

MSc

# Neuroscience

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

Part-time 24 months

### **About this course**

This course introduces students to modern neuroscience, with a unique focus on clinical disorders of the central nervous system. Each module has been co-designed with research active clinicians, to provide a grounded understanding of each topic. Throughout your studies you will have the opportunity to gain hands-on experience with neuroscience tools, preparing you for future careers or further study.

## Introduction

This course will introduce students to the field of neuroscience through the lens of clinical disorders of the central nervous system. It integrates clinical themes such as mental health, epilepsy, neurosurgery and pain, with foundational neuroscience and cutting-edge techniques.

Building on partnerships with the Walton Centre (the UK's only specialist hospital trust providing comprehensive neurology services) and Alder Hey Children's Hospital (one of Europe's biggest and busiest children's hospitals), this course is led by world-renowned clinical and scientific experts in the field.

Students will have the opportunity to gain first-hand experience in neuroscience tools, treatment approaches and advanced research methods including neuroimaging and statistical analysis. This programme has a unique focus on patient experiences and ensures a well-rounded understanding of neurological conditions and the basic science techniques used to study them, preparing graduates for future careers or further study in neuroscience or related disciplines.

Teaching will involve in-person lectures, workshops, seminars and practical sessions. The programme culminates in the research project, where students will be able to deepen their understanding and passion for the topic via hands-on neuroscience research.

### Who is this course for?

The programme is designed for graduates with a range of first degrees in topics such as the STEM subjects (e.g. psychology, physics, biosciences, medicine), allied health-related subjects (e.g. radiography, nursing, physiotherapy), and sports science. No previous experience in neuroscience is required.

# What you'll learn

- Epilepsy: electrophysiology, cell firing, EEG and neurosurgery, basic science, animal models, resection, tumour-induced seizures
- Pain: peripheral and central nervous system, central sensitisation, descending pain modulatory systems, pain disorders and somatosensation, peripheral nerves, ascending pathways, and integration
- Cognitive and mental health neuroscience: memory, language, vision and mental illness, e.g. anxiety, depression, ADHD
- Treatment approaches: pharmacological and interruptive techniques, e.g. TMS. Neuropsychological assessment, including psychophysics and psychometrics
- Brain disease and infection: dementias and neurodegenerative diseases, demyelinating disease, peripheral and brain infection, stroke and acquired brain injury, including methods for assessment and neurorehabilitation. Throughout the course, the systems level (clinical presentation) will be presented alongside lectures and workshops, exploring how basic science laboratory approaches can be used to model and study each condition
- Tools and techniques for functional neuroimaging: electrophysiology, neurovascular coupling, magnetic resonance imaging, experimental design, programming, analysis, scientific writing, and presentation skills
- Advanced statistics and methods: linear regression, mixed models, mediation and moderation, structural equation modelling, Bayesian statistics, psychometrics, and neuroimaging analysis

Research project: students can choose from a wide range of research topics and undertake a project with supervision from a world-class neuroscientist.
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# Careers and employability

The programme will aim to provide students with the skills and knowledge necessary to, e.g. progress to a PhD programme, seek employment in an applied clinical setting (e.g. working with patients undergoing neuro-rehabilitation following stroke) or move into a career related to working with clinical data (biostatistics, data analyst, etc).

Career support from day one to graduation and beyon	ıd
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# Career planning

# From education to employment

### **Networking events**

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# 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 - £15,000 Part-time place, per year - £7,500

#### International fees

Full-time place, per year - £32,000 Part-time place, per year - £16,000

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 <u>funded by external sponsorship</u>.
- International applicants who accept an offer of a place will need to <u>pay a</u> <u>tuition fee deposit</u>.

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 £12,167 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 <u>additional study costs</u> that may apply to this course.

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# **Entry requirements**

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

### Postgraduate entry requirements

Applicants will be expected to hold a Bachelor's degree at a 2.2 or above in a relevant subject such as Psychology, Biosciences, Radiography, Physics, Pharmacology, etc.

International applicants will be required to have an English language qualification of IELTS 6.5 overall with no component below 6.0, or equivalent.

### 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 <u>University of Liverpool International College</u>, means you're guaranteed a place on your chosen course.

# **English language requirements**

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

We accept a variety of <u>international language tests</u> and <u>country-specific qualifications</u>.

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

#### **TOEFL IBT**

88 overall, with minimum scores of listening 19, writing 19, reading 19 and speaking 20

### **Duolingo English Test**

125 overall, with writing not less than 125, speaking and reading not less than 115, and listening not below 110

#### **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 <u>the equivalent score in selected other English language</u> <u>tests</u>, 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 no component below 6.0	6 weeks	On campus
6.0 overall, with no component below 5.5	10 weeks	On campus and online options available
6.0 overall, with no more than one component below 5.5, and no component below 5.0	12 weeks	On campus and online options available
5.5 overall, with no more than one component below 5.5, and no component below 5.0	20 weeks	On campus
5.0 overall, with no more than one component below 5.0, and no component below 4.5	30 weeks	On campus
4.5 overall, with no more than one component below 4.5, and no component below 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 Presessional English course length you require.

Please see our guide to <u>Pre-sessional English entry requirements</u> for IELTS 6.5 overall, with no component below 6.0, for further details.

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