



Professional Development in Official Statistics

MSc in Official Statistics and short courses
offered by the University of Southampton

MSc in Official Statistics

Professional Development in Official Statistics is a programme of short courses at the University of Southampton in collaboration with the Office for National Statistics.

The programme of study is tailored specifically to meet the needs of professional statisticians working within the field of official statistics. The programme has been designed to facilitate part-time study by delivering each unit intensively within a one week period. The nature of the programme enables students to draw on experiences from, and apply new knowledge and techniques to, their work environment as they study.

The modular structure of the MSc programme is designed to enable you to tailor your individual study scheme to other commitments. The successful completion of six instructional units leads to the award of Certificate in Official Statistics (PG/CERT). The successful completion of 12 instructional units leads to the award of Diploma (PG/DIP) in Official Statistics. If you pass the Diploma, you will be permitted to undertake a supervised dissertation for the degree of MSc in Official Statistics.

All three degrees are awarded by the University of Southampton and are subject to the same academic standards system as other postgraduate degrees at the university. Teaching takes place at the Office for National Statistics office in Newport and at the University of Southampton.

Aim of the programme

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.

Through part-time study, 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.

Entry requirement

The usual requirement is a good honours degree from a recognised institution. If the degree did not involve single or joint honours in statistics then evidence is required of statistical training to a level at least equivalent to the Higher Certificate of the Royal Statistical Society. Details of previous statistical training in the form of syllabi, reading lists and examination papers are helpful in this case. Each application will be considered on its merits, and motivation and experience of work in a statistical environment will be important considerations.

If your first language is not English you are required to show evidence of fluency in English.

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CATS (Credit and Accumulation Transfer) points obtained on relevant courses will be considered as grounds for possible exemptions from units on the programme.

When to apply

There is no formal closing date for applications, but early application is recommended to allow, in particular, for references to be taken up. It is expected that registrations will mostly commence towards the beginning of the academic year and that, in this case, applications will normally be submitted by the end of August. There is a compulsory five day Introduction and Revision unit offered in September that new students are required to attend. Applications to begin registration during the academic year will also be considered.

Fees

The fee for UK/EU students registering for the full MSc programme is provided in the timetable attached to this booklet. The fees charged are in line with comparable part-time MSc programmes offered by the University.

Structure of the programme

The degree comprises an instructional component and a Master's dissertation based on supervised research. The instructional component requires the completion of 12 units although students can opt to take the award of Certificate after completing six. Each

unit will be taught during one week. The course programme is on the website: www.southampton.ac.uk/moffstat/programme.html.

The formal teaching includes lectures, sessions for discussion with the presenters, time for private study and, for certain units, computer-based workshops. There will also be the opportunity for you to carry out private study with access to computing and library facilities as appropriate.

The 12 units for the instructional component of the Diploma are to be selected from the 20 units shown in the MSc Unit Outlines at the end of the booklet. You must take all eight compulsory units at some time and at least four of the 12 optional units. In each academic year, 13 of the 20 units will be offered. Compulsory units are run every year and optional units are rotated.

In the first year of registration, you must take Introduction to Survey Research, Basic Survey Sampling and Regression Modelling amongst your units. These units are pre-requisites for many of the other units. You must take at least three units in each year of registration and complete all 12 units by no later than the end of Semester 1 in the fourth year of registration. It is expected that students would complete the six units for the Certificate in Official Statistics in the first two years of registration. Some units have pre-requisites, as indicated in the MSc Unit Outlines.

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Otherwise, you are free to take units in the order you choose. You may find there are periods of time when you are unable to undertake study, for example if you are on secondment abroad or if you are on maternity leave. During such periods it is possible to apply for registration to be suspended. The three and a half years maximum duration of registration for completion of the 12 units excludes any periods during which registration is suspended.

Units are assessed on the basis of both written work and examinations. Deadlines will be set for written work, within the same semester. Examinations will take place at the end of each semester in January and in May/June. The balance between coursework and examinations will vary from unit to unit.

