

MSc NCCN 25/26

Description



MSc Neuroimaging for Clinical and Cognitive Neuroscience

Student Handbook

Faculty of Biology, Medicine and Health

School of Health Sciences, Division of Psychology, Communication and Human Neuroscience

2025-2026

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Website: [MSc Neuroimaging for Clinical & Cognitive Neuroscience \(2025 entry\) | The University of Manchester](#)

School of Health Sciences Student Handbook

[Click here to access.](#)

You will need your University of Manchester login.

The student handbook has been developed as a resource for Undergraduate and Postgraduate Taught students completing degree programmes within the School of Health Sciences (SHS).

This resource should be used as the first point of reference for questions concerning your programme, support and advice, or academic policies and procedures.

The University of Manchester is a large and complex organisation, and we want to ensure that you know how to access the information, support, and guidance you need to succeed in your studies. It is therefore designed to guide you through many aspects of your time as a student and provides useful links to information available through the University's website, as well as summarising the facilities and support services that are available across the University and how you can access them. It also outlines what you should expect of the School and what they can expect from you, and clarifies the policies and procedures relevant to your area of study.

Division of Psychology, Communication and Human Neuroscience Aims

The overarching aim is to offer students a broad and balanced thorough education in Psychology, Human Neuroscience, Human Communication, Speech/Language Therapy, Deaf Education or Audiology within an institutional culture of high-quality research and scholarship. Specific aims are to:

Deliver a range of specialist degrees, informed by current research, which equip students for careers within psychology, neuroscience, speech/language therapy, audiology, deaf education, teaching, and related areas, or which enhance their existing careers and the service they provide.

Maintain and develop high standards of teaching, research and scholarship in an environment which encourages the exchange of knowledge and ideas across professions.

Develop in partnership with students their subject-specific knowledge and understanding, cognitive skills, practical, clinical and professional skills, and transferable skills, accessed from an integrated curriculum.

Develop a variety of teaching methods and assessment strategies to meet programme objectives, student and/or employer needs.

Provide students with effective induction information, academic and pastoral support, in order to enhance their academic and personal development and to encourage the acquisition of qualifications, knowledge, skills and understanding appropriate to their abilities.

Provide appropriate laboratory, clinical, library, and other facilities to ensure a high-quality learning environment.

Promote a commitment to professional development, independent study and lifelong learning.

Develop collaborative working practice in teaching, clinical work, and research with other academic colleagues, and with external services.

Seek professional accreditation of programmes where appropriate and maintain on-going review of all programmes.

Develop academic links that improve support services and professional expertise overseas.

MSc NCCN:

Programme Director

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Deputy Programme Director

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Section A: Programme Information

Rationale and General Description

The programme is designed for students from a variety of scientific backgrounds (graduate and postgraduate) who wish to use functional neuroimaging in academic or clinical research, medicine, pharmaceutical evaluation/diagnostics or who are interested in careers relating directly to fMRI/EEG methods such as MR physics and computer software design. Students will acquire the necessary methodological and theoretical skills to equip them for high-level functional imaging research using fMRI, PET and EEG. The programme is strongly lab-based and offers extensive practical experience grounded within cognitive and clinical theory. The course is taught by a team of cognitive, clinical and imaging neuroscientists who have established expertise in all the

aspects of the programme. The teaching programme combines lecture and small group formats with an extensive series of lab-based sessions designed to ensure a balanced combination of hands-on experience and theoretical debate and understanding.

The programme is full-time and delivered in 3 semesters over a 1 year period. During the first two semesters of the course, students attend a number of course units covering a wide range of theoretical and methodological areas. This taught element of the course includes lectures, labs and small group activity and discussion.

After completion of the course unit assessments, including examinations, in June, students work on their research project exclusively, and submit a research project report by September, 2026. A broad selection of research areas is offered and students choose, and develop, their project work in consultation with their supervisor and advisor.

