

# Programme Specification 2025-26

1.	Programme title	MSc Cognitive and Clinical Neuroscience
2.	Awarding institution	Middlesex University
3a	Teaching institution	Middlesex University London
3b	Language of study	English

## 4a Valid intake dates and mode of study

Mode of Study	Cohort	Delivery Location	Duration
Full-time (FT)	Semester 2	Hendon	1 Years
Full-time (FT)	Semester 1	Hendon	1 Years
Part-time (PT)	Semester 1	Hendon	2 Years
Part-time (PT)	Semester 2	Hendon	2 Years

4c	Delivery method	On Campus/Blended Learning
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5. Profession	nal/Statutory/Regulatory body (if applicable)
N/A	

6.	Apprenticeship Standard (if applicable)	N/A
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7. Final qualification(s) available	
Target Award Title(s)	
MSc Cognitive and Clinical Neuroscience	
Exit Award Title(s)	
PGCert Cognitive and Clinical Neuroscience	
PGDip Cognitive and Clinical Neuroscience	

8. Academic year effective from	2025-26

## 9. Criteria for admission to the programme

A second-class degree in Psychology, Neuroscience, Clinical Neuroscience or related degree is preferred. Applicants with a second class degree in relevant fields will be considered on a case-by-case basis and are encouraged to apply.

Students whom English is a second language must have achieved IELTS 6.5 overall (with a minimum of 6.0 for each component) or above.

### Principle of fair admission

The University aims to ensure that its admissions processes are fair, open and transparent and aims to admit students who, regardless of their background, demonstrate potential to successfully complete their chosen programme of study where a suitable place exists and where entry criteria are met. The University values diversity and is committed to equality in education and students are selected on the basis of their individual merits, abilities and aptitudes. The University ensures that the operation of admissions processes and application of entry criteria are undertaken in compliance with the Equality Act. We take a personalised and fair approach to how we make offers. We feel it's important that our applicants continue to aspire to achieving great results and make offers which take into account pieces of information provided to us on the application form.

This includes recognition of prior learning and experience. If you have been working, or you have other learning experience that is relevant to your programme, then we can count this towards your entry requirements and even certain modules once you start studying.

### 10. Aims of the programme

The programme aims to:

The MSc in Cognitive and Clinical Neuroscience is designed to equip students with the critical skills and cutting-edge knowledge needed to explore the intricate relationship between brain function and human cognition. This programme immerses students in contemporary research, enabling them to engage critically with developments in cognitive and clinical neuroscience. Through an in-depth exploration of brain states and cognition, students will develop expertise in key areas such as developmental neuroscience, electrophysiology, neuroimaging, and non-invasive brain stimulation—essential for understanding both healthy brain function and neurological disorders. With a strong foundation in inferential statistics and research methodologies, students will not only master the tools needed to analyse complex neuroscientific data but also apply their skills in an independent research project, preparing them for careers at the forefront of neuroscience research and clinical applications.

5. Provide students with a knowledge base and practical skills in inferential statistics.
6. Facilitate the completion of an independent research project in cognitive neuroscience.

### 11. Programme learning outcomes

### **Programme - Knowledge and Understanding**

On completion of this programme the successful student will have a knowledge and understanding of:

- 1. The complex relationship between the brain, cognition and behaviour.
- 2. The development of the brain and cognition across the lifespan.
- 3. Contemporary issues in research methods and the scientific method.
- **4.** Inferential statistics and how they are used in biomedical and psychological research.

- 5. Neural and brain processes in health and disease.
- **6.** Research methods in neuroimaging, neurophysiology and non-invasive brain stimulation.

### **Programme - Skills**

On completion of this programme the successful student will be able to:

- 7. Examine and evaluate biomedical and psychological data.
- **8.** Apply and evaluate neuroscience techniques to examine brain function.
- 9. Critically evaluate the underlying assumptions of cognitive neuroscience techniques
- **10.** Pre-process, analyse and interpret data recorded from EEG.
- 11. Critically evaluate contemporary research in cognitive and clinical neuroscience.
- **12.** Design and produce an original and advanced research project.