Supervised dissertation for MSc

The successful completion of 12 instructional units leads to the award of Diploma in Official Statistics. In approved cases, if you pass the Diploma you will be permitted to undertake a supervised dissertation for the degree of MSc in Official Statistics.

A typical dissertations project might involve applying methods learnt on the instructional part of the course to some specific application in Official Statistics – for example the study of non-response in a given survey, the redesign of a survey, the reconciliation of estimates from two different sources or a detailed analysis of a dataset.

Provided satisfactory supervision arrangements can be made,

you can work on a topic of your own choice. Supervisions will normally be by a member of the academic staff at the University of Southampton. The project may also be jointly supervised by a government statistician. Although formal approval to undertake the dissertation will only come on completion of the instructional units, you should start working on your chosen topic no later than the beginning of the fourth year of registration, subject to the approval of the programme coordinator. Preparatory work includes, for example, setting up appropriate datasets and reviewing relevant literature. The dissertation should be completed within one year by the end of the fourth year of registration. Thus the maximum period of registration on the MSc programme is four years, to cover both the instructional units and the dissertation.

The different instructional units of the MSc may be taken as one-off units, with or without assessment, for continuing professional development and if you are interested in updating or refreshing your statistical skills in a particular area. They may also be relevant if you are not sure whether you wish to enrol for the MSc programme and you wish to try out a unit first. Each unit has been awarded 10 CATS (Credit and Accumulation Transfer) points. On successful completion of the assessment, the courses will be considered for exemptions on applications for the MSc programme.

The insert with this booklet shows the course units running this academic year. Further information is available on the website: www.southampton.ac.uk/moffstat or by contacting the University

Short courses

of Southampton at the address shown on page seven. Course units are available to anybody who has the necessary background knowledge and subject to the approval of the programme coordinator. Some units are more advanced than others and a higher level of knowledge will be assumed. If participants do not have the required knowledge, then prior attendance on the equivalent basic course will be required.

Structure

To gain maximum benefit from the units you should undertake the assessment (worth 10 CATS credit points if you pass). Each course unit will be taught during one week. The Course programme is on the website: www.southampton.ac.uk/moffstat/programme.html. The formal teaching includes lectures, sessions for discussion with the presenters together with time for private study and, for certain units, computer-based workshops. There will be the opportunity for you to continue with private study with access to computing facilities as appropriate.

In addition to the one week of teaching, students who choose to undertake the assessment will need a further two days to complete the coursework and/ or undertake an examination near the end of the university semester. The CATS points will only be awarded to those who successfully complete the formal assessments. There is only one course price set for the full days of study.

The fee for each separate unit is provided in the timetable attached to this booklet (excluding accommodation and travel).

Location

The units will either be run at the University of Southampton or at Office for National Statistics in Newport.

Short courses

Staff engaged in teaching and supervision

University of Southampton UoS

Professor Allan Hill
Professor Danny Pfeffermann
Professor Peter Van Der Heijden
Professor Peter Smith
Professor Patrick Sturgis
Professor Li-Chun Zhang
Dr Yves Berger
Dr Solange Correa-Onel (Programme Director)
Dr Gabriele Durrant
Dr Andy Hinde
Dr David Holmes
Dr Paul Smith
Dr Nikos Tzavidis (Head of Department)
Dr Michael Wild

Office for National Statistics

Marie Cruddas
Duncan Elliott
Ruth James
Daniel Lewis
Robin Youll

External Lecturers

Professor Ian Crawford
Dr Pedro Silva

Further information

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“The teaching has been excellent and guest lectures by GSS statisticians provide insight into the statistical decision making process within the GSS”

Nancy Chin,
Department for Transport

MSc Unit Outlines

MSc Unit Outlines – also available as short courses

Elements of Official Statistics – compulsory

Co-ordinator: Marie Cruddas

Aims and objectives

The unit provides an overview of issues and ideas concerning the scope and organisation of Official Statistics, and its processes and products, including Statistical Acts and Codes of Practice. The unit provides a general foundation for the more detailed study of these elements and identifies links with other relevant disciplines.

