

Programme Specification

Official Statistics (2019-20)

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.

Awarding Institution University of Southampton **Teaching Institution** University of Southampton

Mode of Study Full-time Duration in years

Final award Master of Science (MSc) Name of Award Official Statistics

Interim Exit awards Postgraduate Certificate Postgraduate Diploma

FHEQ level of final award Level 7

UCAS code Not Applicable

Programme Code 8082

QAA Subject Benchmark or

other external reference

Accreditation details

Programme Lead

Pathway Lead

EMOS

Not Applicable

Paul Smith (pas1y13)

Programme Overview

Brief outline of the programme

The programme is designed to provide you with the specialist skills and knowledge which are central to the conduct of professional statistical work in government. The primary target audience comprises those currently employed in the UK Government Statistical Service or equivalent organisations overseas.

Through full time study the programme aims to strengthen and update your professional skills and knowledge. Many of the skills taught on the programme, such as survey methods and data analysis, are also in great demand by employers outside government and the programme provides relevant training for professional positions in a wide range of organisations conducting large-scale statistical work.

The modular structure of the programme enables you to tailor your individual scheme of study to your other commitments.

All qualifications are awarded by the University of Southampton and are subject to the same academic standards as other certificates, diplomas and MSc degrees at the University. Teaching takes place primarily at the University of Southampton, and is delivered by experienced personnel from both universities and government.

The MSc comprises an instructional component and a dissertation based on supervised research. The instructional component requires the completion of 8 compulsory modules and 4 option modules. The Certificate requires the completion of 6 modules, 4 of which are specified compulsory modules (see below). Each module is taught over a one week period. Some modules consist of four days of full-time study over Monday to Thursday, while others may use all five days of the week for formal teaching.

Formal teaching includes lectures, discussion sessions with the presenters, time for private study and, for certain modules, computer-based workshops. There will also be an opportunity for you to continue with private study on the Friday for the four-day modules, with access to computing and library facilities as required. The presenter will provide a feedback session on the Friday to discuss any issues arising from your private study.

There is also an option to undertake two further modules and a placement. Successful completion of these (including their assessment) in addition to the MSc can lead to the European Masters in Official Statistics (EMOS) award from Eurostat.

Further information about the programme and its component modules can be found in the programme brochure, the student handbook, as well as on the web at

http://www.soton.ac.uk/socsci/socstats/moffstat/index.html. Handbooks are available from the Postgraduate Secretary or MSc Official Statistics Programme Co-ordinator, Department of Social Statistics and Demography, Faculty of Social Sciences, University of Southampton, Highfield, Southampton, SO17 1BJ.

Your contact hours will vary depending on your module/option choices. Full information about contact hours is provided in individual module profiles.

Learning and teaching

Modules are taught using a variety of methods, which may include lectures, seminars, group work or project work.

Lectures offer an overview of a topic, an explanation of difficult concepts or a discussion of key issues. They presume a certain amount of additional reading, so it is often a good idea to read references before attending the corresponding lecture.

Seminars provide a forum for a closer examination of particular aspects of each module and are an important part of the learning process. Usually, it is only by discussing and questioning aspects of a subject that their full implications can be understood. You will prepare papers and lead discussions or debates, and develop your written and presentational skills. The increasing use of web-based, video-based and PowerPoint-based teaching methods demonstrates our commitment to the effective use of available equipment and resources.

Assessment

Modules are assessed on the basis of both written coursework and examinations. Examinations will take place at the end of each semester in January and in May/June. The balance between coursework and examinations will vary between modules.

Special Features of the programme

N/A

Please note: As a research-led University, we undertake a continuous review of our programmes to ensure quality enhancement and to manage our resources. As a result, this programme may be revised during a student's period of registration; however, any revision will be balanced against the requirement that the student should receive the educational service expected. Please read our <u>Disclaimer</u> to see why, when and how changes may be made to a student's programme.

Programmes and major changes to programmes are approved through the University's <u>programme validation process</u> which is described in the University's <u>Quality handbook</u>.

Educational Aims of the Programme

It is expected that you will usually be working within an Official Statistics environment and the overall aim of the programme is to equip you with the skills you need to develop a career as a professional Statistician in Government.

The aims of the programme are to:

- Train you in the theory and methods of Official Statistics and to expose you to the cutting edge of statistical practice, thus equipping you with the necessary grounding both to understand and to contribute to future developments in the area.
- Enable you to develop further your career as a professional statistician, particularly in the Government Statistical Service or related professions.
- Provide you with the requisite skills for carrying out research in the context of measuring economic and social systems relating to Government where statistical analysis methods are crucial.

