



Q-Step

**A step-change in
quantitative social
science skills**

Funded by the
Nuffield Foundation,
ESRC and HEFCE

THE UNIVERSITY OF
WARWICK

FACULTY OF
SOCIAL SCIENCES

Undergraduate Degrees in

Quantitative Methods

new from 2014





What are Quantitative Methods?

Quantitative methods encompass a range of data skills, from simple statistical analysis to more advanced predictive modelling. The idea behind many quantitative approaches is to understand how and why something has happened and how we might prepare or predict changes in the future. Quantitative methods typically involve working with data and particular software packages (e.g. Excel, SPSS, Stata, R.) that help to manage, analyse and visualise a lot of numerical data.

Why Study Quantitative Methods?

Quantitative skills are useful for answering all kinds of questions, such as understanding why people vote the way they do, why crime rates are higher in some areas than others and how social class affects educational attainment. So much of what we do every day now involves some kind of numerical data generation. For example, the numbers of 'likes' on Facebook, the automated logs that are generated when we make a telephone call or filling in surveys such as the national census; all these require data analysts to make sense of the masses of data that is generated. Studying quantitative methods provide you with skills that are not only increasingly in demand across different kinds of employment sectors, but will also help you to understand and navigate through many everyday data driven demands.

What is Q-Step?

Q-Step is a £19.5 million programme designed to promote a step-change in quantitative social science training. Over a five-year period from 2013, fifteen universities across the UK are delivering specialist undergraduate programmes, including new courses, work placements and pathways to postgraduate study. Expertise and resources will be shared across the higher education sector through an accompanying support programme, which will also forge links with schools and employers.

Q-Step has been developed as a strategic response to the shortage of quantitatively-skilled social science graduates. It is funded by the Nuffield Foundation, the Economic and Social Research Council (ESRC) and the Higher Education Funding Council for England (HEFCE). Further information can be found on Nuffield Foundation website (www.nuffieldfoundation.org/q-step).

The Warwick Q-Step Centre has been established to host the Q-Step programme at the University of Warwick. Its aim is to deliver an exciting teaching programme in one of the strongest UK and global Social Sciences Faculties. Although initially focusing on developing new undergraduate degrees, a suite of new masters level programmes are planned.

Quantitative Methods – New Undergraduate Degrees

The Warwick Q-Step Centre has developed **two new undergraduate degrees that offer high-quality delivery of fundamental and specialised quantitative methods skills** and encompass the following features:

- * embedding of quantitative methods in real-world global issues;
- * engagement with new and emerging data sources;
- * strong international orientation;
- * forward-facing curriculum to meet the demands of global employers.

The degrees are globally distinctive in their capacity to deliver not only traditional quantitative methods training, but also the most cutting-edge quantitative methods and techniques, such as new emerging computational, digital quantitative methods and visualisation techniques.

The degrees offer an exciting teaching and learning approach driven by problem-based learning that is intended to both enthuse students and give them confidence in their ability in quantitative methods. They are designed to take advantage of Warwick's existing strengths in quantitative methods in science, computing, medicine, and links to industry to develop teaching and research at the forefront of both disciplinary and interdisciplinary quantitative methods.

Quantitative methods are not about number crunching; It is much more about understanding what we can do with large volumes of information, to test our existing theories about how societies function and explore new ones.



Unless you go on to quite advanced techniques there is hardly any maths in QM beyond GCSE level. If you can count to 100, understand a percentage or a proportion, or make sense of a simple graph, you have the skills you need to start.



BA Sociology and Quantitative Methods

UCAS Code:	52LB	Number of Places:	15
Standard Entry Requirements:	A-Level grades ABB or equivalent		
Subject Specific A-Level Requirements:	None	Degree Type:	Single Honours

As well as giving students a core grounding in the discipline of Sociology, this degree prepares students to work in ways that help to understand, participate and intervene in a data-driven digital society.

This degree is specifically designed so that students can engage with real sociological problems using cutting edge data analysis.

The degree incorporates:

- * 1-week intensive Spring Quantitative Methods Camp;
- * An industry-based PAID placement programme;
- * Curriculum content with the potential to meet formal accreditation requirements.

Overview of Course Structure

Year 1	Sociological Perspectives (CORE) Researching Society and Culture (CORE) Introduction to Quantitative Methods in Social Science (CORE) Digital Data – Data Collection (option) Optional Modules
Year 2	Qualitative Social Research Methods (CORE) Statistical Models for Social Analytics (CORE) Optional modules Numbers in the Workplace (Summer Placement)
	1-week Quantitative Methods Spring Camps on key global research problems
Year 3	Advanced Quantitative Methods (CORE) Quantitative Dissertation (CORE) Optional modules

Please note: some of the module titles shown above may be subject to change

Further details can be found at: www.warwick.ac.uk/fac/soc/sociology/



BA Politics, International Studies and Quantitative Methods

UCAS Code: **7L29**

Number of Places: **15**

Standard Entry Requirements: **A-Level grades AAA or equivalent**

Subject Specific A-Level Requirements: **None** Degree Type: **Single Honours**

As well as giving a core grounding in Politics and International Studies, the degree will prepare students to work in ways that help to analyse quantitative data.

The degree is designed to emphasize the link between big substantive themes in the discipline (such as security, poverty, democracy, national politics, foreign policy and so on) and different quantitative tools.

The degree incorporates:

- * 1-week intensive Spring Quantitative Methods Camp;
- * An industry-based PAID placement programme;
- * Curriculum content with the potential to meet formal accreditation requirements.

Overview of Course Structure

Year 1

Introduction to Politics (CORE)
 World Politics (CORE)
 Introduction to Quantitative Methods (CORE)
 Qualitative Methods – (CORE)
 Digital Data – Data Collection (Option)
 or another Option in PAIS or cognate department

Year 2

Political Theory from Hobbes (CORE)
 Core Issues in Comparative Politics (CORE)
 Statistical Models for Social Analytics (CORE)
 Option modules
 Numbers in the Workplace (Summer Placement)

**1-week Quantitative Methods Spring Camps
 on key global research problems**

Year 3

Advanced Quantitative Methods (CORE)
 Quantitative Dissertation (CORE)
 Optional modules

Please note: some of the module titles shown above may be subject to change

Further details can be found at: www.warwick.ac.uk/fac/soc/pais



Quantitative Social Sciences - Employability and Careers

Skills in quantitative methods are highly transferrable and marketable. Employers often see quantitative competence as evidence of skills such as the ability to analyse data logically, weigh arguments systematically and to separate the essential from the superfluous.

Quantitative skills are not just highly sought in the competitive global job market, they are also transferrable across a range of different workplaces, including public sector, academia, government, charities and business

Quantitative methods are used widely across the social sciences, for example in politics, policy research, education and criminology.

Examples of the types of careers that quantitative social science graduates can progress to include:

Project co-ordinator
Lobbyist/Activist
Fundraiser
Social statistician
Club leader
Charity worker
Political aid

Government researcher
Civil servant
Watch dog analyst
Local Authority strategist
Crime analyst (police)
Prison officer
Policy advisor

Inspector
Management consultant
Teacher
Lecturer
Investigative journalist

Useful information:

Stand Out and Be Counted - *A guide to maximising your prospects*,
The British Academy in collaboration with ESRC and HEFCE

Social Science by Numbers – *A guide to Careers with Quantitative Methods*,
HEFCE and ESRC

*There is a quantitative skills (QS) deficit in the UK,
with 55% of employers reporting widespread QS
weaknesses amongst their employees.*



Warwick Q-Step Centre

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