BSc (Hons) Neuroscience

Programme Specification

1. Programme title	BSc (Hons) Neuroscience BSc (Hons) Neuroscience with Foundation Year
2. Awarding institution	Middlesex University
3a. Teaching institution 3b. Language of study	3a. Middlesex University 3b. English
4a. Valid intake dates 4b. Mode of study 4c. Delivery method	4a. September 4b. FT/PT/TKSW ☒ On-campus/Blended ☐ Distance Education
5. Professional/Statutory/Regulatory body	N/A
6. Apprenticeship Standard	N/A
7. Final qualification(s) available	BSc (Hons) Neuroscience BSc (Hons) Neuroscience with Foundation Year BSc Neuroscience DipHE Neuroscience CertHE Neuroscience
8. Year effective from	2022

9. Criteria for admission to the programme

Candidates normally require maths and English to at least GCSE grade 4 or equivalent qualifications as well as 112-128 UCAS tariff points from one of the following awards.

- A-levels (including two A2s with at least one science subject, preferably in biology or chemistry at grade C or better)
- Or EDEXCEL National Diploma or Certificate in biology, chemistry, forensic science, laboratory and industrial science, or medical science
- Or Access course in applied science, clinical physiology, human or life sciences, medical or paramedical science, or science.
- Or high school equivalent, such as an International Baccalaureate

Overseas candidates should also be competent in English and have achieved, as a minimum, one of the following standards: IELTS 6.0 (with a minimum of 5.5 in all components) qualification.

Recognition of Previous Learning (RPL) scheme. Past learning or experience will be mapped against existing programme modules within the programme and the mapping will be considered to determine both the number of academic credits and the module exceptions to be awarded.

Please refer to the programme specification for the Foundation Year for criteria for admission to [the BSc (Hons) Neuroscience with Foundation Year programme](#).

10. Aims of the programme

The programme aims to provide students with an opportunity to:

- Gain a detailed knowledge of neuron structure and function;
- Develop an appreciation of key concepts and theories in cognitive neuroscience;
- Acquire knowledge and skills required to carry out a range of investigative techniques used to assess and diagnose normal and abnormal neuronal function;
- Apply scientific methods and approaches to research, development and innovation;
- Develop a range of employability skills required for effective life-long learning, communication, team-working and leadership.
- Recognize ethical issues in clinical and research settings.

11. Programme outcomes*	
A. Knowledge and understanding On completion of this programme the successful student will have knowledge and understanding of: 1. Anatomy of the nervous system; 2. Normal and abnormal neuronal function; 3. The mind and its processes; 4. The principles of diagnosis and treatment of neurological disorders; 5. The importance of scientific research in the advancement of knowledge and to evidence-based practice; 6. The skills required to monitor and assess brain and nerve functions; 7. Neurophysiological techniques. 8. Ethical issues related to clinical and research procedures.	**Teaching/learning methods** Students gain knowledge and understanding through lectures, seminars/workshops and laboratory work, self-study (both directed and self-directed) and online learning. **Assessment methods** Students' knowledge and understanding is assessed by both summative and formative assessments, which include seminar presentations, written assignments including laboratory reports, seen practical assessments.
B. Skills On completion of this programme the successful student will be able to: 1. Solve neurophysiological problems; 2. Critically appraise and synthesise information to gain new insights into aspects of neuroscience; 3. Present information in the most effective format to communicate ideas clearly; 4. Design and carry out research project; 5. Perform range of neurological investigative techniques in accordance with health and safety guidelines; 6. Develop other employability skills, such as leadership, collaborative working, project management and IT skills.	**Teaching/learning methods** Students acquire skills through problem-based learning activities, laboratory classes, clinical skills sessions, internships, and by undertaking a research project. **Assessment methods** Students' skills are assessed by written work, practical assessment, presentations, and a research project.

12. Programme structure (levels, modules, credits and progression requirements)
12. 1 Overall structure of the programme

BSc Neuroscience / with Foundation Year (Full-time mode)

Please refer to the programme specification for the Foundation Year for the modules to be taken during the foundation year of the BSc (Hons) Neuroscience with Foundation Year programme

Year 1

BMS1494 Fundamental Neuroscience (30 credits)	BMS1414 Contemporary Neuroscience and Professional Development (30 credits)	BMS1424 Introduction to Neurology (30 Credits)	PSY1020 Mind and Behaviour in Context (30 credits)

Year 2

BMS2105 Research Methods and Statistics (15 credits)	MGT2991 Science Innovation (15 credits)	BMS2415 Neuropharmacology (30 credits)	BMS2955 Neurophysiology (30 Credits)	PSY2006 Brain, Body and Mind (30 Credits)

Year 3 for BSc Neuroscience and Year 4 for BSc Neuroscience

BMS3496 Clinical Neurology (30 credits)	BMS3976 Neuroanatomy and Pathology (30 credits)	BMS3336 Dissertation (30 Credits)	BMS/PSY3xxx Option (30 Credits)

N.B. Tick Sandwich (TKSW) students, who take BMS3006 Placement for Employability (120 Credits) in Year 3, will be awarded a Diploma in Employability Studies.