Learning outcomes

Students will have a broad overview of the fundamental issues underlying the organisation of Official Statistics and be able to apply this knowledge in discussing the relative merits of alternative approaches. Students will gain an overview of issues relating to data quality in Official Statistics and processes for monitoring and improvement.

Summary of syllabus

Overview of Official Statistics: importance, policy and administrative uses; historical development; organisational models (centralised, decentralised); political, legal and ethical issues; public confidence; codes of practice; scientific principles; role of international organisations; standards and classifications systems; quality assessment framework and public trust in Official Statistics.

Statistical Computing – optional

Co-ordinator: Dr Pedro Silva

Aims and objectives

The unit aims to prepare students to input, verify, organise, modify, combine, analyse and present data using a range of computing and statistical methods implemented in the general purpose statistical package SAS. It also aims to introduce some basic ideas of statistical computing, such as numerical methods used to obtain summary statistics, iterative methods for solving equations, and simulation. Focus is not on detailed explanation of statistical analysis methods, but several of these methods will feature as examples during the course.

Learning outcomes

Students will be able to enter and manipulate data within SAS, perform standard statistical analyses using SAS and understand the resulting output. Students will be able to find additional information on how to perform advanced statistical analyses using SAS and then undertake such analysis.

Summary of syllabus

Introduction to SAS, SAS basics, SAS data management, SAS procedures for statistical analysis: linear regression and more, advanced data management, interactive statistical analysis: SAS insight, statistical computing in SAS, SAS IML (interactive matrix language) and SAS SQL.

MSc Unit Outlines – also available as short courses

Introduction To Survey Research – compulsory

Co-ordinator: Daniel Lewis

Aims and objectives

The aim of the module is to introduce students to the full range of methodological issues arising in sample survey research and to provide students with an understanding of the place of different methods in the survey process.

Learning outcomes

Students will understand the diverse methodological issues arising in sample survey research, the relations between them, together with knowledge of the basic elements of the different methods used to address these issues. Students will be able to critically evaluate survey designs and assess their quality.

Summary of syllabus

Role and aims of surveys in Official Statistics; overview of research methods, survey process and sources and reduction of survey error; introduction to survey sampling (sampling frames); types of survey design (business and social surveys, longitudinal and cross-sectional surveys); data collection modes and instruments; role and task of interviewers and respondents, non-respondents and classifications; ethics and confidentiality; coding and classification; survey harmonisation.

Survey Data Collection – optional

Co-ordinator: Ruth James

Aims and objectives

The unit provides an understanding of characteristics of the main methods used for survey data collection, the different types of questions and the principles of good questionnaire design. It also introduces the main methods of testing questions and questionnaires.

Pre-requisite

Introduction to Survey Research

Learning outcomes

Students will achieve an understanding of the main features of different data collection methods which inform choices of appropriate methods for different types of survey, and gain knowledge of basic principles of questionnaire design and structure, different types of survey questions, effects of different types of questions on data quality and common methods of testing questions which determine choices of methods.

Summary of syllabus

Defining the research and developing a conceptual framework; operational concepts and planning the data collection strategy; interviews and self-administered data collection; computer assisted data collection methods; other methods of data collection; designing data collection instruments for social and business surveys; question design principles; multimode data collection; qualitative and quantitative methods for question testing; role of questionnaire design in overall quality framework.

MSc Unit Outlines – also available as short courses

Survey Sampling – compulsory

Co-ordinator: UoS

Aims and objectives

The unit introduces standard methods of drawing samples from finite populations and making inferences about population characteristics.

Learning outcomes

Students will be familiar with the basic methods used in practice for sampling from finite populations, how to estimate finite population parameters under the different sampling schemes and how to assess the estimation errors.

Summary of syllabus

Basic principles of sampling and inference for finite populations including estimation strategies, survey errors and probability sampling; simple random sampling (with and without replacement) including probability functions, central limit theorem, bias of estimators, inclusion probabilities, standard errors, finite population correction, variance estimation, confidence intervals, proportions, domains, ratio estimation; unequal probability sampling including the Horvitz-Thompson estimator; stratified sampling; systematic sampling; multi-stage sampling including cluster sampling, design effects, intra-class correlation, allocation and design issues.

