU students	£5300
Overseas students	£16050
Additional course costs (all students)	£1600 (includes the 'Study Tour' cost)

Information on funding and possible studentships can be found on the web site:
www.ed.ac.uk/studying/postgraduate/fees-finance

Contact Details

For further information please contact:

Frances Stratford (Programme Administrator), SAC Edinburgh, West Mains Road, Edinburgh EH9 3JG
Tel: +44 (0)131 535 4198 Email: frances.stratford@sac.ac.uk

-  **www.ed.ac.uk/schools-departments/geosciences/postgraduate/masters-programme/taught-masters/environment-protection**
-  **www.sac.ac.uk/learning/courses/postgraduatetaught/mscenv**





Food Security





Food Security

Awards Available:	MSc / PG Dip
Awarding University:	The University of Edinburgh
Mode of study available:	Full Time / Part Time
Start Date:	September

Course Overview

Food security has become a critically important issue for societies around the globe. It concerns not only food production systems and supply chains but also development issues such as land tenure, patterns of inequality, and the exchange value of commodities.

The programme aims to provide a broad understanding of the agronomic, environmental, economic and socio-political factors which affect, and are affected, by food security.

Population demographics, projected changes in diet, trade liberalisation, an increased focus on conservation, technological innovations including GM crops, the impacts of climate change and adaptation strategies applied as a response to climate change resource limitations (particularly in terms of energy, water and nutrients) are interactions critical to the development of appropriate strategies for food security.

On completion of this course, students will:

- gain an understanding of the global context of food security including its political, economic, social and environmental components
- be able to identify the main trade-offs that might exist between food security and other goals
- be able to carry out independent research (either practical or desk-based) and produce reports of the research in a number of different formats (both written and verbal)
- have expertise in at least one specialist area (such as modelling or food supply chain analysis)
- be equipped with the necessary analytical and communication skills the students will be able to contribute to humanity's efforts to achieve and sustain food security during the 21st century.

Programme Structure

This MSc programme consists of 6 taught courses, followed by a period of dissertation project work. The study tour, which takes place in the Spring, is also an integral part of the programme.

Two courses are compulsory:

Frameworks to assessing food security

The aim of this course is to introduce students to the global context for food security including; population demographics and food demand, supply, trade and distribution issues, climate and environmental factors, economics and technology and production trends. Integrative methods for system analysis will be introduced.

Sustainability of food production

The course will focus on conflicts and trade-off among the objectives that are required of food systems. Using health and welfare as central concepts, the course will examine what is required for a healthy environment (including specific resources such as soil), human health and welfare, healthy crops and livestock and the extent to which attempting to maximise any one of these may (or not) lead to conflicts with others.





A further three courses are chosen from a range of option including:

- Atmospheric Quality and Global Change
- Land Use / Environmental Interactions
- Waste Reduction and Recycling
- Water Resource Management
- Soil Protection and Management
- Environmental Impact Assessment
- Management of Sustainable Development
- Applications in Ecological Economics
- Environmental Ethics
- Foundations in Ecological Economics
- Geographical Information Systems
- Project Appraisal
- Interrelationships in Food Security (a new course see below for a description)

Interrelationships in food security

The course will introduce sustainability and resilience as formal system properties together with methods for their analysis. Empirical components of sustainable food production will be studied by examining relationships between non-renewable resource use and food production, energy balances and carbon footprints.

The above courses are delivered by a range of departments across the University of Edinburgh and SAC including The Centre for Environmental Change and Sustainability, the College of Humanities & Social Science, and the College of Science and Engineering.

Study Tour

A compulsory part of the Programme is the MSc study tour which normally takes place in April or May. The objectives of this study tour are to refresh the skills, tools and techniques that are likely to be useful during the dissertation process.

Possible destinations include France, Italy, Morocco and Kenya.

Methods and Delivery

The taught component, leading to the Postgraduate Diploma, comprises 6 courses studied over a period of 9 months, starting in September. The MSc Programme is made up of core courses, together with recommended and elective courses chosen with the approval of the Director of the programme.

Students progressing to the MSc will undertake a further 3 month period of directed study leading to the production of a dissertation in late August. Each course will be assessed by a combination of course work and examination. The examination paper will take place at the end of each course. An oral examination may also be given. Each student will also be assessed on the written dissertation.





Entry Qualifications and Applications

Preferably a UK 2:1 honours degree, or its international equivalent, in a agricultural, ecological, biological or environmental science, engineering, social science, economics, politics or other relevant subject. Applicants holding a UK 2:2 honours degree, or its equivalent from outside the UK, may also be considered. Students whose first language is not English must provide evidence of proficiency in English (IELTS 6.5 or equivalent).

Applications for this course should be made on-line through the University of Edinburgh at www.ed.ac.uk/studying/postgraduate/applying

Fees and Funding (2011-12)

UK and EU students	£5300
Overseas students	£16050
Additional course costs (all students)	£1600 (includes the 'Study Tour' cost)

Information on funding and possible studentships can be found on the web site: www.ed.ac.uk/studying/postgraduate/fees-finance

Career Opportunities

As a taught Masters, this programme is intended to offer a form of semi-vocational training, linked to current research. The continuing developments with regards food labelling and carbon foot printing of food both from a public good perspective but also from commercial retailers, is likely to lead to employment opportunities for graduates. The wider issues of food security (and systems modelling thereof) is clearly policy relevant and there are employment avenues in terms of development consultancies, and both national and supra-national institutions.

