UNIVERSITY OF
LIVERPOOL

MSc

# Data Science and Communication

| Study mode | Duration | |
|---|---|---|
| Full-time | 12 months | Apply by: **11 September 2026** |
| Part-time | 24 months | Starts on: **28 September 2026** |

## About this course

The MSc in Data Science and Communication is designed for students who have an interest in the way data and data processing are shaping our communication practices as society becomes increasingly digitised. Whether you want to investigate how Big Data impacts our daily decision-making practices or learn how to create innovative communication chatbots, this MSc will provide you with the necessary means to successfully navigate the Networked Society.

## Introduction

**Study in a department currently ranked within the world top 75 and 5th in the UK for Communication (Shanghai Global Rankings of Academic Subjects 2025).**

The programme offers state-of-the-art empirical, technical and theoretical training. You will have the opportunity to learn cutting edge computational techniques to study social behaviours at scale, alongside a deep grounding in the principles of communication studies and the social sciences.

Substantial training will also be devoted to quantitative methods aimed at harnessing big data, especially when it comes to social and news media. You will learn the underpinnings of

emerging communication technologies ranging from computer mediated communications to human computer interaction.

## Who is this course for?

This programme is designed for students who want to combine a strong interest in communication and media with advanced data-driven and computational skills. It is ideal for those seeking to understand and shape how digital technologies, social media, and artificial intelligence influence society and communication today.

The skills you will develop as a **computational communication scientist** are highly valued across a wide range of sectors. Graduates are well prepared for careers as **data analysts, data managers, or computational linguists** in fields such as news media, AI industries, research organisations, and policy-making institutions. The programme also provides an excellent foundation for further academic research at doctoral level.

## What you'll learn

The programme is structured around three core modules that provide a comprehensive foundation in the theory and practice of data-driven communication and research. You will learn to:

- **Investigate the data lifecycle** by studying the key building blocks of data science, including data collection, processing, analysis, and visualisation.

- **Apply computational social science research methods** to explore cutting-edge methodologies that help you navigate, interpret, and influence communication in the era of the Networked Society.

- **Understand and work with Artificial Intelligence in communication**, gaining insight into human–computer interaction and computer-mediated communication, and learning how to apply these concepts in real-world contexts.

# Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

## Semester one

You will study four compulsory modules, including a dissertation; and three optional modules (one in Semester one, and two in Semester two).

## Modules

| Compulsory modules | Credits |
|---|---|
| INTRODUCTION TO DATA SCIENCE A (COMM741) | 30 |
| INTRODUCTION TO COMPUTATIONAL SOCIAL SCIENCE METHODS (COMM742) | 15 |

| Optional modules | Credits |
|---|---|
| FUNDAMENTALS OF STRATEGIC COMMUNICATION B (COMM517) | 15 |
| DATABASE AND INFORMATION SYSTEMS (COMP518) | 15 |
| STRATEGIC COMMUNICATION IN PRACTICE: PROFESSIONAL PERSPECTIVES (COMM522) | 15 |
| SCREEN CULTURES B (COMM744) | 15 |
| BIG DATA AND SOCIETY: FOUNDATIONS, POLITICS, AND POLICY B (COMM752) | 15 |
| MEDIA AND CULTURAL CHANGE B (COMM757) | 15 |

| Optional modules | Credits |
|---|---|
| MEDIA AND POLITICS: THEORIES AND CASES B (COMM765) | 15 |
| SOCIAL SURVEY ANALYSIS (ENVS450) | 15 |
| APPLIED DATA MANAGEMENT AND WRANGLING (ENVS615) | 15 |

Programme details and modules listed are illustrative only and subject to change.

## Semester two

# Modules

| Compulsory modules | Credits |
|---|---|
| ARTIFICIAL INTELLIGENCE AND COMMUNICATION A (COMM766) | 30 |

| Optional modules | Credits |
|---|---|
| INFLUENCING STRATEGIES IN DIGITAL MEDIA (COMM520) | 15 |
| BRANDING STRATEGY AND COMMUNICATION (COMM521) | 15 |
| DIGITAL MEDIA AUDIENCES (COMM739) | 15 |
| DATA VISUALISATION (COMM740) | 15 |
| SCREEN INDUSTRIES B (COMM746) | 15 |
| GLOBAL JOURNALISM AND POLITICS (COMM748) | 15 |

| Optional modules | Credits |
| --- | --- |
| BIG DATA AND SOCIETY: ALGORITHMS AND PLATFORMS B (COMM754) | 15 |
| VISUALISING CULTURE AND EVERYDAY LIFE B (COMM759) | 15 |
| VISUAL CULTURES: INSTITUTIONS, EXHIBITIONS, INTERVENTIONS (COMM761) | 15 |
| MEDIA AND POLITICS: ECONOMY AND SOCIETY B (COMM763) | 15 |
| COMPUTATIONAL SOCIAL SCIENCE (ENVS418) | 15 |