### 12. Teaching/learning methods

Students will be actively involved in a range of learning and teaching approaches. Such active approaches aim to put them at the centre of their learning so they are involved and engaged in all aspects of their learning and assessment. A well-balanced mix of theory and practice is delivered by research-active staff and/or practitioners via a range of teaching methods, including:

- •Live learning on campus interactive sessions, seminars, and lab-based practicals, alongside group work to stimulate communication, cooperation, and discussion.
- •Academic support sessions tutorials, assessment workshops, research supervision, and academic advisors supporting students in prioritising their health and wellbeing.
- •Independent study flipped learning activities, 'on-demand' videos, prior reading or preparation for classes, data collection for projects, and group work with classmates.

Live learning on campus will focus on learner activity, including discussion and debates to enable students to share their thoughts and experiences, which will help direct the focus of sessions, making them co-leaders in their learning. Learner activity will also involve group tasks applying knowledge to practical problems. This will allow them to apply learning beyond the classroom and encourage collaborative working and learning between students from different countries and cultures. Learning will be practice-led, with a strong focus on employability, ensuring students gain hands-on experience that prepares them for careers in both research and applied neuroscience settings.

A key feature of the programme is the emphasis on practical lab classes, where students will gain direct experience using neuroscientific equipment, including electroencephalography and non-invasive brain stimulation techniques. These hands-on sessions will enable students to develop proficiency in programming behavioural and cognitive experiments, as well as analysing neuroscientific data using state-of-the-art tools and software. This practical training is designed to bridge the gap between theoretical understanding and real-world application, providing students with valuable technical and analytical skills that are highly sought after in both academia and industry.

Students' learning will be supported by existing and emerging learning technologies, including a variety of platforms and software packages. This will enhance their digital literacy and foster essential skills that are highly valued by employers, such as flexible working.

effective communication, IT proficiency, teamwork, and the ability to create shared understandings based on quality resources and access to global expertise.

Independent study will further consolidate learning, directed in many ways, particularly through the virtual learning environment. This includes the use of 'on-demand' videos, flipped learning activities such as case study preparation, interactive discussion forums, and peer-led activities such as unsupervised group discussions and role-playing exercises in class. Key concept videos will support student's independent learning outside of the classroom.

Approx. number of timetabled hours per week (at each level of study, as appropriate), including on-campus and online hours. FT 9 hours, PT 4.5 hours

Approx. number of hours of independent study per week (at each level of study, as appropriate). FT 31 hours, PT 15.5 hours

### 13. Employability

### 13a Development of graduate competencies

### 13b Employability development

Development of graduate competencies

The MSc Cognitive and Clinical Neuroscience programme is designed to cultivate graduate competencies through a combination of theoretical knowledge, practical application, and reflective learning. Key competencies are developed and articulated as follows:

1.Leadership and Influence

Through group discussions, collaborative research projects, and presentations, students build confidence in articulating ideas and leading research initiatives. The independent research project fosters decision-making and project management skills essential for leadership in scientific and professional settings.

2.Entrepreneurship

Modules like Open Science and Practical methods and topics in cognitive neuroscience encourage innovative thinking by exposing students to cutting-edge research techniques and enabling them to design and execute original research projects. This equips them with the entrepreneurial mindset to identify and act on opportunities in academia, healthcare, and industry.

3. Communication, Empathy, and Inclusion

Participatory seminars and group activities help students hone their communication skills, ensuring they can present complex ideas clearly and inclusively. The programme's focus on understanding diverse cognitive and developmental processes enhances empathy and cultural sensitivity.

4. Curiosity and Learning

Students are immersed in a research-led teaching environment where curiosity is nurtured through critical engagement with current debates in neuroscience and psychology. Modules such as Neuropathology and Clinical Neurophysiology and Developmental Neuroscience challenge students to question assumptions and seek evidence-based conclusions.

5. Collaborative Innovation

Group activities and laboratory sessions provide opportunities for collaborative problem-solving. The integration of interdisciplinary modules like Neuropathology and Clinical Neurophysiology fosters innovation by combining perspectives from psychology and biomedical sciences.

6.Resilience and Adaptability

The diverse assessment methods, including essays, lab reports, and oral presentations, require

students to adapt to various challenges and develop resilience in the face of feedback and rigorous academic demands.

7. Technological Agility and Problem Solving

The programme places a strong emphasis on technological competency through the use of EEG, non-invasive brain stimulation, and neuroimaging tools. Students are trained to troubleshoot technical issues and apply advanced data analysis techniques to solve complex scientific problems.

8. Problem Solving and Delivery

Across all modules, students engage in activities that develop their ability to identify problems, evaluate solutions, and deliver impactful outcomes. The capstone research project exemplifies this competency, as students must manage the end-to-end delivery of an original scientific investigation.