Further Survey Estimation Methods – optional

Co-ordinator: UoS

Aims and objectives

The unit aims to expose students to current theory in survey inference, focusing on methodology for survey based estimation for population totals and related quantities.

Prerequisites

Survey Sampling and Regression Modelling.

Learning outcomes

Students will understand alternative approaches to inference for finite populations. They will be able to develop appropriate estimation procedures for a wide range of sample survey applications which arise in government and have an appreciation of the difficulties of variance estimation for general estimators and an introductory knowledge of the approaches that can be used to overcome this issue.

Summary of syllabus

Design-based, model assisted and model-based approaches to inference; general approaches to weighted estimation; poststratification, ratio estimation, regression estimation; general approaches to variance estimation.

MSc Unit Outlines – also available as short courses

Further Sampling Methods – optional

Co-ordinator: UoS

Aims and objectives

The aim of this module is to develop students' understanding of the principles and methods used to design survey sampling schemes frequently encountered within Official Statistics, and to strengthen students' knowledge of sampling methods, introducing methods of rotation sampling, permanent random number sampling and approaches to achieve close to optimal allocation.

Prerequisite

Survey Sampling.

Learning outcomes

Students will be able to develop appropriate sampling schemes for a range of sample survey designs which arise in government, assess critically the varied aspects of the sampling design of an existing sample survey and investigate merits of alternative designs to inform decisions on whether changes improve performance.

Summary of syllabus

The unit will be centred around two case studies, one household survey and one business survey, and the decisions involved in determining the sampling scheme for each. Methods to be covered will include: stratum construction and allocation in stratified sampling; specification of multistage sampling schemes; rotation sampling; sampling in populations with births and deaths.

Compensating for Non-response – optional

Co-ordinator: UoS

Aims and objectives

The aim of this module is to develop students' understanding of the principles and methods used to compensate for non-response following survey data collection and to enable them to design a strategy for compensating for non-response in a particular survey.

Prerequisite

Survey Sampling.

Learning outcomes

Students will have an understanding of the sources and nature of non-response in surveys and its potential effects on estimation, alternative weighting methods used to compensate for the effects of unit non-response, alternative methods used to compensate for the effects of item non-response with a focus on imputation methods.

Summary of syllabus

Types, nature and reasons for non-response; prevention of non-response and response rates; imputation and other methods for handling item non-response; weighting and calibration methods for unit non-response and non-coverage; modelling approaches to missing data.

MSc Unit Outlines – also available as short courses

Small Area Estimation – optional

Co-ordinator: UoS

Aims and objectives

The aim is to provide the students with an overview and a broad understanding of methods of small area estimation, their motivation and applications.

Prerequisites

Survey Sampling, Regression Modelling.

Learning outcomes

Students will understand the uses and limitations of different methods of small area estimation; they will understand the circumstances in which they are applicable and how the results of different methods should be interpreted; they will be able to read and understand the Official Statistics literature on small area estimation.

Summary of syllabus

Motivations for small area estimation; data sources and auxiliary information; design-based methods for domain estimation and their limitations; simple synthetic estimation; methods based upon nested error regression models for continuous variables; methods based upon area-level regression models for continuous variables; methods for discrete variables; methods making use of time series information.

Evaluation and Monitoring – compulsory

Co-ordinator: UoS

Aims and objectives

The aim of this unit is to develop students' understanding of the nature of studies to monitor and evaluate intervention programmes, using examples from government and other related areas. There is a particular focus on the statistical methods in both the design and analysis of such studies.

Prerequisite

Regression Modelling.

Learning outcomes

Students will understand the broad principles guiding the choice between alternative statistical designs that can accommodate the evaluation of an intervention, apply the ideas to the design of a broad strategy for the monitoring and evaluation of a specific government programme.