Programme details and modules listed are illustrative only and subject to change.

## Final project

During the summer you will complete a dissertation.

# Modules

| Compulsory modules | Credits |
| --- | --- |
| DISSERTATION (COMM716) | 60 |

Programme details and modules listed are illustrative only and subject to change.

## Teaching and assessment

# How you'll learn

Teaching is delivered through weekly workshops held on campus. These usually last for 2-3 hours per module per week. Depending on which module options are taken, there may be lectures and separate seminar sessions scheduled.

Class sizes for master's programmes in the Department of Communication and Media tend to be small, but numbers can vary depending on what option modules are selected. A typical class in Data Science and Communication will include between 10-20 students.

## How you're assessed

The assessment strategy is designed to emphasise tasks which mirror those that students might undertake as professionals and researchers. The choice of privileging authentic assessement is in line with Curriculum 2021 and responds to the overall educational goal of endowing students with skills to navigate the complexity of the Networked Society by informing communication challenges through data science. Thus, each module shows assessements tailored to different disciplinary areas with the inclusion of empirical components. For example, in a module such as Introduction to Data Science students are asked to deliver an annotated computer code and elaborate on the results, while the module Data Visualisation requires the students to build a portfolio of visualisations and descriptions.

Feedback is given on all submitted work (formative and summative), with a view to the student's reflective engagement with key issues in data science and communication, improved self-awareness and motivation to make progress for future exercises of the same sort, and towards the assessment activities.

Assessment is normally by coursework (test, essay), portfolios work online (blogs, reviews, media programming), and other research-led activities (reports, database management).

## Liverpool Learning Framework

At Liverpool, we take a distinctive approach to education through the Liverpool Learning Framework. This means teaching that is engaging, inclusive and designed to help you succeed during your studies and beyond.

You'll develop specialist subject knowledge alongside the skills employers value most, including:

- Digital fluency
- Confidence
- Global citizenship

Our curriculum is characterised by the three Liverpool Hallmarks:

- Research-connected teaching - learning informed by the latest ideas and discoveries
- Active learning - taking part, applying knowledge and learning by doing

- Authentic assessment - assessments designed around real-world tasks and challenges

We also embed key priorities across our curriculum, including AI literacy, employability, and sustainability, helping you prepare for the future and make a positive impact in the world.

We're committed to creating a supportive and inclusive learning environment where every student can thrive.

# Careers and employability

The MSc in Data Science and Communication programme provides students with key skills which are in high demand both in the private and the third sector. There is a constant growth in the number of jobs that specifically call for an expertise in Data Science applied to communication environments. Such professional figures are required by a wide range of stakeholders including, among others, AI companies (from start-ups to multinational corporations), news media agencies, public health and cyber security institutions.

The interdisciplinary professional skills developed by the students will make them highly qualified, compared to single-discipline graduates, for a wide range of sectors dealing with Big Data and Society, ranging from data analysis and data management to natural language processing and communication diffusion. In addition, the programme's focus on cutting edge methodologies for data analysis in response to social science issues will allow our students to become pioneers in solving novel problems arising in the Networked Society, tackling, for instance, misinformation as well as challenges both in human-computer interaction and computer-mediated communication. In this way, the MSc programme offers multiple opportunities in the fast-changing digital media sector. Examples of relevant careers include, but are not limited to:

- Computational social scientists
- Data analysts in NLP environments
- Digital communication managers
- Product/project managers for AI/digital products
- Counsellors for digital strategies.

Graduates wishing to continue academic studies will find a supportive and nurturing research environment that prepares them well for doctoral-level research activities. Career pathways that follow this route include employment in higher education (teaching and/or research), or teaching at secondary and further education levels.

