THE UNIVERSITY of EDINBURGH
Global Academy of
Agriculture and Food Security

SRUC

Sustainable Agriculture and Food Security

Solving problems that matter



Agricultural Science

Global Academy of Agriculture and Food Security

Are you interested in tackling global challenges as a highly skilled agri-food scientist, applied biologist, NGO/Government advisor, agri-food entrepreneur, business manager or policy developer?

If so, a BSc (Hons) from the University of Edinburgh's Global Academy of Agriculture and Food Security will equip you with the skills to help solve problems that matter.

There are fewer bigger challenges facing humanity than feeding the growing human population well while protecting the natural systems on which we all depend. With the world population expected to reach 11 billion by the end of this century and demands on systems already at an all-time high, it is essential that we find ways to feed the growing population without destroying the planet.

We need agricultural scientists.

The University of Edinburgh and our teaching partner Scotland's Rural College (SRUC) make a significant contribution to tackling these issues at national and global levels so come and join us play a central role in building a better future.

The BSc (Hons) programmes in Agricultural Science and Agricultural Economics are among the most interdisciplinary courses offered by the University of Edinburgh and are taught with academic input from Scotland's Rural College (SRUC). These programmes combine the study of plants and animals with the scientific study of human society and economics and equip students with the skills to develop sustainable farming systems for the future. Food security will ensure there is a supply of safe, nutritious and affordable food for all people at all times.

You will develop your skills in science, business, technology and geography to optimise crop and animal production to within economic targets and meet environmental objectives. Career options within agricultural science are rich and varied – knowledge gained in this field will be essential for the world-leaders of tomorrow.



KEY FACTS

REF2014

Joint submission with SRUC Ranked 1st for Research Power at the most recent REF (Times Higher Education, THE Research Power)

flexible degree structure students can transfer between our degrees up to the end of year 2

TOP 50

consistently one of the top 50 Universities in the world, according to the QS World University rankings



strong links with industry and farming, locally, nationally and internationally

£35M

invested in the Academy to enhance our education, training, research, innovation and consulting

Boost your employability with work placements built into the programme

We have scholarships available for prospective students

+44 (0)131 651 7305 globalagriculture@ed.ac.uk www.ed.ac.uk/agrifood



SRUC

Scotland's Rural College (SRUC)

SRUC is a widely respected higher education institute dedicated to producing specialist research, delivering high quality education and comprehensive consultancy services in the rural sector within the UK and beyond.

SRUC is proud to be a partner of the University of Edinburgh's Global Academy of Agriculture and Food Security, delivering our expertise and research experience into undergraduate courses.

www.sruc.ac.uk

SUSTAINABLE DEVELOPMENT GOALS

THE UNIVERSITY of EDINBURGH
Global Academy of Agriculture and Food Security

As part of a global development agenda, United Nations member states have adopted a set of seventeen goals with the collective aim to end world poverty, protect the planet and ensure prosperity for all. The University of Edinburgh's Global Academy of Agriculture and Food Security portfolio of programmes will equip students with the key skills to help achieve these goals and with 193 United Nations member states, our graduates can expect world-wide employment opportunities.



For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and people like you.

BSc (Hons) Agricultural Economics

BSc (Hons) Agricultural Science - Animal Science

BSc (Hons) Agricultural Science - Crop and Soil Science

BSc (Hons) Agricultural Science - Global Agriculture and Food Security

+44 (0)131 651 7305 globalagriculture@ed.ac.uk www.ed.ac.uk/agrifood

Career Options

A BSc (Hons) in Agricultural Science from the University of Edinburgh will equip you with the skills and knowledge required for a variety of rewarding career paths.

Agricultural Science has taken me in many diverse directions, but always brought me back to agriculture. It's a fascinating, complex and critical issue! My initial interest was in agricultural ecology; the key driver of that being food. I found once you're interested in food, you start looking at the social drivers of diet and one you're interested in those, the focus returns to agriculture to understand how we can produce the food the public want. And in some cases whether we should.

I have worked as a consultant for ADAS, as a committee specialist for the UK Parliament, run an oyster research group in Ireland, investigated bullocks and tractors in India, identified pollination gaps for cotton and looked at potential mental health benefits associated with improved diets.

Lecturer in Sustainable Resource Use for Food Security, Global Academy of Agriculture and Food Security.

