

Course Information Sheet for entry in 2024-25: MSc in Applied Digital Health



Course facts

| | |
|-----------------|-----------|
| Mode of study | Full Time |
| Expected length | 12 months |

About the course

The MSc in Applied Digital Health is a one-year, full-time course, designed to teach the interdisciplinary knowledge and skills needed to drive innovation in the fast-growing area of digital health.

The MSc is led by the Nuffield Department of Primary Care Health Sciences (NDPCHS). The course combines front line clinical experience with theoretical and methodological expertise, capitalising on the breadth of internationally leading digital health research in the department. In addition, recognising the interdisciplinary nature of digital health, the MSc draws on the expertise of faculty from across the University, spanning medicine, social science, engineering, computing and data science.

Aimed at early-career professionals, entrants to the Applied Digital Health MSc will come from a wide range of backgrounds, including (but not limited to) clinical medicine, medical sociology, psychology, statistics, computer science and engineering. No pre-existing knowledge is assumed, although applicants must have an interest in both the social and technical aspects of digital health. The breadth of content means that this MSc is not suitable for applicants who wish to focus their studies on only one component of the digital health field.

Upon successful completion of the course graduates will be able to:

- discuss the drivers, enablers, barriers and challenges to digital health innovation, using real-world examples
- summarise the state-of-the-art in digital health tools – including digital therapeutics, digital diagnostics, artificial intelligence, learning health systems and those that facilitate automated care pathways or improved patient (self)management – and both explain and critically evaluate the theories and techniques that underlie them
- identify and formulate a response to the ethical, policy, regulatory and practice challenges facing digital health
- explain in detail the need for user-focused development, meaningful evaluation and successful implementation of digital health tools, and propose appropriate methods, actions and processes to meet these requirements
- describe and apply key qualitative and quantitative research methods used to study digital health care, as well as identify the strengths and weaknesses of those methods.

It should be noted that this MSc is not a computing or engineering course. While it does include significant content on the concepts underlying tools and technologies commonly used in digital health, it does not teach students how to programme digital health software.

Course outline

This course consists of eight compulsory modules and a dissertation.

Each module focuses on different ways in which digital health can be used to address the challenges facing twenty-first century healthcare. These solutions include clinical informatics for better surveillance of care quality and public health; harnessing electronic health data to support diagnosis and prognosis; improving outcomes via remote patient monitoring and digital diagnostics; using digital tools to facilitate physical and cognitive behaviour change; implementing more efficient and effective models of primary care; reducing the cost of care.

Module titles are as follows:

1. Foundations of Digital Health
2. AI for Efficient Healthcare Systems
3. Harnessing Big Data for Clinical Decision Support
4. Remote Monitoring and Digital Diagnostics
5. Supporting Health Behaviour Change using Digital Tools
6. Digital Transformation of Primary Care
7. Economics of Digital Health
8. User Focused Design and the Lifecycle of Digital Health Innovation

There are a number of cross-cutting themes that run throughout the modules. These themes include artificial intelligence and machine learning, behavioural science, challenges facing health systems, electronic health records, ethics, implementation, policy, programming for data analysis, regulation and law, sociotechnical processes, statistics and study design for the evaluation of digital tools.

The modules run consecutively, with each covering a two week period. In the first week of each module teaching is delivered via a range of face-to-face methods, including lectures, seminars, and group work. In the second week students engage in guided self-study and complete their assessment for the module, with learning further supported by a guest lecture series and a journal club.

In the third term students undertake an original research project, culminating in a research dissertation and a short presentation. Students are supported in the selection of a research topic, although the department welcomes students to propose a topic of their choosing (subject to conditions).

Supervision

The allocation of graduate supervision for this course is the responsibility of the Nuffield Department of Primary Care Health Sciences and it is not always possible to accommodate the preferences of incoming graduate students to work with a particular member of staff. A supervisor may be found outside the Nuffield Department of Primary Care Health Sciences. Students will be assigned an academic advisor for the entirety of the course, in addition to their dissertation supervisor, who they will meet with twice a term. In addition, each student will be allocated a dissertation supervisor for that component of the course.