Programme Aims

Students will become members of a neuroimaging community that leads research and development in this area. The aims of the programme are to provide students with a solid set of skills and a thorough theoretical understanding relevant to cognitive brain imaging. The course aims to prepare students for higher research degrees or employment in the clinical or industrial sectors. The course will produce students who:

1. have an in-depth knowledge and understanding of current methods used in cognitive brain imaging (including structural and functional MRI, PET and EEG/ERP) and their relative strengths and limitations.
2. are skilled in processing and analysing MRI, fMRI, PET and EEG/ERP data and who understand how to interpret brain activation data and are able to give appropriate consideration to the specific limitations faced in the interpretation of cognitive brain imaging data.
3. have an appropriately specialised theoretical background to allow them to develop their skills in cognitive brain imaging, including a working background in cognitive science, cognitive theory as well as in neuroanatomy and issues affecting spatial localisation.
4. have focused skills in experimental design relevant to cognitive brain imaging. Particular emphasis is placed on providing knowledge-based skills that will ensure careful task analysis and an in-depth understanding of the interactive nature of key features of brain neurophysiology with the physics of the data acquisition method and the experimental paradigm in hand.

5. have a range of transferrable skills including presentation and communication skills (both oral and written); scientific writing; report writing; analytical skills and to provide students with the opportunity to develop specific time-management, target setting and self-monitoring work skills.
6. To have a solid grasp of a selection of advanced imaging techniques and to understand some of the mathematical, statistical and neurophysiological factors underlying these advanced methods
7. Apply an understanding of the research process, methodological, analytical techniques to conduct, analyse and report an original piece of research.

Research Project

The research project involves a student working closely with their supervisor to develop and implement a piece of research drawing particularly on image analysis skills.

Please note: For those students progressing to a 3-year PhD following completion of this MSc, the data collected and/or analysed for this research cannot be used as part of the PhD. However, it is perfectly proper to use the MSc research as a pilot study for the PhD.

Supervisory Arrangements

All Graduate Research Students are allocated a Supervisor. Supervision is governed by the University Manual of Academic Procedures, which outlines in more detail the responsibilities of the Supervisor and the Student. Briefly, the responsibilities of the Supervisor include: giving guidance about the nature of research and the standard expected; the planning of the research programme; and pointing the Student towards relevant literature and other sources of information.

The relationship between the Student and his/her Supervisor is of central importance. Both the Student and the Supervisor have a responsibility to ensure that the dissertation is completed within the prescribed period of the programme. Supervisors and students should establish at their initial meeting clear and explicit expectations of each other in order to minimise the risks and problems of misunderstanding, personality clashes, inadequate supervision and unsatisfactory work. Timetables for Progress Monitoring meetings must be closely observed. It should be noted that in some instances students may be jointly supervised by staff, and be assigned a principal and second supervisor.

The Dissertation Unit Lead will allocate a supervisor with expertise in your chosen areas. Whilst it is not always possible to allocate students to the supervisor of choice, every

attempt will be made to match students to a research area of their choice.

Supervisor Availability

It is the responsibility of the student to liaise with their research project supervisor to arrange supervision meetings, and to agree on deadlines around reading drafts. We recommend discussing availability and other practical aspects of meeting (when, where, how supervision will take place) in the first supervisory meeting, and booking in supervision meeting dates in advance.

Supervisors sometimes become unavailable unexpectedly, for example due to illness. Where a supervisor is unavailable and you have an urgent issue that needs resolution, you can contact your academic advisor for further advice or support. If they are also unavailable you can also contact the programme directors, or the leads (Drs Cheryl Capek and Dan Cox) for further advice or support.

Academic Advisor

All students will be allocated an Academic Advisor from the outset of their studies. Support from the Academic Advisor is a pastoral role and in addition to support provided by the student's dissertation supervisor.

The Academic Advisor will be a member of the programme team. Other individuals who are available to help support students and answer queries include: the Unit Leads and the Dissertation supervisors. In addition the SHS Student Support Hub will provide advice and guidance to students and staff in the school.

You can come to the Student Support Hub located in the Ground Floor of the Jean MacFarlane Building, Monday – Friday, 9:00am to 5:00pm. Alternatively, or outside of office hours, you can email shs.hub@manchester.ac.uk

The Advisor will assist in the monitoring a student's progress and will act as a point of contact to discuss academic and other matters.

Chatham House Rule

We recognise that students may have lived experience and/or work experience of issues that are covered in the MSc. Students may choose to share their experiences in classes although they should not feel compelled to if they do not want to. We ask students to follow the Chatham House Rule – When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be

revealed.â?• This is to encourage inclusive and open dialogue but protect the identity of those who are speaking.

External Examiner

The External Examiner for this programme is TBC.

Dissertation information for students

For information on layout and presentation of dissertations see the [Guidance for the Presentation of Taught Masters Dissertations](#).