Programme Learning Outcomes

Knowledge and Understanding

On successful completion of this programme you will have knowledge and understanding of:

- A1. Concepts and frameworks used in Official Statistics.
- A2. The data collection techniques used in Official Statistics ‡.
 - (‡ This general skill is not developed fully for PGCert students.)
- A3. The statistical theory underpinning a wide variety of research design and data collection methods.
- A4. The statistical modelling techniques used in Official Statistics ‡.
 - (‡ This general skill is not developed fully for PGCert students.)
- A5. Demographic methods used in Official Statistics ‡.
 - ‡ This general skill is not developed fully for PGCert students.
- A6. Some statistical analysis packages.
- A7. The principles of research design and strategy and the choice of research method.
- A8. The role of inference in the scientific approach and the impact of measurement, collection and analysis strategies on the validity and generalisability of research outputs ‡.
 - ‡ This general skill is not developed fully for PGCert students.
- A9. An individual research topic†.
 - † This general skill is not developed fully for PGDip or PGCert students.

Teaching and Learning Methods

Lectures (A1-A8), computer workshops (A4, A6), tutorials (A1-A5, A7), and supervised research (A9).

Assessment Methods

Examinations (A1-A3, A5, A7-8), coursework (A1-A3, A4, A6-A8) and dissertation.

Subject Specific Intellectual and Research Skills

On successful completion of this programme you will be able to:

- B1. Recognise standard and non-standard situations and select appropriate methods of design and analysis.
- B2. Apply methods for research design and data collection, including those based on the survey method.
- B3. Analyse large and complex quantitative data sets‡.
 - ‡ This general skill is not developed fully for PGCert students.
- B4. Interpret the results of analyses and explain them to non-statisticians‡.
 - ‡ This general skill is not developed fully for PGCert students.
- B5. Make modifications to statistical methods where necessary.

Teaching and Learning Methods

Lectures (B1 to B5), computer workshops (B3, B4, B5), tutorials (B1, B2 and B4).

Assessment Methods

Examinations (B1, B2 and B5), coursework (B1 to B5).

Transferable and Generic Skills

On successful completion of this programme you will be able to:

- C1. Present the results of your work in written reports.
- C2. Identify and use library and bibliographic resources relevant to your work.
- C3. Manage an individual research project †.
 - † This general skill is not developed fully for PGDip or PGCert students.

Teaching and Learning Methods

Lectures (C1-C2), tutorials (C2), workshops (C2) and supervised research (C2-C3).

Assessment Methods

Coursework (C1-C2) and dissertation (C2-C3).

Programme Structure

The programme structure table is below:

Information about pre and co-requisites is included in individual module profiles.

Where optional modules have been specified, the following is an indicative list of available optional modules, which are subject to change each academic year. Please note in some instances modules have limited spaces available.

Pathway

Part I

Typical programme content

The MSc comprises an instructional component and a Master's dissertation based on supervised research. The instructional component requires the completion of 12 modules (60 ECTS). The Certificate requires the completion of 6 modules (30 ECTS). Each module will be taught during one week. Some modules follow four days of full-time study over Monday to Thursday, while others may use all five days for formal teaching.

Programme details

The programme is designed to be taken on a part-time basis for those working within the field of Government Statistics or a related area. However, it is possible to take the programme full time within a single year: all compulsory modules are available each year, but only the optional modules which are scheduled to be taught in that particular year will be available. The instructional component must be completed within one academic year. Thus the maximum duration of full time registration is one year.

If you have completed 6 modules (to include the 4 compulsory modules STAT6088, STAT6093, STAT6095, and STAT6096) you can choose to be awarded a Postgraduate Certificate (PG Cert) in Official Statistics as an exit point.

At the beginning of your registration you are strongly encouraged to attend a one-week revision module covering basic mathematics, statistical inference and an introduction to R. This module takes place in September and is run to help you prepare for postgraduate study.

You may undertake a period of supervised research for a Master's dissertation in an area related to the programme. It is expected that this will be completed within the three months following your formal completion of the instructional component. The dissertation should be between 15,000-20,000 words in length.

Note that none of the modules on the taught component of the programme is core.