I bring a variety of perspectives to my teaching and research with a background that includes investment banking, mechanical engineering and running a livestock farm. I returned to academia to complete my PhD in in 2014 and continue to research interactions within global food and land-use systems, combining social, economic and environmental aspects.

Lecturer in Global Food Systems and Security, Global Academy of Agriculture and Food Security.

I spent the first half of my career as a research scientist at the Macaulay Institute studying feeding behaviour of sheep, then I moved to Ethiopia and worked for the International Livestock Research Institute on smallholder livestock production. This job took me all over Africa and Asia meeting with all sorts of people ranging from small-scale dairy farmers in India to government ministers in Tanzania.
The contrasting agricultural research issues in Europe and Africa are fascinating and I enjoy spanning both those worlds!

Professor of Livestock and Development, Global Academy of Agriculture and Food Security.

Programme Structure

YEAR 1 | **YEAR 2**

We offer a flexible degree structure where students can transfer between our degrees up to the end of year 2

- Introductory Topics in Agricultural and Food Economics
- Science for Agri-Food Systems: Cells to Organisms
- Science for Agri-Food Systems: Interactions within Systems
- Professional Skills for Global Agri-Food Scientists

- Applications in Agricultural and Food Economics
- Animal Systems
- Crop Production Systems
- Professional Skills for Global Agri-Food Scientists

Work Placements

We encourage students to expand their horizons by gaining experience outside academia. Placements are an opportunity to put the knowledge you have gained on course into practise and help you prepare for the workplace.

There is a core work placement in Year 3 and students who wish to seek further placements outside of term time are encouraged to discuss this with their Personal Tutor. The Global Academy of Agriculture and Food Security has a vast range of industry links so we can help put you in touch with partners in your relevant area of interest.

YEAR 3

YEAR 4

BSc (Hons) Agricultural Economics

- Agricultural Growth and Productivity Analysis
- Operation of Agri-Food Supply Chains
- Global Agri-Food Systems
- Professional Skills for Global Agri-Food Scientists

- Advanced Agricultural Economic Modelling Tools
- Environmental and Natural Resource Economics
- Global Agri-Food Systems
- Professional Skills for Global Agri-Food Scientists
- Student Project

BSc (Hons) Agricultural Science - Animal Science

- Global Animal Health & Welfare
- Global Animal Production
- Global Agri-Food Systems
- Professional Skills for Global Agri-Food Scientists

- Future Livestock Production
- Global Animal Products
- Global Agri-Food Systems
- Student Project

BSc (Hons) Agricultural Science - Crop and Soil Science

- Crop Physiology and Agronomy
- Crop Protection
- Global Agri-Food Systems
- Professional Skills for Global Agri-Food Scientists

- Soils and Nutrient Cycling
- Genetic Improvemnt of Crops
- Global Agri-Food Systems
- Professional Skills for Global Agri-Food Scientists
- Student Project

BSc (Hons) Agricultural Science - Global Agriculture and Food Security

- Innovation
- Planetary Health and Food Futures
- Global Agri-Food Systems
- Professional Skills for Global Agri-Food Scientists

- International Development
- Global Livestock and Crop Systems
- Global Agri-Food Systems
- Professional Skills for Global Agri-Food Scientists
- Student Project

BSc (Hons) Agricultural Economics

Qualification:	BSc (Hons) Agricultural Economics
UCAS code:	D401
Institution Code:	E56
Study Mode:	Four years full-time
Course Location:	Easter Bush Campus, Edinburgh, EH25 9RG
Start Date:	September

Theoretical and applied aspects and statistical modelling concepts will use real world data to give an understanding of:

- Agricultural production
- How to measure and gauge influences on growth in the agricultural sector
- Functioning of complex supply chains
- Advanced modelling techniques applied within agricultural economics
- Pressures on natural resources with the agri-food context through an economic lens
- Product quality
- Contracts between suppliers and customers, retailers and consumer influences on the chain operations
- Growth within agricultural systems
- Policy analysis
- Research methods, including interdisciplinary and transdisciplinary research, communication, writing and business skills
- Evaluation of potential synergies and trade-offs between mitigation and adaptation of practises and policies relating to climate change and how this impacts agriculture
- Core work placement with additional optional work placements available

Career Options

Agricultural Economists are employed in a wide range of roles, including:

- Economists
- Policy Advisors for government departments, banks, NGOs (non-governmental organisations), charities, industry bodies
- Farm and/or Agri-Business Consultants
- Marketing Managers in the global Agri-Food sector
- Food Supply Chain Managers for retailers
- Researchers in Industry or Academia
- Teachers

BSc (Hons) Agricultural Science - Animal Science

Qualification:	BSc (Hons) Agricultural Science - Animal Science
UCAS code:	D402
Institution Code:	E56
Study Mode:	Four years full-time
Course Location:	Easter Bush Campus, Edinburgh, EH25 9RG
Start Date:	September

This programme will give an understanding of:

- Opportunities and challenges facing animal health and welfare globally, and how to assess and manage them
- Key system components in animal production systems including genetics, reproduction, nutrition, management and environment
- The role of technology in shaping future animal production systems
- Animal production systems in terms of efficiency and wider sustainability
- Impact of climate change and resource constraints on future livestock production
- Epidemiology and control of diseases of national and international importance
- Relationships between health, welfare and management
- Global trends in livestock product consumption and production
- Research methods, including interdisciplinary and transdisciplinary research, communication, writing and business skills
- Land-based and aquatic livestock systems
- Processing, quality and safety of livestock products
- Economics of animal health and welfare
- Regulations and trade in animal products
- Core work placement with additional optional work placements available

Career Options

Animal Scientists are employed in a wide range of roles, including:

- Technical Advisors in animal feed, breeding and health industries
- Managers of multinational companies
- Policy Advisors for government departments, NGOs (non-governmental organisations), charities, industry bodies
- Marketing Managers in the global Agri-Food sector
- Food Supply Chain Managers for retailers
- Researchers in Industry or Academia
- Teachers

BSc (Hons) Agricultural Science - Crop and Soil Science

Qualification:	BSc (Hons) Agricultural Science - Crop and Soil Science
UCAS code:	D403
Institution Code:	E56
Study Mode:	Four years full-time
Course Location:	Easter Bush Campus, Edinburgh, EH25 9RG
Start Date:	September

This programme will examine the opportunities and challenges associated with increasing global crop production to give an understanding of:

- Crop physiology and agronomy
- Sustainable approaches to crop protection, plant breeding, soil management and global agri-food systems
- Physiology of yield formation and efficiency of light, water and nutrient use
- Limitations to yield in different climates and production systems
- Causes of gaps between potential and actual yield achieved
- Crop management options for increasing yield
- Sustainable methods of crop protection against major pests, weeds and disease
- Research methods, including interdisciplinary and transdisciplinary research, communication, writing and business skills
- Integrating chemical and non-chemical approaches
- Utilising the latest advances in risk assessment and forecasting
- Understanding decision making of farmers
- Statutory plant health measures
- Approaches to minimise pesticide insensitivity and plant resistance to pests and disease
- Core work placement with additional optional work placements available

Career Options

Crop and Soil Scientists are employed in a wide range of roles, including:

- Technical Advisors and Leaders in crop breeding, production and protection industries
- Management of multinational companies
- Research project managers
- Policy Advisors for government departments, NGOs (non-governmental organisations), charities, industry bodies
- Marketing Managers in the global Agri-Food sector
- Food Supply Chain Managers for retailers
- Researchers in Industry or Academia
- Teachers

BSc (Hons) Agricultural Science - Global Agriculture and Food Security

Qualification:	BSc (Hons) Agricultural Science - Global Agriculture and Food Security
UCAS code:	D404
Institution Code:	E56
Study Mode:	Four years full-time
Course Location:	Easter Bush Campus, Edinburgh, EH25 9RG
Start Date:	September

This programme will give an understanding of:

- Science-society relationships / public engagement / ethics and social licence in agri-food systems
- Opportunities and challenges facing animal and crop systems globally / crop and animal systems in extreme environments
- International agricultural development
- Participatory approaches to technology development
- Concepts and issues surrounding Planetary Health / One Health
- Evaluating future technological developments / change and their potential impact
- Global agri-food, livestock and crop production systems / sustainable intensification
- Research methods, including interdisciplinary and transdisciplinary research, communication, writing and business skills
- Relationships between human diet and health and the natural and managed environments
- Drivers of global environmental change and health impacts
- Theory and practice of research and innovation
- Impacts of global environmental change on food security
- Ecosystem services for health and food production
- Core work placement with additional optional work placements available

