MANCHESTER 1824
The University of Manchester

MSc | PGDip ONLINE AND PART-TIME

DATA ANALYTICS AND SOCIAL STATISTICS

CONTENTS

COURSE OVERVIEW

The field of data analytics is developing rapidly. With the rise of ever larger and more specialised datasets, it's essential to understand how to collect, handle, evaluate and interpret data to unleash its true potential.

This course will teach you how to process and analyse complex social data effectively to improve your skills and develop your career in data analytics within social sciences.

MSc, PGDip

Next enrolment: September 2025

MSc: 27 months, part-time
PGDip: 18 months, part-time

MSc: £16,500
PGDip: £11,000

Access video lectures, reading materials, self-tests, online tutorials and assessments

Approx. 20 hours study time per week

Use real world data and R software to develop practical skills.

24/7 library access

EXCELLENT

Our teaching is rated as 'excellent' by HEFCE, and our research-led approach to education means your lecturers will have real-world experience and knowledge which is sought by international organisations.

Explore The School of Social Sciences ↗

POWERFUL RESEARCH

The University of Manchester is ranked 5th in the world for research power by the Research Excellence Framework (2021).

UNLOCKING SOCIAL INSIGHTS

Gain unique learning opportunities through groundbreaking research led by Professor Rachel Gibson, awarded a Smart Data Research UK grant to advance social science understanding.

Find out more online ↗

ACADEMIC'S VOICE

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This master's will enable you to confidently analyse real-world data by using the latest statistical software and methods. The course covers all the stages of working with data from data collection, importing, wrangling and visualisation to analysis and presentation.

DR ALEXANDRU CERNAT

Course Director and
Associate Professor in Social Statistics

HEAR FROM ALEXANDRU ↗

WHO IS THIS COURSE FOR?

This course is designed to help you develop your data analytics skills including cleaning, visualising, interpreting and processing to enhance your career opportunities.

The course is ideal for professionals working with big data and social data. The multidisciplinary modules can help you upskill and use methods that are applicable and relevant in diverse fields including education, health and business. Taught by leading experts in data analytics and social sciences, you will learn crucial practical skills that you can use in your workplace from day one of your studies.

Whether you have a background in data analytics or are looking for a way to gain big data skills and knowledge, this course will ensure you are at the forefront of developments in data analysis for social science.

BENEFITS TO YOUR CAREER

Our Data Analytics and Social Statistics course is designed to give you the vital knowledge and skills to take your career to the next level.

- Learn how to efficiently manipulate, reshape and recode data using R and RStudio, enhancing your practical data analysis skills with real-world applications.
- Develop strong communication skills by conveying complex information to diverse audiences through data visualisations.
- Acquire the ability to extract and evaluate valuable insights from various data sources by applying advanced statistical techniques, enabling you to make more informed decisions.
- Demonstrate your research capabilities by planning and conducting independent research projects in social sciences utilising secondary data.
- Learn how to formulate insightful research questions and hypotheses by critically reviewing and synthesising academic literature, making you an asset in research-oriented roles.
- Gain the ability to work with large and complex datasets, enabling more informed and accurate decision-making in any data-driven role.

GRADUATE DESTINATIONS

The field of data science and social statistics offers graduates a range of career options from continuing to study for a PhD, to working in government or in influential research and policy organisations. Our MScs provide and Economic and Social Research Council (ESRC) recognised qualification that is of value across a number of professions.

REAL-WORLD EXPERIENCE

Data Analytics and Social Statistics has been designed with working professionals in mind. Throughout the course you'll gain valuable real-world skills that you can apply to your work from day one.

BIG DATA FOR BIG ISSUES

Data plays an important role in understanding many of the significant policy challenges of our time – from food security to climate change. With the help of this course, you'll have the skills to analyse big data, and spot patterns that can lead to impactful work.

REAL-WORLD APPLICATION

Thanks to our partnerships with key industry institutions and partners, we can incorporate real data from across the social sciences (politics, economics, psychology, sociology, criminology, etc) into our course and teaching. This use of real data will bring you the methodological and statistical skills to tackle complex situations in practice.

PRACTICALLY-FOCUSED

This course uses the industry standard statistical software - R and RStudio, so you can integrate your learnings into your field of work from day one. This will make you an indispensable team member within your workplace, allowing you to bring your knowledge to assist other colleagues and transform group projects.