Summary of syllabus

Alternative experimental and quasi-experimental designs for evaluation programmes and the principles underlying the choice between these designs; general statistical methods that can be used in the analysis of data devised from such designs, in particular for the estimation of programme effects, including regression adjustment and other analysis methods, propensity score matching and econometric methods of analysis.

MSc Unit Outlines – also available as short courses

Demographic methods I – compulsory

Co-ordinator: UoS

Aims and objectives

The aim is to provide an understanding of demographic data, explain basic concepts, definitions and measures and the main methods used in population analysis.

Learning outcomes

Students will be familiar with the principle sources of demographic data; understand principles of demographic measurement and be familiar with basic demographic rates and other measures; understand the origin and significance of variation in population structure; be able to carry out direct and indirect standardisation and to judge their appropriateness; be able to construct a simple life table and interpret quantities; understand the process of population growth; understand how population estimates are made.

Summary of syllabus

Population size and growth; age-sex structures; principles of demographic measurement; key demographic rates and measures, direct and indirect standardization; Lexis diagrams; life tables; period and cohort perspectives, population estimates; sources of demographic data.

Demographic Methods II – optional

Co-ordinator: UoS

Aims and objectives

To introduce more advanced demographic methods.

Prerequisite

Demographic Methods I

Learning outcomes

Students will understand and be able to construct and interpret more advanced demographic measures, including the use of event histories; understand and be able to interpret extensions of ordinary life table analysis; understand basic population dynamics and stable population theory; understand the principles of, and be able to carry out, population projection using the mathematical and component methods.

Summary of syllabus

More advance measures of fertility, nuptiality and mortality; multiples decrement and cause deleted life tables; increment-decrement tables; introduction to stable population theory; population growth; projections; managing bias and censorship in event histories.

MSc Unit Outlines – also available as short courses

National Accounts – optional

Co-ordinator: Robin Youll

Aims and objectives

The aim of the module is to introduce the theory and practice of national accounts. The module aims to provide students with a broad understanding of economic statistics, their role, uses and how they are measured.

Learning outcomes

Students will have an understanding of the framework structure of the national accounts, including the history, need for and uses of economic statistics and the main concepts used to measure the economy.

Summary of syllabus

The history and role of economic statistics with a focus on the need for and use of economic statistics with particular reference to the role of national accounts. Concepts, definitions and classifications including an overview of the System of National Accounts (SNA) and the European System of Accounts (ESA). Also, included is an introduction to the main categories, the rules of national accounting, the accounting structure and the role of supply use tables. Measuring economic growth through three approaches to measuring GDP in real terms and the principles of price and volume. The European Union and UK National Accounts in practice.

Index Numbers – compulsory

Co-ordinator: Ian Crawford

Aims and objectives

The unit will cover the theory and practice of index numbers as a means of making price and quantity comparisons.

Pre-requisites

Regression Modelling.

Learning outcomes

Students will have a detailed knowledge of the algebra of index numbers and be able to use it to solve practical problems. They will be able to discuss the merits of techniques for averaging, for taking account of quality changes, and for introducing new items.

Summary of syllabus

Introduction to index numbers and overview including basic concepts and attributes, taxonomy of approaches, implicit and direct index numbers, index number calculation; test/axiomatic approaches to index numbers including bilateral indices, fixed base and chained indices; economic approaches to index numbers including cost of living index, estimation approximations, exact and superlative index numbers and nonparametric bounds; the Divisia Index; hedonics and quality change including solutions for new goods and quality change, modelling quality change, the repackaging model and the linear characteristics model; measuring productivity including parametric and non-parametric methods.

MSc Unit Outlines – also available as short courses

Statistical Disclosure Control – optional

Co-ordinator: UoS

Aims and objectives

The aim of the unit is to provide students with an understanding of the different methods of statistical disclosure control and of the issues involved in applying these methods in order to protect the confidentiality of respondents to statistical outputs.

Prerequisite

Survey Sampling.

Learning outcomes

Students will be able to evaluate and critique the different disclosure control methods depending on the type of statistical output (microdata or tabular data) with respect to the amount of protection afforded and the impact on the quality of the data.