Assessment

During the first two terms there are a series of formative assessments designed to enable teaching staff to monitor student progress. All students are provided with feedback that will enable them to improve their learning by helping them identify their strengths and weaknesses.

There are also eight summative assessments in the first two terms, one per module. Each of these summative assessments account for 8.75% of the final mark. The assessments vary according to the content of the module but may include essays, sets of exercises and presentations.

The dissertation in the third term is worth 30% of the final mark.

Changes to this course

The University will seek to deliver this course in accordance with the description set out above. However, there may be situations in which it is desirable or necessary for the University to make changes in course provision, either before or after you commence your course. These might include significant changes made necessary by any pandemic, epidemic or local health emergency. For further information, please see the University's Terms and Conditions (<http://www.graduate.ox.ac.uk/terms>) and our page on changes to courses (<http://www.graduate.ox.ac.uk/coursechanges>).

Costs

Annual fees for entry in 2024-25

| Fee status | Annual Course fees |
|------------|--------------------|
| Home | £43,170 |
| Overseas | £43,170 |

Information about course fees

Course fees are payable each year, for the duration of your fee liability (your fee liability is the length of time for which you are required to pay course fees). For courses lasting longer than one year, please be aware that fees will usually increase annually. Information about how much fees and other costs may increase is set out in the University's Terms and Conditions (<http://www.graduate.ox.ac.uk/terms>).

Course fees cover your teaching as well as other academic services and facilities provided to support your studies. Unless specified in the additional cost information (below), course fees do not cover your accommodation, residential costs or other living costs. They also don't cover any additional costs and charges that are outlined in the additional cost information.

Additional cost information

Please note that this course requires that you attend in Oxford for teaching, and you may incur additional travel and accommodation expenses for this. Further, as part of your course requirements, you will need to choose a dissertation, a project or a thesis topic. Depending on your choice of topic and the research required to complete it, you may incur additional expenses, such as travel expenses, research expenses, and field trips. You will need to meet these additional costs, although you may be able to apply for small grants from your department and/or college to help you cover some of these expenses.

Living costs

In addition to your course fees, you will need to ensure that you have adequate funds to support your living costs for the duration of your course.

The likely living costs for 2024-25 are published below. These costs are based on a single, full-time graduate student, with no dependants, living in Oxford. We provide the cost per month so you can multiply up by the number of months you expect to live in Oxford.

Likely living costs for one month

| | Lower range | Upper range |
|--------------------------|-------------|-------------|
| Food | £315 | £495 |
| Accommodation | £745 | £925 |
| Personal items | £190 | £320 |
| Social activities | £40 | £95 |
| Study costs | £35 | £85 |
| Other | £20 | £35 |
| Total | £1,345 | £1,955 |

Likely living costs for nine months

| | Lower range | Upper range |
|--------------------------|-------------|-------------|
| Food | £2,835 | £4,445 |
| Accommodation | £6,705 | £8,325 |
| Personal items | £1,710 | £2,880 |
| Social activities | £360 | £855 |
| Study costs | £315 | £765 |
| Other | £180 | £315 |
| Total | £12,105 | £17,595 |

Likely living costs for twelve months

| | Lower range | Upper range |
|--------------------------|-------------|-------------|
| Food | £3,780 | £5,940 |
| Accommodation | £8,940 | £11,100 |
| Personal items | £2,280 | £3,840 |
| Social activities | £480 | £1,140 |
| Study costs | £420 | £1,020 |
| Other | £240 | £420 |
| Total | £16,140 | £23,460 |

When planning your finances for any future years of study at Oxford beyond 2024-25, it is suggested that you allow for potential increases in living expenses of 5% or more each year – although this rate may vary depending on the national economic situation.

More information about how these figures have been calculated is available at www.graduate.ox.ac.uk/livingcosts.

Document accessibility

If you require an accessible version of this document please contact Graduate Admissions and Recruitment by email (graduate.admissions@admin.ox.ac.uk) or via the online form (<http://www.graduate.ox.ac.uk/ask>).