COURSE UNIT OVERVIEW

STUDY PATHWAYS

To gain an **MSc,** you'll complete six 20 credit units, a mandatory 20 credit Research Skills in Practice unit and a 40 credit dissertation project where you will identify and investigate a research topic relevant to professional practice in social sciences. To gain a **PGDip** you will complete six 20-credit modules.

01

DATA CLEANING AND VISUALISATION USING R (20 CREDITS)

+ **Mandatory**

+ In this highly practical course unit, you will be introduced to the main building blocks of the R and RStudio software and develop skills in working with R and RStudio in an efficient manner.

02

INTRODUCTION TO STATISTICAL MODELLING (20 CREDITS)

+ **Mandatory**

+ This unit will introduce you to complex quantitative data analysis in the social sciences. It is designed to help you develop technical competence and robust foundations of the underlying principles of the statistical methods employed to interpret analysis output competently.

03

SURVEY METHODS AND ONLINE RESEARCH (20 CREDITS)

+ **Mandatory**

+ This unit introduces you to the principles of designing surveys for various contexts, including academic, public, and private sectors. You'll learn to plan, design, and conduct surveys, with a focus on sampling strategies, ethical considerations, and techniques to ensure data quality.

04

DATA SCIENCE MODELLING (20 CREDIT)

+ **Mandatory**

+ This unit equips you to work with high-dimensional and complex datasets in fields such as criminology, sociology, and psychology. You'll gain technical skills in supervised and unsupervised learning methods, with practical experience using R and RStudio.

05

MULTILEVEL AND LONGITUDINAL ANALYSIS (20 CREDITS)

+ **Mandatory**

+ This unit builds your expertise in analysing complex survey designs and hierarchical data structures, such as cross-country or longitudinal datasets. You'll expand your programming skills while learning advanced methods like multilevel modeling.

06

DEMOGRAPHIC FORECASTING (20 CREDITS)

+ **Optional**

+ This unit equips you to measure, forecast, and evaluate population changes across various contexts. Using real-world data and R/RStudio, you'll apply demographic methods, focusing on mortality and population dynamics, including case studies like COVID-19. You'll also develop skills to assess data accuracy and critique forecasting methods.

07

STRUCTURAL EQUATION MODELLING (20 CREDITS)

+ **Optional**

+ This optional unit introduces the principles of structural equation and latent variable modelling, equipping you with the skills to run and interpret these models using R and RStudio. You'll learn to apply these techniques to social datasets, evaluate published research, and translate theories into robust statistical models.

08

RESEARCH SKILLS IN PRACTICE (20 CREDITS)

+ **Mandatory for MSc students**

+ This unit strengthens your research skills in preparation for the dissertation. It covers developing theory-driven hypotheses and conducting impactful literature reviews in the social sciences. Delivered in two focused blocks, it equips you to craft research proposals, critically appraise literature, and formulate robust, data-driven research.

PROJECT

For your final project to gain an MSc, you'll need to complete the mandatory resarch skills module and a research project based around a topic linked to professional practice in social sciences.

DISSERTATION PROJECT (40 CREDITS)

+ Mandatory for MSc students

This mandatory 40-credit unit is the culmination of the MSc programme, requiring you to produce a 9,000-word dissertation based on a quantitative research study. The project focuses on a research topic relevant to social science practice, utilising secondary social data, preferably from large-scale surveys. It integrates advanced research skills, including literature evaluation, hypothesis development, and robust data analysis, to address pertinent questions in the field.

Supported by frequent sessions with your assigned supervisor, you'll follow a structured timeline to ensure steady progress. The dissertation emphasises critical engagement with current debates in data analytics and social statistics, while also contributing new insights to the field. By completing this project, you will demonstrate mastery in designing and executing a comprehensive research study, synthesising findings, and delivering clear, evidence-based recommendations tailored to professional social science practice.

01 DATA CLEANING AND VISUALISATION USING R

DATA CLEANING AND VISUALISATION USING R (20 CREDITS)

ABOUT THIS UNIT

This unit introduces you to statistical programming in R and RStudio, equipping you with practical skills in data tidying, visualisation, and reproducible workflows.