Summary of syllabus

Concepts of confidentiality and disclosure; motivation for disclosure control and the social, ethical, professional and legal contexts; general approaches to disclosure control; assessing disclosure risk and methods of disclosure control for tabular data and microdata; the impact of disclosure control on the utility of the data.

Regression Modelling – compulsory

Co-ordinator: UoS

Aims and objectives

The aim is to provide an overview of statistical methods for linear and logistic regression.

Learning outcomes

Students will understand the different techniques involved in fitting regression models and know how to apply these methods to typical datasets arising in official statistics.

Summary of syllabus

Linear regression covering: basic regression model, residual analysis, model building and selection, handling categorical variables, interactions and transformations; binary response regression including introduction to logistic regression covering the basic model, interpreting the parameters, assessing model fit and model building and selection.

MSc Unit Outlines – also available as short courses

Generalised Linear Models – compulsory to choose one out of the three Data Analysis modules

Co-ordinator: UoS

Aims and objectives

The aim of this module is to introduce students to the theory of generalised linear models for modelling relationships between variables with an emphasis on practical considerations, and to the use of specific models and associated techniques.

Pre-requisite

Regression Modelling.

Learning outcomes

Student will understand the general theory of generalised linear models, use models to describe the relationship between a response and a set of explanatory variables, in particular for datasets arising in official statistics, use models to investigate the association structure between variables, model diagnostics and interpretation.

Summary of syllabus

Generalised linear models: exponential family of distributions and properties; tables, measures of association and odds ratios; log-linear models; multinomial logistical regression; ordinal regression; Poisson error models; random effects models; goodness of fit statistics; influential observations; models with serially correlated errors.

Analysis of Complex Survey Data – compulsory to choose one out of the three Data Analysis modules

Co-ordinator: UoS

Aims and objectives

The aim of the module is to present methods for statistical modelling based on complex survey data with an emphasis on the impact of differential weighting, stratification and clustering on linear and logistic regression modelling. The module will also discuss issues associated with testing for goodness of fit and independence using tabulated survey data.

Pre-requisite

Generalised Linear Models

Learning outcomes

Students will have a solid foundation in the conceptual issues associated with statistical modelling using complex survey data and have practical skills to apply appropriate methods in the analysis of survey data.

Summary of syllabus

Descriptive and analytical inference for complex survey data, regression and logistic modelling with complex survey data, parametric models and pseudo-maximum likelihood, hypothesis testing and goodness of fit for complex survey data, tests for two-way tables in complex surveys.

MSc Unit Outlines – also available as short courses

Multilevel Approaches to the Analysis of Repeated Measures Data – compulsory to choose one out of the three Data Analysis modules

Co-ordinator: UoS

Aims and objectives

The aim of this unit is to introduce students to modelling approaches that can handle hierarchical structures and enable students to apply these methods critically to both multilevel and longitudinal repeated measures data.

Pre-requisite

Regression Modelling.

Learning outcomes

Students will be able to understand how repeated measures data creates complex error structures, be able to apply multilevel approaches to continuous response data to handle the error structures, interpret the results critically, understand when and how to apply alternative approaches, be aware of transitional models and the analysis of gross flows for repeated measures on binary outcomes over two waves.

Summary of syllabus

Longitudinal data structures and how these fit within a multilevel framework; regression-type models for repeated measurements for continuous and discrete response data; random intercepts models; estimation and testing, contextual effects and cross-level interactions; random slope models for more complex error structures; multivariate models for binary, multinomial and ordinal

response data with fully flexible error structures; diagnostic checking (specification issues and residual analysis), fixed effect models (within group modelling), marginal models and Generalised Estimation Equations as alternative approaches; gross flows and transitional models for repeated measures binary data.

“Whether you are taking the MSc Official Statistics or individual units as part of Continuing Professional Development, the standard of tuition is excellent, as are the purpose-built facilities at the university”

David Nolan,
Inland Revenue and Customs

MSc Unit Outlines – also available as short courses

Time Series Analysis – compulsory

Co-ordinator: UoS

Aims and objectives

This unit aims to introduce students to time series models in common use and their use for predicting future observations and/or estimating unobservable components like trend and seasonal effects.