European Masters in Official Statistics (EMOS)

The MSc in Official Statistics is accredited as a programme in the European Masters in Official Statistics. The program already covers the essential teaching elements of EMOS, and additionally requires a placement. Successful completion of the MSc in Official Statistics (there is currently a requirement for two additional modules, but we are seeking to have this requirement removed) plus an assessment based on the placement (whose place will normally be taken by the student's dissertation as long as it is on a work-related topic. The placement is assessed in STAT6112 Workplace experience in Official Statistics – reflective essay) will lead to the European Masters in Official Statistics (EMOS) accreditation.

Part I Compulsory

Code	Module Title	ECTS	Туре
DEMO6020	Demographic Methods I	5	Compulsory
STAT6089	Evaluation and Monitoring	5	Compulsory
STAT6091	Index Numbers	5	Compulsory
STAT6096	Intro to Survey Research	5	Compulsory
STAT6095	Regression Modelling	5	Compulsory
STAT6088	Statistics in Government	5	Compulsory
STAT6093	Survey Sampling	5	Compulsory
STAT6087	Time Series Analysis	5	Compulsory

Part I Optional

Must take 40 credits from the following:

Code	Module Title	ECTS	Туре
STAT6111	Administrative data in Official	5	Optional
	Statistics		
STAT6107	Analysis of Complex Survey Data	5	Optional
STAT6114	Data Science Foundations	5	Optional
STAT6104	Further Sampling Methods	5	Optional
STAT6106	Small Area Estimation	5	Optional
DEMO6022	Demographic Methods 2	5	Optional
STAT6103	Statistical Programming	5	Optional

Part II

Part II Core

Code	Module Title	ECTS	Туре	
STAT6113	Dissertation	30	Core	

Progression Requirements

The programme follows the University's regulations for <u>Progression</u>, <u>Determination and Classification</u> <u>of Results: Undergraduate and Integrated Masters Programmes</u> and <u>Progression</u>, <u>Determination and Classification of Results: Postgraduate Master's Programmes</u> as set out in the University Calendar: http://www.calendar.soton.ac.uk/sectionly/sectly-index.html

Support for student learning

There are facilities and services to support your learning some of which are accessible to students across the University and some of which will be geared more particularly to students in your particular Faculty or discipline area.

The University provides:

- library resources, including e-books, on-line journals and databases, which are comprehensive and up-todate; together with assistance from Library staff to enable you to make the best use of these resources
- high speed access to online electronic learning resources on the Internet from dedicated PC Workstations onsite and from your own devices; laptops, smartphones and tablet PCs via the Eduroam wireless network. There is a wide range of application software available from the Student Public Workstations.
- computer accounts which will connect you to a number of learning technologies for example, the Blackboard virtual learning environment (which facilitates online learning and access to specific learning resources)
- standard ICT tools such as Email, secure filestore and calendars.
- access to key information through the MySouthampton Student Mobile Portal which delivers timetables, Module information, Locations, Tutor details, Library account, bus timetables etc. while you are on the move.
- IT support through a comprehensive website, telephone and online ticketed support and a dedicated helpdesk in the Hartley Library.
- Enabling Services offering support services and resources via a triage model to access crisis management, mental health support and counselling. Support includes daily Drop In at Highfield campus at 13.00 15.00 (Monday, Wednesday and Friday out of term-time) or via on-line chat on weekdays from 14.00 16.00. Arrangements can also be made for meetings via Skype.
- assessment and support (including specialist IT support) facilities if you have a disability, long term health problem or Specific Learning Difficulty (e.g. dyslexia)
- the Student Services Centre (SSC) to assist you with a range of general enquiries including financial matters, accommodation, exams, graduation, student visas, ID cards
- Career and Employability services, advising on job search, applications, interviews, paid work, volunteering and internship opportunities and getting the most out of your extra-curricular activities alongside your degree programme when writing your CV.

- Other support that includes health services (GPs), chaplaincy (for all faiths) and 'out of hours' support for students in Halls and in the local community (18.00-08.00).
- A Centre for Language Study, providing assistance in the development of English language and study skills for non-native speakers.

The Students' Union provides

- an academic student representation system, consisting of Course Representatives, Academic Presidents, Faculty Officers and the Vice-President Education; SUSU provides training and support for all these representatives, whose role is to represent students' views to the University.
- opportunities for extracurricular activities and volunteering
- an Advice Centre offering free and confidential advice including support if you need to make an academic appeal
- Support for student peer-to-peer groups, such as Nightline.