You'll explore the main building blocks of R and RStudio, learning how to manage and prepare data for analysis. The unit covers advanced techniques for data exploration and visualisation using R packages, with real-world examples drawn from the social sciences.

Delivered entirely online, the unit combines asynchronous videos, guided readings, interactive activities, and synchronous seminars to support your learning. Assessment includes a draft research notebook (formative), a visualisation report, and a final research notebook.

LEARNING OUTCOMES

- Define core concepts of statistical programming and the 'grammar of graphics'.
- Manage and reshape data efficiently in R and RStudio.
- Create reproducible workflows and communicate data-driven insights effectively.
- Evaluate and clean 'messy' data, justifying your methods.
- Use R to visualise and analyse relationships among variables.
- Produce well-structured R code and effective graphics.

KEY INFORMATION

200 hours total study time, (approx. 20 hours per week part-time

Weekly synchronous sessions, asynchronous videos, and interactive activities

Assessment is based on your research notebook and visualisation report

Academic Lead: Dr Myong Sook Kim

02 INTRODUCTION TO STATISTICAL MODELLING

INTRODUCTION TO STATISTICAL MODELLING (20 CREDITS)

ABOUT THIS UNIT

This unit provides a foundation in statistical modelling and data analysis using R and RStudio, focusing on exploratory data analysis, hypothesis testing, and regression.

You'll develop technical competence to interpret statistical outputs and critically evaluate quantitative research in the social sciences. Real-world data from disciplines such as sociology, economics, and criminology will help you apply statistical concepts to practical scenarios.

Delivered fully online, the course includes asynchronous videos, interactive activities, and weekly synchronous sessions to support your learning. Assessment includes a critical evaluation of published research and a research paper, with formative quizzes to consolidate your skills.

LEARNING OUTCOMES

- Understand statistical inference, sampling and the role of uncertainty.
- Recognise the assumptions, limitations and practical applications of statistical methods.
- Formulate and interpret statistical models and outputs in R and RStudio.
- Develop evidence-based arguments and causal reasoning for hypothesis-driven research.
- Critically evaluate quanitative research and communicate insights effectively through visualisations and statistical models.

KEY INFORMATION

200 hours total study time (approx. 20 hours per week part-time)

Weekly synchronous sessions, asynchronous videos, and interactive activities

Assessments include a research paper, a critical evaluation of research analysis and formative weekly quizzes

Academic Lead: Dr Myong Sook Kim

03 SURVEY METHODS AND ONLINE RESEARCH

SURVEY METHODS AND ONLINE RESEARCH (20 CREDITS)

ABOUT THIS UNIT

This unit introduces you to survey methods and online research, focusing on the design and implementation of surveys for academic, public, and private sector applications.

You will learn about sampling techniques, questionnaire design, data collection tools, and ethical considerations. Topics include addressing measurement error, improving data quality, and ensuring robust survey methodologies.

The unit also covers practical tools such as Qualtrics or Lime Survey and explores issues around data privacy, documentation, and storage. Delivered fully online, the course includes asynchronous materials, interactive activities, and weekly synchronous sessions. Assessment consists of a survey proposal and a critique of an existing survey.

LEARNING OUTCOMES

- Understand conceptual and theory-driven approaches to survey design.
- Summarise ethical considerations and identify factor influencing data quality.
- Differentiate between sampling techniques and survey methods.
- Evaluate survey questionnaires and critically assess survey quality.
- Design and plan effective surveys, including creating questionnaires for specific research needs.
- Communicate evidence-based opinions effectively and prepare professional survey proposals.

KEY INFORMATION

200 hours total study time (approx. 20 hours per week part-time)

Weekly synchronous sessions, asynchronous videos, and interactive activities

Assessment includes a survery proposal, critique and analysis in addition to weekly quizzes

Academic Lead: Dr Alexandru Cernat

04 DATA SCIENCE MODELLING

DATA SCIENCE MODELLING (20 CREDITS)

ABOUT THIS UNIT

This unit equips you with the skills to handle high-dimensional, complex datasets and extract valuable insights using advanced data science models.

You'll explore supervised and unsupervised learning techniques for classification and forecasting, with a focus on improving prediction accuracy. Practical training in R and RStudio will be supported by real-world social science datasets (e.g., criminology, sociology, psychology).