Career Options

A degree in Global Agriculture and Food Security can lead to a wide range of career options, including:

- Technical Advisors in animal feed, breeding and health industries
- Technical Advisors in crop breeding, production and protection industries
- Management of multinational companies
- Research project managers
- Policy Advisors for government departments, NGOs (non-governmental organisations), charities, industry bodies
- Marketing Managers in the global Agri-Food sector
- Food Supply Chain Managers for retailers

Entry Requirements

SQA Highers

BBBB by end of S5 or ABBB/BBBBB by end of S6, with a minimum of BBB achieved in one year of S4-S6. To include at least two of Biology, Chemistry, Economics, Business Studies, Geography, Environmental Science, Computing or Mathematics, which must include Biology or Chemistry. Qualified applicants are advised to take Biology or Chemistry at Advanced Higher level where possible. National 5: Mathematics, Geography or Economics at grade B and English at grade B.

A Levels

BBB in one sitting, to include at least two of Biology, Chemistry, Economics, Business Studies, Geography, Environmental Science, Computing or Mathematics, which must include Biology or Chemistry. GCSEs: Mathematics, Geography or Economics at Grade B or 6 and English at Grade B or 6.

International Baccalaureate

Overall score of 30 points, including HL Biology or Chemistry, at Grade 5. Mathematics, Geography and/or Economics are recommended. SL: English at Grade 5 and Mathematics at Grade 4.

Irish Leaving Certificate

4 Higher Level subjects to H3, to include at least two of Biology, Chemistry, Economics, Business Studies, Geography, Environmental Science, Computing or Mathematics, which must include Biology or Chemistry. Junior Certificate Mathematics, Geography or Economics at grade B/H3 and English at grade B/H3.

International Applicants

We accept a broad range of international qualifications which can be viewed at **www.ed.ac.uk/studying/international/country**. For further guidance, or if your qualification is not listed, please contact our admissions team.

Widening Participation

We are strongly committed to widening access, and recognise that not everyone has an equal opportunity to demonstrate their full academic potential from their school or college qualifications alone. For this reason we aim to identify applicants who could benefit from additional consideration in the admissions process, for example, applicants who reside in areas of disadvantage.

You can check your eligibility for a contextual offer at this link **www.ed.ac.uk/studying/undergraduate/applying/selection/contextual-admissions**

English Language Requirements

If English is not your first language, you will also need to meet the University's required standard of English. If your English language qualification is not listed below, please contact our admissions team for guidance.

- IELTS Academic: total 6.5 (at least 6.0 in each module)
- TOEFL-iBT: total 92 (at least 20 in each module)
- PTE(A): total 61 (at least 56 in each of the "Communicative Skills" sections; the "Enabling Skills" sections are not considered)
- CAE and CPE: total 176 (at least 169 in each module)
- Trinity ISE: ISE II with distinctions in all four components

Massive Open Online Course (MOOCs)

MOOCs do not form part of the formal entry requirements, but the University of Edinburgh offers a number of free courses that might be of interest to students considering Agricultural Science and/or Agricultural Economics.

These short, online courses are written by University of Edinburgh academic staff and offer learners access to a broad range of subject areas as well as introducing you to online learning platforms.

You might be interested in reading more about:

Critical Thinking in Global Challenges
www.ed.ac.uk/studying/moocs/subjects/medicine-vet/critical-thinking-global-challenges

