

Title of the post: Lecturer/Senior Lecturer in Statistics & Agri Data Analysis

Department: Crops & Environmental Services

Salary: £34,189 to £50,132 per annum.

(The point of entry will be dependent upon relevant qualifications and

experience)

Location: Newport, Shropshire

The University

Harper Adams University is the premier UK Higher Education (HE) institution focused on the land-based and food supply-chain sectors, and has an increasingly important national role in teaching a wide range of rural subjects. Situated in rural and scenic Shropshire the University, and its surrounding area, provide an excellent working and living environment for staff and students alike, yet the University campus is only one hour from the UK's second city of Birmingham. Over 2,500 HE students attend the University, primarily on sandwich courses which include a year-long industrial placement.

The University was founded by Thomas Harper Adams in 1901 on the original farmland of the Harper Adams Estate. The University estate includes amenity areas, woodland, and a commercial farm of 205 hectares; with rented land the total area farmed is approximately 508 hectares, spread over several locations with cereals, potatoes, forage maize and grassland carrying a dairy herd, sheep, beef, pig and poultry units.

The Privy Council awarded taught degree awarding powers to Harper Adams in 1996 and research degree awarding powers in July 2006. The University offers a wide range of courses including Foundation and Honours degrees, in addition to shorter awards designed to meet the continuing professional development needs of those already in the workplace. The subjects are extremely wide ranging and cover Agriculture, Animal Welfare and Managements, Business, Countryside, Engineering, Food and Land & Property Management. The University has also focused on developing its postgraduate education and research and there is a growing number of postgraduate students at both diploma and masters level. Masters and PhD programmes in entomology and pest management are currently areas of rapid development within the University

Harper Adams University has research competence across the entire agri-food chain and is ideally located in the centre of a mixed livestock and arable farm. Facilities within close proximity of the livestock units and field plots include laboratories, glasshouses, and engineering workshops. Research is increasingly organised through interdisciplinary centres *eg* the Centre for Integrated Pest Management, the National Centre for Precision Farming and the Soil and Water Management Centre are based at Harper Adams and academic staff are encouraged to work within one or

more of these. Harper Adams is rapidly expanding its research activities. In the 2014 REF (Research Excellence Framework), 100 per cent of the research conducted by Harper Adams University was assessed to be of international quality, with more than 50 per cent either internationally excellent or world leading. There are approximately 75 research students registered for MRes, MPhil or PhDs.

Harper Adams has built up an international reputation for the quality of its courses and has achieved the highest possible ratings in the most recent Quality Assurance Agency reviews. Our preparations for the TEF (Teaching Excellence Framework) are well in hand. Our extensive programme of research and education for rural professionals supports a high profile of business and community reach-out work, short course delivery for businesses and technology transfer activities supported by strong industry links and partnerships with companies such as JCB, Marks & Spencer and Dairy Crest.

In the 2017 Complete University guide, Harper Adams was positioned 46th out of a total of 127 higher education institutions, breaking into the top 50 for the first time and becoming the top post-92 university. Harper Adams was also voted University of the Year in the WhatUni? Student Choice Awards in 2016. Harper Adams has an enviable record in employment terms, showing that our graduates are highly sought after in the jobs market. According to the Higher Education Statistics Agency (HESA) employment performance indicator, 99.4% of 2014/15 graduates were employed six months after graduation

Harper Adams has extensive, well-equipped teaching facilities. These include lecture theatres, tutorial rooms, a recently constructed library with environmental management features, a variety of IT suites including an engineering design centre, extensive laboratory facilities, a field laboratory and a livestock project centre, a glasshouse complex, an agricultural engineering unit with a large covered soil working area and a number of sustainable technology installations. A dedicated entomology laboratory has recently been developed.

Other facilities at the University

The University's Students' Union operates a small gym and squash courts that staff may use on the payment of a nominal fee. The University operates tennis courts, an open-air swimming pool and bowling green that are available for staff use during the summer period. University catering outlets provide access to lunch facilities on campus.