Ethical considerations surrounding the use of 'big data' are integrated throughout the course, emphasising responsible and integrity-driven data science practices. Delivered fully online, the unit includes asynchronous materials, interactive activities, and weekly synchronous sessions.

LEARNING OUTCOMES

- Understand the principals of handling high-dimensional datasets and various machine learning methods.
- Identify appropriate models for classification and forecasting problems.
- Evaluate the ethical implications of machine learning and big data.
- Develop plans to manage and analyse large datasets using R and RStudio.
- Select and apply supervised and unsupervised models to empirical problems.
- Communicate data-driven insights effectively through reports and presentations.

KEY INFORMATION

200 hours total study time (approx. 20 hours per week part-time)

Weekly synchronous sessions, asynchronous videos, and practical exercises

Assessments through practical exercises in R, and analysis report and a formative methodological critique

Academic Lead: Dr Diego Perez Ruiz

05 MULTILEVEL AND LONGITUDINAL ANALYSIS

MULTILEVEL AND LONGITUDINAL ANALYSIS (20 CREDITS)

ABOUT THIS UNIT

This unit prepares you to tackle complex survey designs and data structures in social sciences using advanced multilevel and longitudinal analysis techniques.

You'll gain practical experience analysing hierarchical datasets, such as cross-country and longitudinal data, using R and RStudio. Real-world datasets will be used to develop your methodological and statistical skills, enabling you to address the challenges of nested and longitudinal data structures effectively.

Delivered entirely online, this unit combines asynchronous learning, interactive activities, and regular synchronous sessions.

LEARNING OUTCOMES

- Understand and model nested and longitudinal data in the social sciences.
- Interpret statistical outputs and evaluate research using advanced methods.
- Design and implement multilevel and longitudinal analyses using R and RStudio.
- Apply statistical techniques to real-world hierarchical and temporal datasets.
- Communicate findings effectively with clear visualisations and data-driven insights.

KEY INFORMATION

200 hours total study time (approx. 20 hours per week part-time)

Weekly synchronous sessions, video demonstrations, quizzes, and interactive activities

Assessment through a research paper, mid-term test and weekly formative quizzes

Academic Lead: Dr Diego Perez Ruiz

06 DEMOGRAPHIC FORECASTING

DEMOGRAPHIC FORECASTING (20 CREDITS)

ABOUT THIS UNIT

This unit equips you with the knowledge and skills to analyse and forecast population change at various geographic levels.

You'll learn to derive and interpret demographic measures, critically assess data sources, and apply methods to real-world issues such as the impact of the COVID-19 pandemic. The focus is on measuring and forecasting mortality and other population components.

Through online lectures, practical exercises, and real data analysis, you'll gain the skills to evaluate and forecast demographic trends using statistical techniques in R and RStudio. You'll be assessed via a test, essay, and presentation.

LEARNING OUTCOMES

- Understand key theories, concepts, and methods for analysing and forecasting population change.
- Critically evaluate different demographic forecasting techniques and their applications.
- Apply statistical methods in R and RStudio to produce demographic measures.
- Assess claims about population change from media and statistical authorities.
- Communicate data-driven insights effectively through written and oral presentation.

KEY INFORMATION

200 hours total study time (approx. 20 hours per week part-time)

Fully online with asynchronous content, interactive activities, and weekly synchronous seminars.

Assessments through an essay, a test and a 15 minute presentation

Academic Lead: Professor Arkadiusz Wisniowski and Dr Tina Hannemann

07 STRUCTURAL EQUATION MODELLING

STRUCTURAL EQUATION MODELLING (20 CREDITS)

ABOUT THIS UNIT

This unit is designed to equip you with the theoretical principles and practical skills needed to apply structural equation modelling to social science research.

Delivered entirely online, the unit introduces you to latent variable modelling and the use of R and RStudio to specify, estimate, interpret, and critically evaluate structural equation modelling techniques.

Through asynchronous videos, interactive activities, guided readings, and weekly live sessions, you'll gain a strong technical foundation and learn to translate research questions into appropriate models.

You'll also develop the ability to critically interpret and communicate your findings effectively.

LEARNING OUTCOMES

- Understand the principles and applications of structural equation modelling and latent variable techniques.
- Critically evaluate structural equation modelling studies and apply them to relevant research questions.
- Use R and RStudio to specify, estimate, and interpret structural equation models.
- Translate theoretical concepts into actionable statistical analyses and meaningful inferences.
- Effectively communicate data-driven insights and synthesise evidence from research and analysis.