Contact Details

For further information please contact:

Frances Stratford (Programme Administrator), SAC Edinburgh, West Mains Road, Edinburgh EH9 3JG
Tel: +44 (0)131 535 4198 Email: frances.stratford@sac.ac.uk

- www.ed.ac.uk/schools-departments/geosciences/postgraduate/masters-programme/taught-masters/food-security
- www.sac.ac.uk/learning/courses/postgraduatetaught/mscfood





Organic Farming





Organic Farming

Awards Available: MSc / PG Dip
Awarding University: The University of Glasgow
Mode of study available: Distance Learning
Start Dates: September



Course Overview

The sector is expected to continue its expansion to meet national targets and European CAP policy development. The sector requires high level graduates with the technical and management skills to meet this expansion. SAC offers this programme to enable students with a variety of academic and working experiences to gain a fast-track understanding of the key technical production, marketing and management aspects of organic farming and food. This enables students to build on their existing expertise and aspirations, and to give them enhanced career opportunities as practitioners, promoters and facilitators within the sector. The organic farming courses are offered on a part-time distance learning basis to allow those in continuing employment or with family commitments to be able to participate. Course participants come from a wide range of backgrounds, including farmers, growers, vets and other agricultural and food sector workers who wish to develop their career and businesses in the organic food and farming sector.

Specific course objectives are to provide graduates with:

- An ability to critically appraise organic farming as an agricultural system
- A good understanding of the organic sector
- A sound knowledge of the science underpinning organic farming
- An understanding of the marketing, business & quality assurance requirements for organic produce
- Work placement experience
- Research skills (MSc only)

The course is accessible through its delivery by part-time on-line distance learning.





Modules and Descriptors

The course modules comprise of a mix of technical production, marketing and management, and skill development modules. The modules are briefly described in a separate page.

A study tour is used to visit a range of organic and conventional farms as well as businesses operating in the organic food supply and distribution chain. In the taught modules an element of student choice is often built in through the use of essay and other course work topics that cover areas of potential interest. There is also a Work Placement module. Students following the distance learning course may gain exemption from the practical element of the placement but will require to complete a report of their work experience.

Organic Forage and Livestock Production

This module will provide an understanding of the role of forage legumes in organic systems and describe grassland management systems that maximise the contribution of legumes. Students will also be given an understanding of the organic approach to livestock production, particularly in terms of animal welfare, preventative health management and nutrition.

Soils and Nutrient Cycling

This module will aim to provide the students with the tools to manage their soils optimally. Ultimately, they should be able to describe soil properties, evaluate soil fertility and assess management requirements in the context of organic farming. Providing an understanding of the chemical, physical and biological features of soil fertility and nutrient cycling. Developing practical skills in soil assessment and whole farm nutrient budgeting.

Organic Crop Production

This module will provide an understanding of methods of crop production for arable and vegetable field crops, with particular reference to organic farming in the UK. Developing an understanding of breeding, establishment, nutrition, protection, harvesting and storage in the context of organic crop production of field crops.

Organic Farming Case Study

This module will improve the student's ability to undertake whole farm analysis and in particular organic conversion planning. Whole farm analysis involves a range of skills and examination of a wide range of issues: technical, financial, marketing and environmental. The module will require the student to integrate the knowledge gained in other Modules, to provide an evaluation and plan for the conversion to organic production of an actual farm example.

Organic Farming Profession

This module will provide an overview of the philosophy, principles, history and development of the organic farming industry. The organic standards will be introduced and the ways in which they are used to regulate the organic food and farming industry at UK, European and world levels will be covered. The roles of the main UK organisations that influence the development of the organic sector will also be explored.

Organic Farming Work Placement

This module will allow students to become familiar with an organisation or business in the organic food and farming sector during a 6-week (or equivalent) work placement. The student will gather relevant and unique material to enable them to carry out a technical and business analysis and make recommendations for future development of the organisation or business in question. The material will also be used in class discussion and to contribute to group learning.





Issues in Organic Farming

This module explores the public goods delivered by organic farming. Develops an understanding of food quality and the role and application of Quality Assurance (QA) Schemes in the organic food sector to meet the needs of relevant legislation and consumer concerns. Provides an overview of the principles of environmental management in the context of organic agriculture, helping students gain an appreciation of the potential impacts of agricultural enterprises on the environment, measures for minimising such impacts, and opportunities for incorporating positive environmental management measures into farm business plans. Includes a 3-day study tour

Marketing and Business Management in the Organic Farming Sector

This module will provide an understanding of the concepts, principles and techniques involved in marketing management and how they are applied in the context of the organic farming sector. Financial accounts are one source of information regarding an organic business, and aid the process of planning and control. This module will provide an understanding of accounts to assist in the process of setting goals within a business and assessing the financial consequences of alternatives.