Students and staff are able to take part in a number of social activities in support of the local community, including a number of charitable activities.

For further details about the University, please visit our website:

http://www.harper-adams.ac.uk

The Crop and Environment Sciences Department

This new post will be based with the Crop and Environment Sciences (CES) Department, but involve work across the University. The Department consists of 37 academic members of staff providing high quality teaching to undergraduate and postgraduate students. The Department also delivers several short courses, such as BASIS Crop Protection, FACTS Fertilisers and Agricultural Awareness, for continuing professional development of the industry.

The Department is actively involved in research, with 5 Professors and a total of 23 staff publishing peer-reviewed papers. The Crop and Environment Research Centre (CERC) provides dedicated facilities and the technical expertise required to conduct the wide range of research projects and commercial crop trials undertaken by University staff. The main areas of research include producing food and non-food crops by sustainable methods (including IPM) and the conservation of biodiversity.

Most of the undergraduate teaching supported by the Department is delivered to FdSc and BSc Agriculture (& routes), FdSc and BSc Countryside Management, BSc Countryside and Environmental Management, BSc Geography and Environmental Management, BSc Wildlife Conservation Applied Zoology and Applied Biology courses. The CES Department also delivers modules for a range of Masters courses including MSc Entomology, MSc Integrated Pest Management and MSc Agriculture Undergraduate courses have a work placement providing strong links with commerce, industry and the professions. The postholder will have a cross-University role and will support other Departments

Staff are encouraged to contribute to the development and delivery of the Workforce Development agenda through Short Courses and CVE programmes, to seek research grants/awards and to conduct research leading to peer-reviewed academic journal articles, conference papers and articles of professional and industry-related interest.

In addition, the post-holder may have unique access to large datasets generated by a consortium of agri-businesses focussed on precision agriculture. Specific areas of interest to this consortium include:

- data analytics; leverage of datasets and combination with complimentary data; management of unqualified data; identification of the importance of datasets; working with industry partners to clarify needs.
- Connectivity; connections between data sources (FMIS, weather, satellite/UAV, machinery, trials etc); provision of data to organisations who currently have no access, but could benefit.

The Appointment

The person appointed will be responsible to the Head of the Crop and Environment Sciences Department for the discharge of his/her duties which, appropriate to experience and background, will include:

- Contributing to the successful teaching, assessment and management of a suite of undergraduate and postgraduate modules within the subject area of data analysis and statistics
- Providing input to the University's strategy for the delivery of teaching in statistical and data analysis techniques to undergraduate and postgraduate students
- Providing professional advice on statistical analysis and experimental design to a wide range of students and users engaged in research activity

- Developing the University's capability to analyse Big Data and effectively communicate findings
- Managing, undertaking and supporting research and consultancy.
- Participating in the development, organisation and delivery of internal and external short courses and training activities relating to agri-statistics and data analysis
- Maintaining and developing relationships with key individuals and organisations within the sector
- Working with industry to develop data analytics and connectivity solutions in precision agriculture
- Participating in the organisation and supervision of undergraduate and postgraduate student dissertations, projects and vocational placements.
- Attending conferences and meetings and delivering lectures and presentations to outside organisations.
- Contributing to the broader academic life of the University and performing such other duties as may reasonably be requested by the Head of Crop and Environment Sciences Department

The Person

For Harper Adams to be a premier provider of higher education for the land based industries, it is essential to have expertise to underpin our provision within this sector. This appointment is a new initiative designed to address the increase in complex research projects undertaken by the University and the opportunities created by the availability and analysis of Big Data within the agriculture and land use sector.

Suitable candidates will have a good first degree in a relevant subject area and a relevant higher degree, typically a PhD. We will also consider applicants with appropriate postgraduate level technical knowledge and expertise relevant to the post. Candidates should have a strong interest in the application of statistical and data analysis techniques to support research within the agriculture and land use sector.