1. You need to stick to the format for dissertations outlined in the Faculty guidelines. If something isn't specified in the guidelines (for example, if you want to number sections), try to follow a fairly standard format, for example APA format or the format adopted in University PhD theses.
2. We do not insist on APA format, but you should consult your supervisor. Whatever format you choose, you should be consistent throughout your dissertation.
3. The word limit is 10,000. There is no additional 10% leeway permitted for this assessment. The dissertation module follows the University's Policy on Marking and the Assignment Word Count Guideline which you will find above but you cannot exceed the 10,000 word limit. While the maximum is 10,000, in practice, 8,000 words is likely to be appropriate for most projects. It's best to talk to your supervisor if your word count is going to be lower to ensure you are covering all the relevant info. Students should be aware that the dissertation forms a substantial piece of work, and as such, the literature review should be thorough and will generally include more information than you might find in a journal article on the same topic. However, we recognise that different types of project have different requirements in terms of the amount of information needed in Methods sections and Results sections, and some may lend themselves to longer Discussions of results than others. You should therefore seek guidance from your supervisors who are experts in your field of research. As your supervisor will also be one of the two markers for your dissertation, they are the best people to consult. The reason we have strict word limits is to encourage students to write concisely. It should be entirely possible to write your dissertations in 10,000 words. We use the length of a journal article in the field as a gauge here. Consider placing some text (where appropriate) in Appendices.

4. There are no guidelines for the number of words allocated to each section of the dissertation as projects differ widely. However, bear in mind that your Introduction and Discussion are usually related. So if you discuss a wide range of background literature to motivate your study, the reader will expect to see reference to this literature in your Discussion. It would be unusual to introduce a large body of research in your discussion that had not previously been mentioned in your Introduction, or analyses that were not in your Results.

5. You can use footnotes but these will be included in your word count.

6. Your dissertation will be marked by your supervisor and one other person. They will then agree a mark. A selection of dissertations will be sent to our external examiners. Their role is to check that marking is consistent, and to advise us if they think any marks are inappropriate. They always see borderline dissertations (those on the borderline between degree classifications), fails, distinctions, and anywhere two markers disagree substantially on the mark to be awarded (this rarely happens in practice), plus a handful of others.

7. You do not need to include all of your data in the Appendices, although it might be helpful to include sample data, especially if you have an elaborate coding scheme. It is generally good practice to include (a sample of) your materials, for example if you have designed questionnaires, used a series of sentences or visual stimuli for your task and so on. You do not need to include all your ethics application, but you may wish to include advertisements for participants if you think it is relevant to your project, for example if the advert is likely to have attracted a particular kind of participant that may have influenced your results in some way.

8. While not required, it is advisable to use reference managing software (e.g., Endnote, Mendeley, Zotero) for your references.

9. Finally, the best person to consult for guidance is your supervisor. But if anyone has any other questions, please feel free to email the Project lead (who are also the Programme Directors) and they will do their best to advise.

Marking

Always check with your supervisor what they are looking for when marking the work. Supervisors will be provided with the guidelines below (subject to change up to date guidance will be provided during the course of the year):

15%	Context / Background / Introduction
15%	Literature Review / Case for the Study
	20% Design of Study or Methods
20%	Results

20%

Discussion

10%

Presentation and Referencing

Guidance for Presentation of Taught Masters Dissertations

The University of Manchester guidance on presentation of taught Masters Dissertations is available at: [Guidance for the presentation of Taught Masters dissertations](#)

The guidance explains the required presentation of the dissertation, and failure to follow the instructions in the guidance may result in the dissertation being rejected by the examiners.

There is more information on taught masters dissertation requirements on Canvas: <https://my.manchester.ac.uk>

Monitoring Dissertation Progress

In order to monitor their progress, students will have regular, scheduled meetings with their dissertation supervisor. Their academic advisor will also check in with them at the start of the project period to ensure both student and supervisor(s) are aware of expectations in carrying out the dissertation project.

Academic Advisors

You will be allocated an academic advisor who you will be expected to meet with (either in person or online) at least three times per year

Meeting 1: Full-time students approx December 2024

The purpose of this meeting is to discuss any questions you have about the programme.

Meeting 2: Full-time students approx February 2025.

This meeting occurs after students have received the results for semester 1 taught courses. The purpose is for students to discuss their progress on taught courses with their advisor.

Meeting 3: Full-time students approx June 2025.

The purpose of this meeting is to monitor the student's progress and to discuss any issues to do with the programme.

In addition, students may request meetings with the Programme Directors at any point throughout their studies if there are additional matters they wish to discuss.

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