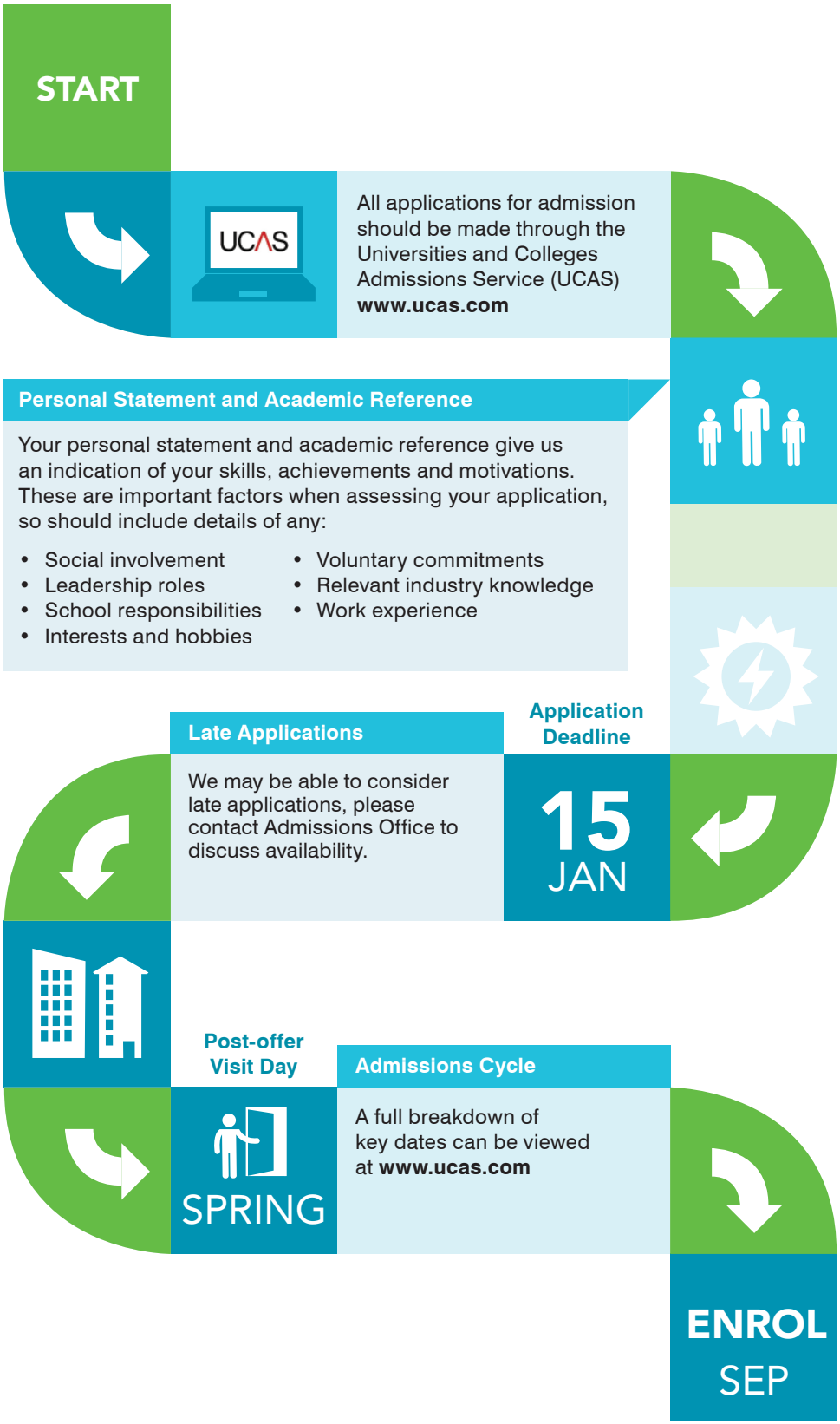
Learning for Sustainability
www.ed.ac.uk/studying/moocs/subjects/humanities-social-sciences/learning-for-sustainability

Research Data Management and Sharing
www.ed.ac.uk/studying/moocs/subjects/science-engineering/research-data-management-and-sharing

Social Wellbeing
www.ed.ac.uk/studying/moocs/subjects/humanities-social-sciences/social-wellbeing

Statistics: Unlocking the World of Data
www.ed.ac.uk/studying/moocs/subjects/science-engineering/statistics-unlocking-data-mooc

How to Apply


START
UCAS
All applications for admission should be made through the Universities and Colleges Admissions Service (UCAS) **www.ucas.com**
Personal Statement and Academic Reference
Your personal statement and academic reference give us an indication of your skills, achievements and motivations. These are important factors when assessing your application, so should include details of any:
• Social involvement
• Leadership roles
• School responsibilities
• Interests and hobbies
• Voluntary commitments
• Relevant industry knowledge
• Work experience
Late Applications
We may be able to consider late applications, please contact Admissions Office to discuss availability.
Application Deadline
15 JAN
Post-offer Visit Day
SPRING
Admissions Cycle
A full breakdown of key dates can be viewed at **www.ucas.com**
ENROL
SEP

1583
The year the University of Edinburgh was founded

31,000+
Students in attendance

20,000+
Undergraduate students

11,000+ International students

from **140** countries

Choose Edinburgh

The Easter Bush Campus

The Global Academy of Agriculture and Food Security is located at the Easter Bush Campus.