Associated with your programme you will be able to access:

- Module co-ordinators support. Module co-ordinators will be available at designated times during the week to discuss issues related to the particular modules you are studying at the time. This will be in addition to class contact time.
- Academic/personal tutor. As soon as you register on this programme, you will be allocated a personal tutor (normally the MOffStat Programme Coordinator for MOffStat students). S/he is a member of the academic team and will be available to discuss general academic issues related to the programme as well as offer advice and support on any personal issues which may affect your studies.
- Module handbooks/outlines. These will be available at the start of each module. The Handbook includes the aims and learning outcomes of the module, the methods of assessment, relevant background material to the module and a session-by-session breakdown of the module together with appropriate reading lists.
- Within the Faculty, administrative support is provided by your Student Office which deals with student records and related issues and with queries related to your specific degree programme.

Methods for evaluating the quality of teaching and learning

You will have the opportunity to have your say on the quality of the programme in the following ways:

- · Completing student surveys for each module of the programme.
- Acting as a student representative on various committees, e.g. Staff-Student Liaison Committees, Faculty Programmes Committee OR providing comments to your student representative to feedback on your behalf.
- Serving as a student representative on Faculty Scrutiny Groups for programme validation.
- Taking part in programme validation meetings by joining a panel of students to meet with the Faculty Scrutiny Group.

The ways in which the quality of your programme is checked, both inside and outside the University, are:

- · Regular module and programme reports which are monitored by the Faculty.
- · Programme validation, normally every five years.
- · External examiners, who produce an annual report.
- A national Research Excellence Framework (our research activity contributes directly to the quality of your learning experience).
- Institutional Higher Education Review by the Quality Assurance Agency.

Further details on the University's quality assurance processes are given in the Quality handbook.

Career Opportunities

The programme is designed to provide you with the specialist skills and knowledge which are central to the conducting professional statistical work within government. The primary target audience consists of those currently employed in the UK Government Statistical Service or equivalent organisations overseas.

The programme is aimed at enabling this audience to strengthen and update their professional skills and

knowledge. Many of the skills taught on the programme, such as survey methods and data analysis, are also in great demand by employers outside government and it is intended that the programme provides relevant training for professional positions in a wide range of organisations conducting large-scale statistical work.

External Examiner(s) for the programme

Name: Professor Maria Giovanna Ranalli - University of Perugia

Students must not contact External Examiner(s) directly, and external examiners have been advised to refer any such communications back to the University. Students should raise any general queries about the assessment and examination process for the programme with their Course Representative, for consideration through Staff: Student Liaison Committee in the first instance, and Student representatives on Staff: Student Liaison Committees will have the opportunity to consider external examiners' reports as part of the University's quality assurance process.

External examiners do not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact their Personal Academic Tutor in the first instance.

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. More detailed information can be found in the programme handbook.

Appendix 1:

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. In addition to this, students registered for this programme also have to pay for:

Additional Costs

Туре	Details	
Software Licenses	All specific pieces of software required as part of your programme are available on the University's public workstations. Statistical software can be downloaded via iSolutions for free: https://www.software.soton.ac.uk	
Hardware	The University's public workstations, loaded with statistical and more generic software, are available to you for use. You may, however, benefit from having your own PC, laptop or tablet, and a USB stick.	
Stationery	You will be expected to provide your own day-to-day stationery items, e.g. pens, pencils, notebooks, etc. Any specialist stationery items will be specified under the Additional Costs tab of the relevant module profile.	
Textbooks	Where a module specifies core texts these should generally be available on the reserve list in the library. However due to demand, students may prefer to buy their own copies. These can be purchased from any source. Some modules suggest reading texts as optional background reading. The library may hold copies of such texts, or alternatively you may wish to purchase your own copies. Although not essential reading, you may benefit from the additional reading materials for the module.	
Approved Calculators	Candidates may use calculators in the examination room only as specified by the University and as permitted by the rubric of individual examination papers. The University approved model is Casio FX-570 This may be purchased from any source and no longer needs to carry the University logo.	
Printing and Photocopying Costs	In the majority of cases, coursework such as essays and reports are submitted on line. Information about generic University printing, including printing costs, can be found here: https://www.southampton.ac.uk/isolutions/students/printing-forstudents.page	

In some cases you'll be able to choose modules (which may have different costs associated with that module) which will change the overall cost of a programme to you. Details of such costs will be listed in the Module Profile. Please also ensure you read the section on additional costs in the University's Fees, Charges and Expenses Regulations in the University Calendar available at www.calendar.soton.ac.uk.