This multifaceted approach ensures that graduates are not only experts in cognitive and clinical neuroscience but are also equipped with the broad competencies needed to thrive in diverse professional environments.

### Employability development

Employability is a foundational aspect of the MSc Cognitive and Clinical Neuroscience programme, integrated through strategic activities, engagement, and robust evaluation mechanisms to prepare students for careers in academia, healthcare, and industry.

- 1. Career Readiness Activities
- •Career Workshops: Delivered by Middlesex employability services, these workshops focus on CV building, job applications, and interview preparation, tailored to career opportunities in neuroscience, healthcare, and data science.
- •Research Showcase: Students present their research ideas, reading and projects to peers, and academics, enhancing communication skills and building professional networks.
- 2. Employer Engagement
- •Curriculum Input: Employers from neuroscience and healthcare sectors provide feedback on modules like Practical Cognitive Neuroscience to ensure alignment with contemporary research.
- •Learning opportunities with healthcare professionals, and Middlesex employability services allow students to address real-world challenges and develop practical skills.
- 3. Evaluating Employability Development
- •Student Feedback: Surveys capture student reflections on employability activities, helping identify areas for improvement.
- •Graduate Outcomes: Middlesex employability services tracks employment destinations and gathers alumni feedback to evaluate career preparedness.
- 4. Employability Integration

Given the intensive one-year structure, employability is embedded strategically across the programme:

- •Career Mapping Workshop: Early in the year, Middlesex employability services guides students in identifying career goals and planning their trajectory.
- •Individual Consultations: Toward the end, programme leaders offer one-on-one sessions to refine CVs, prepare for interviews, and strategise career transitions.

This cohesive approach ensures graduates are equipped with the knowledge, skills, and connections to excel in their chosen fields.

### 13c Placement and work experience opportunities (if applicable)

N/A

### 13d Future careers / progression

Students graduating with a Cognitive and Clinical Neuroscience MSc will be provided with skills and knowledge necessary for careers in UK health services and research centres. The

programme is suited for students who want to pursue a career in data science, cognitive science, academic research (MPhil/PhD), teaching in higher education, and clinical neurophysiology (e.g. in the NHS).

The range of professional skills that Cognitive and Clinical Neuroscience MSc graduates develop ensures that they are highly valued across the economy. The programme develops a range of broad skills including critical thinking and scientific reasoning. As well as this, specific expertise in neuroimaging and stimulation techniques are developed. Further, students are taught advanced data handling, information processing and statistical techniques. With a greater presence on data handling and critical engagement with statistics in today's workplace these skills are thought to provide better opportunities for graduates to enter positions where data analytics are valued. The specific skills in practical engagement with neuroimaging and stimulation provide a grounding in experience for students to progress along a clinical career. Furthermore, claims about cognitive neuroscience are pervasive in marketing – the programme will also adequately equip students with the data handling and critical skills to be able to pursue marketing careers.

### 14. Assessment methods

The MSc Cognitive and Clinical Neuroscience programme employs a diverse range of assessment methods, including essays, practical assessments, presentations, reports, lab reports, and research reports. These methods are carefully aligned with the programme's learning outcomes, ensuring students develop the necessary theoretical understanding, technical proficiency, and critical thinking skills required for careers in neuroscience research and clinical applications.

# 15. Programme Structure (level of study, modules, credits and progression requirements)

Structure is indicative for Part-time routes.

Students must take all of the compulsory modules and choose following programme requirements from the optional modules.

Non-compensatable modules are noted below.

## **Available Pathways**

Not Applicable

### Year 1

#### Year 1 Level 7 FT and PT

Code	Туре	Module Title	Credits at FHEQ Level
PSY4060	Compulsory	Developmental Neuroscience 2025-26	15 at Level 7
PSY4062	Compulsory	Open Science 2025-26	15 at Level 7
PSY4250	Compulsory	Electroencephalography for	15 at

		Cognitive Neuroscience	Level 7
		2025-26	
PSY4230	Compulsory	Statistical literacy for psychological science 2025-26	15 at Level 7
PSY4180	Compulsory	Practical methods and topics in cognitive neuroscience 2025-26	30 at Level 7
PSY4035	Compulsory	Research: Practice and Reporting 2025-26	60 at Level 7
BMS4210	Compulsory	Neuropathology and Clinical Neurophysiology 2025-26	30 at Level 7