Prerequisite

Regression Modelling.

Learning outcomes

Students will understand the concepts and methods underlying the analysis of univariate time series and the theoretical bases of different methods of time series analysis including decomposition into trend, seasonal and irregular components, and know how and when to apply these methods and test for goodness of fit using the software X12.

Summary of syllabus

Basic concepts of time series: stocks and flows, signal (trends and seasonals), noise, equidistant observations, calendar effects, outliers, stationary and non-stationary components, ergodicity, autocorrelations, partial autocorrelations; the periodogram and spectral analysis; local models and moving average methods; the problem of end effects; statistical models for forecasting (ARIMA models); exponential smoothing; data cleaning and RegARIMA; X12ARIMA package.

Student's views



Ben Winkley

Department for Business, Innovation and Skills

As soon as I started working for BIS, my line manager recommended that I study towards the MSc in Official Statistics. I have a degree in Management from Warwick Business School and had studied some statistics, but it was important to strengthen my core stats skills for my work.

The MSc courses are giving me confidence and understanding to be able to contribute to all sorts of projects across the department both for current and future posts that I will hold. They also help me gain experience in sections of the competency framework that I would not have been exposed to in my job.

So far I have taken four modules each year and this seems to be a reasonable pace. Study does not impinge on my ability to work hard in BIS and yet I am progressing through the course at an encouraging rate. The evenings up to a coursework deadline or

“The flexibility of the course helped me to fit studying around my work schedule.”

exam can sometimes be busy, but I don't think that the course is too costly on my personal time, especially when compared with the skills that I am gaining.

One of the biggest strengths of the course is that there is a lot of overlap between the students attending each module. I have formed good friendships with statisticians from across the GSS. We spend time together during the weeks of lectures and, when needed, can discuss problems we are having with assignments and also with our jobs. These friendships have really helped me work better 'across the GSS'. From time to time one of us encounters a problem that we know another student has a good data source on. Sharing data and knowledge between us not only improves efficiency, it is a great way to promote the MSc to our managers!

Student's views



Rebecca Haslam
DASA Statistical Methodology Group

When I first began work in the Government Statistical Service, my undergraduate degree in Music meant that I had a limited statistical background. After six months I decided to apply to the MSc in Official Statistics with the aim of increasing my knowledge and awareness of the subject matter. Having started the MSc, I have realised what an invaluable experience it provides and I am certain that this will enhance my future career prospects.

The course covers a vast array of statistical subjects, all of which are taught by leading experts in the field. Many of the courses include some teaching by GSS statisticians, which helps to gain an understanding of how the theoretical aspects apply in the working environment. The MSc has widened my knowledge considerably and has given me new ideas to apply to my work in DASA.

I have found one of the many benefits of the course to be the amount of choice given to students, both in terms of which modules

“This is my third year of the MSc in Official Statistics and I have found it to be excellent training for work as a professional statistician in government.”

you choose to take and in terms of how many you complete each year. This flexibility has made it possible for me to attend courses I find interesting and that are work-related. Each module is taught intensively over a week. I find this layout suits me really well because it means that everything covered is at the forefront of my mind when it comes to the assessment, and it gives an excellent opportunity to build up a rapport with other GSS statisticians. The small class sizes enable discussions among the students and one-on-one assistance from the lecturer(s) if necessary.

Although a lot of dedication and hard work is required in undertaking the MSc, I believe it is thoroughly worthwhile; both in the short term for gaining new ideas to apply in the workplace, and in the longer term for personal development and career progression.

This booklet is prepared well in advance of the academic year to which it relates. Consequently details of courses may vary and staff changes and fees payable by students tend to increase. The University therefore reserves the right to make such alterations to courses and fees as are found to be necessary.

If the University makes an offer of a place, it is essential that you are aware of the current terms on which the offer is based. If you are in any doubt, please feel free to ask for confirmation of the precise position for the year in question before the offer is accepted.