The Campus has facilities from 3 of the 4 UK AgriTech Innovation Centres and has the largest concentration of animal science related expertise anywhere in Europe, together with wider agricultural and environmental research facilities. An ambitious programme of development is underway to provide a dynamic and vibrant environment with world class facilities equipped with the latest technologies. Established and emerging biotech companies will be based onsite and support academic activity in agri-data, informatics, livestock science and precision farming.

This allows us to attract the highest calibre of teaching staff, scientists and industry partners and makes the campus one of the most exciting places for students to learn alongside commercial business, research and innovation.

Come and Visit

Visit **www.ed.ac.uk/studying/undergraduate/open-day** to register your interest in joining us for an Open Day or email **globalagriculture@ed.ac.uk** to arrange a visit outside these dates.

The City of Edinburgh

Edinburgh, the inspiring capital of Scotland, is a historic, cosmopolitan and cultured city, which offers a unique living and learning experience. One of the most vibrant cities in Europe, the city of Edinburgh is regularly voted as one of the most desirable places to live in the world and has been rated the “friendliest city in the UK”. This cosmopolitan, safe and welcoming atmosphere encourages all students to feel at home very quickly.

Edinburgh is rich in social, cultural, learning and sports facilities. The city of Edinburgh hosts 12 annual festivals each year, including the world’s largest arts festival in August and one of the world’s largest winter festivals.

Learn more:
www.ed.ac.uk/studying/undergraduate/edinburgh

£35M

invested in the Academy to enhance our education, training, research, innovation and consulting

TOP SPORTING UNIVERSITY

in Scotland with world class facilities

5 Galleries & Museums

30 Libraries

260+ Student Societies

Student Experience

Clubs and Societies

There are over 260 student societies – more than any other university in the UK – covering everything from a cappella singing to yoga to economics to mountain climbing, which can cater to your interests. As well as being fun, many societies can give you the kind of transferable skills useful in future careers.

Learn more:
www.eusa.ed.ac.uk

Sports and Fitness

The University has over 65 different sports clubs including everything from fencing to skydiving, horse riding to ice hockey. The main sports facilities are centrally located at the Pleasance Sports Centre and include a full range of indoor sports facilities and a 25m swimming pool. Our outdoor facilities include playing fields, tennis courts and the Outdoor Pursuits Centre on Loch Tay for sailing and mountain biking, and in Aviemore or skiing, mountain climbing and hill walking.

Learn more:
www.ed.ac.uk/sport-exercise

Opened in Autumn 2017, this state-of-the-art facility allows students to stay active, have fun, try new things and feel their best. Easter Bush is the first University campus to offer a satellite gym and we are delighted our students have the opportunity to regularly exercise around their studies – key to maintaining physical and mental wellbeing.

To read more about our gym and Student Membership:
www.ed.ac.uk/sport-exercise/easter-bush-gym

Accommodation

Once you accept your offer to study at the University of Edinburgh, our accommodation team will be in touch to provide you with details on what accommodation packages are available. As a new student to the University you will be guaranteed a place in our University halls of residence. Our student accommodation allows students to be independent in safe, secure and sociable surroundings. Our student accommodation is located in the city centre, which allows our students to experience living in the city and to make friends outside of their own subject area. Transport links to Easter Bush Campus are excellent and the bus pass expenses are subsidised.

We understand that it is difficult for students to arrange accommodation in a city before they have moved there and so we offer a range of accommodation packages to meet your needs.

Applications can be made for accommodation from February. More information can be found on the accommodation website:
www.accom.ed.ac.uk

Money Matters

Tuition Fees

The annual tuition fee for the BSc programmes is fixed for the full duration of the course. All graduate and overseas candidates are considered on a full-fees basis only.

For up to date tuition fee information, refer to the following website:
www.ed.ac.uk/students-funding/tuition-fees/undergraduate/tuition-fees

Payment of Fees

At Edinburgh we recognise that students need flexibility when paying fees. We provide a range of payment options to suit everyone. The fee can either be paid in full, or spread over manageable instalments by Direct Debit.

For more information refer to the Payment Options website:
www.ed.ac.uk/finance/students/fees

Scholarships

The Global Academy of Agriculture and Food Security offers a number of dedicated scholarships to our UK and international students. These are awarded on academic merit and applications are competitive so may be subject to an additional question.