### Year 2

РΊ

Code	Туре	Module Title	Credits at FHEQ Level
PSY4060	Compulatry	Developmental	15 at
F314000	Compulsory	Neuroscience 2026-27	Level 7
PSY4062	Compulsory	Open Science 2026-27	15 at
1 01 4002	Compulsory		Level 7
PSY4035	Compulsory	Research: Practice and	60 at
F 3 1 4 0 3 3	Compulsory	Reporting 2026-27	Level 7
PMC4240	Neuropathology and Clinical	30 at	
BMS4210	Compulsory	Neurophysiology 2026-27	Level 7

<sup>\*</sup>Please refer to your programme page on the website re availability of option modules

### 16. Programme-specific support for learning

All new students go through an induction programme, and some have early diagnostic numeric and literacy testing before starting their programme. Student services provide one-to- one tutorials and workshops for those students needing additional support in these areas.

High quality specialist laboratories equipped with research grade software and hardware where appropriate, for formal teaching as well as self-study. Specifically, a range of research grade Electroencephalography (EEG) systems, non-invasive brain stimulation and specialised software used for behavioural experiment programming and EEG analysis.

Research activities and practitioner clinical expertise of academic staff feed into the teaching programme, which can, on some occasions, provide an opportunity for students to work with academics on some aspect of research.

17. HECos code(s)	100272: Neuroscience
17. HECos code(s)	100993: Cognitive Psychology
17. HECos code(s)	101382: Affective Neuroscience

### 18. Relevant QAA subject benchmark(s)

### 19. University Regulations

This programme will run in line with general University Regulations: Policies | Middlesex University

This programme will run in line with general University Regulations: https://www.mdx.ac.uk/about-us/policies/

### 20. Reference points

Middlesex University Regulations 24/25

2031 Learning Framework Operationalising the Principles: for Postgraduate

**Taught Programmes** 

Graduate competencies

Quality Assurance Agency (QAA) Frameworks for Higher Education Qualifications

QAA Quality Code for Higher Education

QAA Master's Degree Characteristics Statement

QAA Psychology subject benchmark statement

Health and Care Professions Council Standards of Proficiency: Practitioner Psychologists

External Examiner's feedback and reports

Students' feedback from student voice groups, PTES and module evaluation surveys

Middlesex University Learning and Teaching Policies and Strategies

21. Other information (if applicable)

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if they take full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the rest of your programme handbook and the university regulations.

## **Curriculum map for MSc Cognitive and Clinical Neuroscience**

Programme learning outcomes

## Knowledge and understanding

A1	The complex relationship between the brain, cognition and behaviour.
A2	The development of the brain and cognition across the lifespan.
A3	Contemporary issues in research methods and the scientific method.
A4	Inferential statistics and how they are used in biomedical and psychological research.
A5	Neural and brain processes in health and disease.
A6	Research methods in neuroimaging, neurophysiology and non-invasive brain stimulation.

## Skills

B1	Examine and evaluate biomedical and psychological data.
B2	Apply and evaluate neuroscience techniques to examine brain function.
В3	Critically evaluate the underlying assumptions of cognitive neuroscience techniques
B4	Pre-process, analyse and interpret data recorded from EEG.
B5	Critically evaluate contemporary research in cognitive and clinical neuroscience.
B6	Design and produce an original and advanced research project.

## **Programme learning outcomes -** Highest level achieved by graduates

A	A	A	A	A	A	B	B	B	B	B	B
1	2	3	4	5	6	1	2	3	4	5	6
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## 22b. Mapping by level of study and module

Module Title	Module	Α	Α	Α	Α	Α	Α	В	В	В	В	В	В
	Code	1	2	3	4	5	6	1	2	3	4	5	6
	by Level of study												
Level of study: 7													
Practical methods and topics in cognitive neuroscience	PSY4180	Х	Х			X	X		х	Х		Х	
Developmental Neuroscience	PSY4060	Х	Х			Х				Х		Х	
Open Science	PSY4062			Х	Х			Х					
Neuropathology and Clinical Neurophysiology	BMS4210	х	Х			Х	Х		х		Х	X	
Electroencephalography for Cognitive Neuroscience	PSY4250	Х			Х		Х		х	Х	Х	Х	
Statistical Literacy for Psychological Science (SLiPs)	PSY4230			Х	X			х					
Research: practice and reporting	PSY4035			Х									Х