KEY INFORMATION

200 hours total study time (approx. 20 hours per week part-time)

Fully online with 27 hours of contact time.

Assessments include a methodological critique, a test and an analysis report.

Academic Lead: Dr Nicholas Shryane

08 RESEARCH SKILLS IN PRACTICE

RESEARCH SKILLS IN PRACTICE (20 CREDITS)

ABOUT THIS UNIT

This unit prepares you to confidently plan, design, and complete the dissertation component of the MSc programme.

This unit focuses on enhancing your research skills through two main topics. The first topic guides you in developing theory-driven research hypotheses, while the second provides strategies for producing an impactful literature review in the social sciences.

Each topic runs over four weeks and includes assessments designed to develop your critical and practical skills. Teaching is delivered entirely online through a combination of asynchronous videos, interactive activities, guided readings, and synchronous seminars and tutorials.

LEARNING OUTCOMES

- Understand theoretical and practical knowledge of current debates in data analytics and social statistics.
- Critically evaluate statistical methods and their application to social science research topics.
- Develop theory-driven research questions and critically appraise academic literature.
- Design a robust research proposal and produce an evidence-based critique of literature.
- Communicate research findings and opinions effectively.

KEY INFORMATION

200 hours total study time (approx. 20 hours per week part-time)

Includes 27 hours of contact time and the remainder of independent study

Assessments through a research proposal, literature critique and formative quizzes.

Academic Lead: Dr Myong Sook Kim

09 RESEARCH PROJECT

RESEARCH PROJECT (40 CREDITS)

ABOUT THIS UNIT

In this unit you will independently design, plan, conduct, and write a quantitative research dissertation using secondary social data, typically from large-scale surveys.

You'll choose a research topic relevant to professional practice, identify research gaps, explore data sources, and apply appropriate statistical techniques. The process begins with a Dissertation Preparation Form and a short presentation, both of which will receive formative feedback to refine your research plan.

Throughout the project, you'll follow a recommended timeline and receive personalised guidance through online meetings with your supervisor and peer support via the programme's virtual learning environment (VLE).

LEARNING OUTCOMES

- Demonstrate in-depth knowledge of trends and debates in data analytics and social statistics.
- Evaluate literature, theoretical perspectives, and research methods to address chosen research questions.
- Design and execute a quantitative research project using secondary data and robust analytical techniques.
- Synthesize and evaluate findings to produce evidence-based, data-driven conclusions.
- Communicate effectively through high-quality academic writing and presentations.

KEY INFORMATION

400 hours total study time

Includes 50 hours of direct study and 350 hours of independent planning and completion

Assessments through a dissertation preperation form, dissertation and presentation.

Academic Lead: Variable dependent on your project

STUDY TIMELINE

September — November

01

DATA CLEANING AND VISUALISATION USING R (20 CREDITS)

YEAR 1

November — January

02

INTRODUCTION TO STATISTICAL MODELLING (20 CREDITS)

YEAR 1

February — April

03

SURVEY METHODS AND ONLINE RESEARCH (20 CREDITS)

YEAR 1

May — July

04

DATA SCIENCE MODELLING (20 CREDITS)

YEAR 1

September — November

05

MULTILEVEL AND LONGITUDINAL ANALYSIS (20 CREDITS)

YEAR 2

November — January

06-07 OPTIONAL UNITS

DEMOGRAPHIC FORECASTING OR STRUCTURAL EQUATION MODELLING (20 CREDITS)

YEAR 2

February — May

08

RESEARCH SKILLS IN PRACTICE (20 CREDITS)

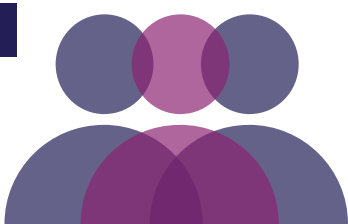
YEAR 2

May — September

09

DISSERATION PROJECT (40 CREDITS)

YEAR 2



ONLINE LEARNING AT A GLANCE

TEACHING EXCELLENCE

Our online courses are created and taught by the same established scholars as our on-campus options.