MSc Project (taken following successful completion of taught modules)

Provides an opportunity for in-depth individual research on a topic related to organic farming.

Time Commitment

The PGDip is a high level learning course taught at university post-graduate level. Typically, a student will spend an average of 12 to 15 hours a week during 'term' time.

Methods and Delivery

Our Organic Farming course is studied by part-time distance learning. The learning material is presented on-line using SAC's web learning environment, allowing students to undertake the course from their own home or workplace. Blackboard utilises chat and threaded discussion facilities as well as static and other interactive programme learning material. Other on-line communication media, such as Learnlinc, are also used for tutorial and presentation purposes. Guidance is provided to students on home computer requirements to successfully undertake the course.

Once every term there is a weekend school where students come to SAC Aberdeen for seminars, practical sessions and farm visits.

Entry Qualifications

The normal entry for the PG Diploma is a degree in a science or technology relevant to the sector, however acceptance onto the programme is essentially based on an assessment of candidate's ability to benefit from the studies. While an adequate indication of ability to carry out academic study is essential, no absolute academic prerequisites are laid down. Applications from mature candidates with extensive work experience are particularly welcome.

The course is taught in English and students for whom it is not their first language must have achieved a minimum score of IELTS 6.5 or equivalent recognised English language qualification.





Application Details

All students should send a completed SAC postgraduate application form to:
The Postgraduate Admissions Office, SAC Aberdeen, Craibstone Estate, Bucksburn, Aberdeen, AB21 9YA.

Please consult the SAC website or postgraduate prospectus for further details.

Fees and Funding (2010-11)

For UK and EU students, fees for 2010-11 are £1,950 per year for the PgDip, payable in instalments if you wish. The PgDip which runs over 2 years will cost £3,900 in total. The fee for the MSc year (year 3 of the programme) is £875 for 2010-11. A small increase in fees is likely for 2011-12.

For information on fees for non-EU students, please contact Dr Lou Ralph or visit:
www.sac.ac.uk/learning/prospective/tuitionfees/

Career Opportunities

In recent years over 90% of graduates have found relevant employment before or soon after graduating. Career choices have included:

-  Advisor
-  Certification Officer
-  Inspector
-  Farm Management
-  Research Assistant
-  Development Officer
-  Farmer
-  Consultant

Student Profiles

"I had no formal training in crop or livestock production and only limited volunteer experience when I decided to pursue my dream of working in organic agriculture. Ready to dive in but not sure of how to 'get serious' about it, I was happy to learn about SAC's PGDip/MSc. programme and enrolled in Autumn 2007. What initially attracted me to SAC was the combination of academic rigour and practical application that the course offered, plus the (critical) ability to study remotely while continuing in my normal job. I was also impressed by what I perceived as SAC's prominent role within the field as a centre for research and information exchange to the UK's organic producer community.

"Since joining I can honestly say that the programme as a whole and especially the wonderful, dedicated and capable teaching staff, have exceeded my expectations. The course material has been challenging and stimulating, and the staff leading the classes have been extremely engaging and supportive throughout. SAC makes quite good use it seems of digital community software tools, and through Blackboard, Moodle, iLinc, and online access to library resources I never feel unable to get what I need. And when we are on campus for the study weekends it is always apparent how much thought and effort go into assuring that it will be a useful and valuable experience for the students. I am very much looking forward to the work placement where I will get to apply some of the things that I have learned.





"One of the unanticipated benefits for me has come from the way that the programme encourages (perhaps even requires) the building of relationships among the students. I know that I have already built some friendships and a network of like-minded folks that will continue on after we have completed the course.

"Obviously, at this level of study the course requires commitment and effort (and good time management), but in return I feel I am building a great foundation of knowledge and experience for achieving my goals. I would whole-heartedly recommend the course to anyone who has a passion for organic farming, and wants to prepare themselves to succeed."

Doug Schwarz

"My original degree was in Agriculture from Aberdeen University but when I graduated I entered a completely different employment field. Now, after 20 years with the same employer, it was time for a major career change and a return to farming in Scotland. The PGDip Organic Farming course offered the perfect chance to re-vitalise my knowledge of the wider agricultural sector as well as provide the detailed knowledge required to operate in the important and expanding organic sector.

"The distance learning approach has worked really well with excellent web-based information boards, e-learning packages and specialist librarian and research support. The course is well developed and efficiently organised with the tutors always on hand to assist and provide guidance either by telephone or e-mail. Like any part-time course you have to be organised with your time but the course modules are well balanced and, with a bit of juggling, are manageable when holding down a full time job and entertaining the kids! Study weekends and farm visits take place each term and are a key part of tying the various threads together as well as allowing you to get to know the rest of the course and the staff. These get-togethers are also great fun as your fellow students have a real mix of backgrounds and experience and the farm visits give a fascinating insight to a wide range of organic enterprises."

Chris Bremner

Course Contact Details

For further information, please contact:
Dr Lou Ralph, Programme Leader
Tel: 01224 711218
Email: lou.ralph@sac.ac.uk

www.sac.ac.uk/learning/courses/postgraduatetaught/mscorgfarm