It would be advantageous if candidates had some direct experience of analysing agricultural data. Applications from individuals with an established academic record demonstrating research experience and a portfolio of publications would be welcome. All candidates should have an active interest in research, teaching and knowledge exchange.

The University has a positive policy on staff development and the appointee will be encouraged to gain additional experience and/or qualifications relevant to the post.

Person Specification

This is a lecturing position demanding a responsive and committed approach to the role. The post will involve working outside of normal office hours and require travelling within the UK and overseas.

Applicants should have;

- a) A suitable degree qualification and a PhD, or equivalent postgraduate experience within a relevant discipline and evidence of excellent written English and communication skills (Essential)
- b) A full UK driving licence and no legal restrictions on overseas travel other than standard visa and immigration requirements (Essential)
- c) Experience of development and application of statistical analysis and modelling techniques of relevance to agriculture, forestry, environment and/or bioscience (Essential)
- d) Evidence of the ability to effectively use a range of statistical computer packages for example R, Genstat and SPSS (Essential)
- e) An established or developing profile and esteem within the sector (Essential)
- f) Evidence of an interest in research and a proven ability to apply research findings to practical situations (Essential)
- g) Ability to contribute to the successful teaching, assessment and management of undergraduate and postgraduate modules (including undergraduate and postgraduate supervision) that include data analysis and statistics (Essential)
- h) Experience of advising other scientists or students on data analysis and statistics (Desirable)
- i) Experience of analysis and presentation of Big Data relevant to the agricultural sector and the ability to develop data analytics for precision agriculture (Desirable)

Conditions of Service

Salary

The commencing salary will be within the range £34,189 to £50,132 per annum. The point of entry will be dependent upon relevant qualifications and experience. Salaries are paid monthly, in arrears, by credit transfer.

Pension

The person appointed will be entitled to participate in the Teachers' Pension Scheme (TPS) subject to its terms and conditions from time to time in force, unless election is made to make private pension arrangements or to participate in the State Earnings Related Pension Scheme (SERPS).

Contract of Employment

The Contract of Employment will be that agreed between PCEF and the unions recognised at national level (the Polytechnics and Universities National Negotiating Committee Lecturers' Common

Interest Group) on 5 December 1990, revised to comply with the Trade Union Reform and Employment Rights Act 1993 and the provisions of the National Framework Agreement for the modernisation of pay structures. The main features are:

- participation in staff appraisal schemes;
- exclusivity of contract;
- clauses relating to patents and inventions, copyright, confidential information, pensions, sickness and maternity benefits.

A full copy of the Contract of Employment and associated conditions will be available for inspection by candidates shortlisted for interview.

Removal Expenses

The lowest of three tenders for removal expenses within the United Kingdom will be refunded. If the successful candidate terminates the engagement within six months of commencement the removal expenses must be repaid to the University.

Probationary Period

The appointment is subject to satisfactory completion of a twelve month probationary period.

Criminal Convictions

The post involves the opportunity for access to children and young persons under the age of 18. For this reason the University is entitled to take into account any criminal convictions, cautions or impending case(s) that it considers to be relevant to this post.

The post is exempt from the provisions of the Rehabilitation of Offenders Act 1974. This means that applicants are not entitled to withhold information about convictions which for other purposes are "spent" under the provisions of the Act.

Applicants must therefore complete the part of the application form declaring any criminal convictions and cautions from any court or police authority. The successful applicant will have to undergo a Criminal Records Bureau check before an appointment can be made.

References

Candidates should ensure that they provide full details of the name and postal address of their referees. Please include e-mail addresses and telephone numbers wherever possible. Referees should include your present, or most recent, employer.

Application Procedure

All applications should be completed and submitted using the Harper Adams e-Recruitment programme at http://jobs.harper-adams.ac.uk to arrive no later than midnight on Friday 11th January 2019