# Career support from day one to graduation and beyond

## Career planning

## From education to employment

## Networking events

# Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

## Tuition fees

### UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)

Full-time place, per year - £12,500
Part-time place, per year - £6,250

### International fees

Full-time place, per year - £28,000
Part-time place, per year - £14,000

Tuition fees are for the academic year 2026/27.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support.

- You can pay your tuition fees in instalments.
- All or part of your tuition fees can be funded by external sponsorship.
- International applicants who accept an offer of a place will need to pay a tuition fee deposit.

If you're a UK national, or have settled status in the UK, you may be eligible to apply for a Postgraduate Loan worth up to £12,858 to help with course fees and living costs. **Learn more about paying for your studies**.

## Additional costs

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This could include buying a laptop, books, or stationery.

Find out more about the additional study costs that may apply to this course.

# Entry requirements

The qualifications and exam results you'll need to apply for this course.

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**Postgraduate entry requirements**

We accept a 2:2 honours degree from a UK university, or an equivalent academic qualification from a similar non-UK institution. This degree should be in Communication Studies or other Social Sciences or Humanities, or in Computer Science, IT or a similar technical discipline. Alternatively, an applicant may have a degree in another subject and appropriate postgraduate experience and employment.

Graduates of non-UK universities will need to have achieved comparable results. All cases will be judged individually on the basis of information provided on the standard university application form plus academic references. All applications are considered on their individual merit.

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**International qualifications**

Select your country or region to view specific entry requirements.

Many countries have a different education system to that of the UK, meaning your qualifications may not meet our entry requirements. Completing your Foundation Certificate, such as that offered by the University of Liverpool International College, means you're guaranteed a place on your chosen course.

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# English language requirements

You'll need to demonstrate competence in the use of English language, unless you're from a majority English speaking country.

We accept a variety of international language tests and country-specific qualifications.

International applicants who do not meet the minimum required standard of English language can complete one of our Pre-Sessional English courses to achieve the required level.

### IELTS

6.5 overall, with no component below 6.0

### TOEFL iBT

If you took a TOEFL test on or before 20 January 2026, you'll need 88 overall, with minimum scores of listening 19, writing 19, reading 19 and speaking 20. If you took a TOEFL test from 21 January 2026 onwards, when a new scoring system was introduced, you'll need 4.5 overall, with 4 or above in all components. TOEFL Home Edition not accepted.

### Duolingo English Test

125 overall, with writing not less than 125, speaking and reading not less than 115, and listening not below 110. For academic year 2025/26 only, we will also accept the production, literacy, comprehension and conversation score set: 120 overall, with no component below 105.

### Pearson PTE Academic

61 overall, with no component below 59

### LanguageCert Academic

70 overall, with no skill below 65

### PSI Skills for English

B2 Pass with Merit in all bands

### INDIA Standard XII

National Curriculum (CBSE/ISC) - 75% and above in English. Accepted State Boards - 80% and above in English.

### WAEC

C6 or above

# Pre-sessional English

Do you need to complete a Pre-sessional English course to meet the English language requirements for this course?

The length of Pre-sessional English course you'll need to take depends on your current level of English language ability.

## Pre-sessional English in detail

If you don't meet our English language requirements, we can use your most recent IELTS score, or the equivalent score in selected other English language tests, to determine the length of Pre-sessional English course you require.

Use the table below to check the course length you're likely to require for your current English language ability and see whether the course is available on campus or online.

| Your most recent IELTS score | Pre-sessional English course length | On campus or online |
|---|---|---|
| 6.0 overall, with writing at 6.0 and no component below 5.5 | 6 weeks | On campus or online |
| 5.5 overall, with writing at 5.5 and no component below 5.0 | 10 weeks | On campus or online |
| 5.5 overall, with no more than one component at 5.0 | 12 weeks | Online |
| 5.5 overall, with no component below 5.0 | 20 weeks | On campus |
| 5.0 overall, with no more than one component at 4.5 | 30 weeks | On campus |
| 4.5 overall, with no more than one component at 4.0 | 40 weeks | On campus |

If you've completed an alternative English language test to IELTS, we may be able to use this to assess your English language ability and determine the Pre-sessional English course length you require.

Please see our guide to [Pre-sessional English entry requirements](#) for IELTS 6.5 overall, with no component below 6.0, for further details.

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