For more details on our Scholarships, please visit
www.ed.ac.uk/global-agriculture-food-security/studying/scholarship-opportunities

Living Costs

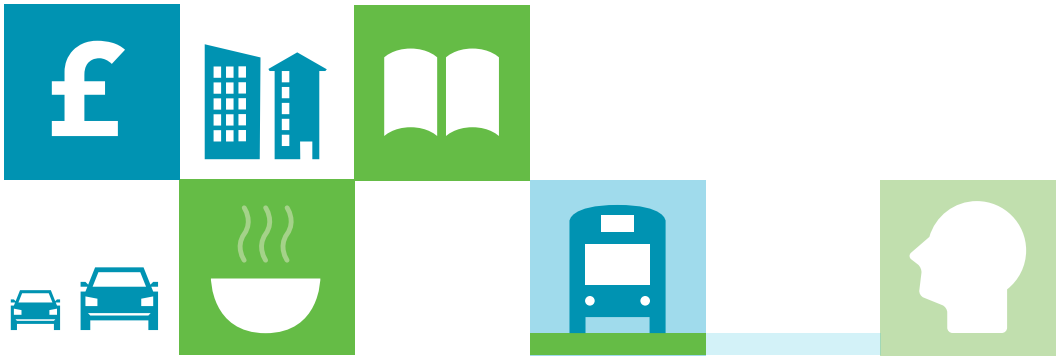
We have estimated that students need approximately £700 per month for living costs, including room and board. In addition to these expenses, you will also need to consider initial, annual and miscellaneous costs (deposits, bedding, textbooks, insurance, travel, etc).

- Living costs in Edinburgh are comparable to many major cities in the world.
- Edinburgh University Student's Union (EUSA) can offer advice about how to budget
- Consider the cost of accommodation and daily living expenses as well as the cost of tuition fees.
- Planning a budget will depend on the type of accommodation selected and spending habits.
- Food costs will vary, but will account for a significant part of the budget.

Additional Costs

In addition to any tuition fees charged, additional costs include specialised equipment and books (estimated at £150), locker deposits (£15) and transportation costs to Easter Bush Campus using public transport from the city centre, this will be approximately £500 per year, which will be subsidised by the Global Academy of Agriculture and Food Security.

For the most up to date information on estimated living expenses visit:
www.ed.ac.uk/student-funding/undergraduate/cost-of-living



Key Contacts

Undergraduate Admissions Team

The Global Academy of Agriculture and Food Security
The University of Edinburgh
Easter Bush Campus
Midlothian, EH25 9RG

+44 (0)131 651 7305
globalagriculture@ed.ac.uk
www.ed.ac.uk/agrifood

Follow us

www.facebook.com/GlobalAgEd

Director

Professor Geoff Simm

University Contacts

Accommodation Services
www.accomm.ed.ac.uk

Edinburgh University Students' Association (EUSA)
www.eusa.ed.ac.uk

Fees and Funding
fees@ed.ac.uk
www.ed.ac.uk/student-funding/tuition-fees

Scholarships and Bursaries
www.ed.ac.uk/student-funding

Student Disability Service
www.ed.ac.uk/student-disability-service

Student Recruitment and Admissions (SRA)
sra.enquiries@ed.ac.uk
www.ed.ac.uk/student-recruitment

International

Edinburgh Global – support for international students
+44 (0)131 650 4296
global.enquiries@ed.ac.uk
www.ed.ac.uk/studying/international
global.ed.ac.uk/ask-us-a-question

UK Visas and Immigration
www.gov.uk/ukvi

UK Council for International Student Affairs
www.ukcisa.org.uk

Other Links

Visit Scotland
www.visitscotland.com

UCAS
www.ucas.com

Apply to Edinburgh
www.ucas.com/students/apply

SRUC

Scotland's Rural College

SRUC is a specialist land-based higher education institute offering courses in agricultural and rural management, production agriculture and skills training.

For more information about SRUC's courses, please visit:
www.sruc.ac.uk/agriculture

Printed on 100% recycled paper.

Further information

To find out more about the degree programmes and how you can apply, please contact our admissions team:

0131 651 7305
globalagriculture@ed.ac.uk
www.ed.ac.uk/agrifood

FSC Logo Here

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.