FLEXIBILITY

Online learning offers much more flexibility than traditional on-campus study, which makes it the perfect fit for working professionals.

HIGH QUALITY RESOURCES

You will have access to the same range of excellent facilities as on-campus students.

AN ONLINE COMMUNITY

Our virtual learning environment provides an opportunity to discuss and collaborate with your peers and academics with interactive features.

A GLOBAL APPROACH

Online learning at The University of Manchester is designed to be accessed by students from around the globe.

ONLINE LEARNING IN PRACTICE

Online learning can help you to access the excellence of The University of Manchester from anywhere in the world. The online model is ideal for working professionals who want to study alongside their careers and other commitments by offering flexible, part-time study.

VIRTUAL LEARNING ENVIRONMENT

Our online, postgraduate courses are taught using a virtual learning environment. This is home to all of the teaching on your course including lectures tutorials, videos and more as well as all learning materials such as reading, discussion boards and journals.

FLEXIBILITY AND TIMETABLING

Our online, part-time postgraduate courses give you the opportunity to take full responsibility for your studies so you can fit learning around your life.

There are live tutorials online, however, we understand attendance to these will not always be possible around a busy work schedule, so they are recorded for you to watch at a time that suits you.

All the resources you require for your studies are available to you 24/7 so you can adjust your studies to fit around your work and personal life.

FIND OUT MORE ABOUT ONLINE LEARNING ↗

TECHNICAL REQUIREMENTS

Upon receiving an offer you will be asked to confirm that you can meet the following technical requirements for successful completion of the course:

- An average of 15-20 hours available to devote to studying each week.
- Regular access to a computer with internet speeds fast enough to run video conferencing and stream video lectures.
- A computer that meets the software requirements of video conferencing and other software, broadband internet connection, desktop or laptop PC with windows 10 or later, 4GB RAM, 6GB disk space for installation (administrator rights are required to install software).
- Some courses will also require you to download relevant software - you will be provided access to this.
- A smart phone on Android 11.0 or greater, or iOS 11.0 or greater, as you'll need to authenticate your credentials to access your learning materials.

APPLICATION AND ADMISSIONS

APPLICATION DEADLINE:
25 August 2025

COURSE START DATE:
1 September 2025

ENTRY REQUIREMENTS

An Upper Second (2:1) class honours degree, or the overseas equivalent in a social science discipline.

We may also consider exceptional applicants with a Lower Second (2:2) class honours degree in a social science discipline (or the overseas equivalent), with either research experience or equivalent professional background.

If you chose to study on a PGDip level and would like to build your qualification to an MSc, you will have to obtain a 50% pass mark on taught units.

ENGLISH LANGUAGE REQUIREMENTS

IELTS academic test score of 7 overall, including 6.5 in writing with no further component score below 6.5, or equivalent. Discover more about English language requirements here ↗ .

WHAT TO SUBMIT WITH YOUR APPLICATION

When applying for this course you will be required to submit the follwing:

+ Copies of official degree certificates and transcripts of your previous study, showing the subjects taken and grades obtained. If these documents are in languages other than English, please provide official translations in addition to your official certificates and transcripts.
+ English language score report (if applicable) or alternative evidence to demonstrate your English language competency.
+ A copy of your CV detailing your full work experience.
+ A personal statement addressing the questions below (max 500 words):
  - What attracts you to apply to this course?
  - How does your work experience support you in applying for this course?
  - What do you hope to gain from this course?
  - How will this help you achieve your future aims and aspirations?

BEGIN YOUR APPLICATION ↗

FEES AND FUNDING

TUITION FEES

- MSc - £16,500 (UK/EU/International)
- PGDip - £11,000 (UK/EU/International)

HOW TO FUND YOUR COURSE

Funding your online course is a key consideration when looking to begin your academic journey and your individual circumstances will determine how you can fund your studies.

Whilst funding options for online postgraduate taught courses are not as numerous as those for undergraduate and PhD study, there are still a variety of options to explore for your online course including:

- Postgraduate loans
- Employer funding
- Self-funding
- Scholarships
- Bursaries
- Tuition discounts (including 10% application discount and 15% alumni discount)

EXPLORE FUNDING OPTIONS ↗

TENDAI'S STORY

Tendai Charles, an Assistant Professor of Education, pursued an MSc in Data Analytics and Social Statistics to develop his skills and ability to handle big social data to advance his career.

"I chose the MSc in Data Analytics and Social Statistics to strengthen my ability to handle big social data and advance my career. The University of Manchester's global reputation was a key factor - when you look at international rankings, it's consistently among the top institutions.

"When I looked for master's programmes in statistics, this was the only university that was Russell Group that included both the titles data analytics and social statistics."

When I reviewed the course content, I saw that the structure was exactly what I needed. It starts with data cleaning and visualisation, builds to intermediate statistics, and progresses to more advanced techniques.

One of the most valuable aspects was the hands-on approach to assessment. I had previously worked with small datasets, but this course pushed me to engage with large-scale 'big data,' which is critical in today's research landscape. Even with my background in education, the course provided the tools to work with vast datasets across different social science fields.

Studying online can sometimes feel isolating, but the course is designed to be highly collaborative. Despite being spread across the world, we work together in a dynamic virtual learning environment. The academics go the extra mile to ensure flexibility, offering recorded lectures, one-on-one meetings, and detailed feedback on assignments.

This programme has transformed my professional capabilities. I can now confidently guide students in advanced quantitative statistics, and my own research has expanded beyond qualitative methods to include robust quantitative analysis. As a reviewer for academic journals, I used to struggle with interpreting statistical results - now, I can engage with them fully, which has been incredibly empowering.

I would highly recommend this MSc to anyone looking to upskill in data analytics. The field is growing rapidly, and this course equips you with everything you need to stay ahead."

STUDENT STORY

“This course challenges us to work with large-scale data. The opportunity to apply academic knowledge to real-world data under the guidance of faculty is what sets this course apart.”

TENDAI CHARLES

Assistant Professor of Education, British University, Dubai

HEAR FROM TENDAI ↗

WHY MANCHESTER?

AN INTERNATIONALLY RENOWNED UNIVERSITY

In the Academic Ranking of World Universities (2023), the University is placed:

- 6th in the UK;
- 10th in Europe;
- 41st in the world.

WORLD-CLASS RESEARCH

The University of Manchester's research beacons are examples of pioneering discoveries, interdisciplinary collaboration and cross-sector partnerships that are tackling some of the biggest questions facing the planet.

OUTSTANDING TEACHING

This quality of research feeds into our taught courses, many of which are also designed to meet the needs of industry.

SOCIAL RESPONSIBILITY

We were the first university in the UK to set social responsibility as a core goal - this is reflected in our commitment to the UN Sustainable Development Goals.

GLOBAL INFLUENCE

There are more than 170 nationalities among our student population and our range of online and blended learning courses enable a global audience to benefit from a Manchester education.

Much of our research has a global impact, in areas including health and wellbeing, climate change, international trade and cohesive communities.

We also have agreements with a host of international institutions and organisations that inform our global approach to research and education.

SUPPORT AND SERVICES

As a student of The University of Manchester, you will receive full access to our facilities and resources such as the online library, careers service and wellbeing support. Many of these services offer personalised support and 24/7 access, and are all accessible to our global community.

SUSTAINABLE DEVELOPMENT GOALS

The 17 Sustainable Development Goals (SDGs) are the world's call to action on the most pressing challenges facing humanity and the natural world, and we're playing a leading role in tacking them.

At The University of Manchester, we address the SDGs through our research and particularly in partnership with our students. To illustrate how our teaching will empower you as a change maker, we've highlighted the key SDGs that this course addresses:

GOAL 3 - GOOD HEALTH AND WELL-BEING

Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development.

GOAL 4 - QUALITY EDUCATION

Obtaining a quality education is the foundation to improving people's lives and sustainable development.

GOAL 5 - GENDER EQUALITY

To gain gender equality we must empower all women and girls.

GOAL 10 - REDUCED INEQUALITIES

To reduce inequalities, policies should be universal in principle, paying attention to the needs of disadvantaged and marginalized populations.

GOAL 16 - PEACE, JUSTICE AND STRONG INSTITUTIONS

To achieve equality there must be peaceful, inclusive societies, access to justice for all and effective, accountable and inclusive institutions at all levels.

LEARN TO MASTER SOCIAL DATA

www.manchester.ac.uk/socialdata

studyonline@manchester.ac.uk

BEGIN YOUR APPLICATION ↗