L6 Options: Students will need to choose one of the following options.

Option 1: BMS3956 Applied Clinical Neurophysiology II (30 credits)
Option 2: Psychology modules.

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BSc Neuroscience (Part-time mode)

Please note the Foundation Year can only be studied full-time.

Year 1

BMS1494 Fundamental Neuroscience (30 credits)	BMS1424 Introduction to Neurology (30 Credits)	PSY1020 Mind and Behaviour in Context (30 credits)

Year 2

BMS1414 Contemporary Neuroscience and Professional Development (30 credits)	BMS2415 Neuropharmacology (30 credits)	BMS2955 Neurophysiology (30 Credits)

Year 3

BMS3976 Neuroanatomy and Pathology (30 credits)	BMS2105 Research Methods and Statistics (15 credits)	MGT2991 Science Innovation (15 credits)	PSY2006 Brain, Body and Mind (30 Credits)

Year 4

BMS3496 Clinical Neurology (30 credits)	BMS3336 Dissertation (30 Credits)	BMS/PSY3xxx Option (30 Credits)

L6 Options: Students will need to choose one of the following options.
Option 1: BMS3956 Applied Clinical Neurophysiology II (30 credits)
Option 2: Psychology modules;
    ONE from (first term)
- PSY3052 Neuropsychology: The healthy brain and what can go wrong with it (15 credits)
- PSY3053 Neuropsychology of language & communication (15 credits)

    And ONE from (second term)
- PSY3036 Fundamentals of cognition: Human memory (15 credits)
- PSY3057 Primatology (15 credits).

12.2 Levels and modules		
Level 4		
COMPULSORY	OPTIONAL*	PROGRESSION REQUIREMENTS
Students must take all of the following: BMS1414 BMS1424 BMS1494 PSY1020	There are no optional modules	All modules must be passed.
Level 5		
COMPULSORY	OPTIONAL *	PROGRESSION REQUIREMENTS
Students must take all of the following: BMS2105 MGT2991 BMS2415 BMS2955 PSY2006	There are no optional modules.	All modules must be passed.
Level 6		
COMPULSORY	OPTIONAL *	PROGRESSION REQUIREMENTS
Students must take all of the following: BMS3336 BMS3496 BMS3976	Students must also choose one of these optional modules choices: 1. BMS3956 2. PSY3052 or PSY3053 plus PSY3036 or PSY3057 Additionally, students on sandwich programme must select this module in year three. BMS3006	All modules must be passed.

*Please refer to your programme page on the website re availability of option modules

http://www.mdx.ac.uk/about-us/policies/academic-quality/handbook/

12.3 Non-compensatable modules	
Module level	**Module code**
4	None
5	None
6	BMS3336

13. Information about assessment regulations
This programme will run in line with general University Regulations.

14. Placement opportunities, requirements and support (if applicable)
Students have an opportunity to take year-long placement during their third year before completing the final year of the programme under the Thick Sandwich (TKSW) mode. They are required to work with MDXWorks to secure a placement before the end of their second year. A suitable placement is an academic or a commercial research laboratory, a health service organisation or a charity related to neuroscience. MDXWorks and the module leader will monitor the student's progress on placement and provide the student with the most appropriate support to help the student to have a rewarding placement and to complete the placement.

15. Future careers / progression
On graduation, you can either continue your studies at postgraduate level by taking a diploma, Master's degree or PhD or seek employment in a variety of careers.

A graduate can undertake further studies for a career in the NHS as a clinical scientist, healthcare scientist, physiotherapists, data analyst, nurse or a medical doctor. Fast-track training programmes are available for many NHS professions.

A career in education at a school, college or university is also an option. Other science related careers include research and development industry or academia, science communication, journalism or publishing, and scientific sales and marketing of diagnostic equipment.

Examples of non-science related careers are market research or analysis, retail, or operation management and public or private administration. |

16. Particular support for learning (if applicable)
Specialist laboratory facilities are available on campus to enable students to learn about neuroscience and develop practical skills required to work as a neuroscientist.

Online support for all modules on the programme are available on our virtual environment called My Learning.

Learning resource facilities at the University include computing suites and internet access.

Access to English Language and Learning Support, including Dyslexic support, are available on campus or online. |

17. HECos code(s)	CAH02-05 medical sciences
18. Relevant QAA subject benchmark(s)	N/A

19. Reference points

The following reference points were used in designing the programme.
QAA (2019) *Subject Benchmark Statement Biomedical Sciences*. QAA

Internal Documentation:
Middlesex University (2021) *Middlesex University Regulations*. London, MU

20. Other information

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 s/he takes 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.

21. Curriculum map for BSc Neuroscience

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Programme learning outcomes

	Knowledge and understanding
	Knowledge and understanding
A1	Anatomy of the nervous system
A2	Normal and abnormal neuronal function
A3	The mind and its processes
A4	The principles of diagnosis and management of neurological disorders
A5	The importance of scientific research in the advancement of knowledge and to evidence-based practice
A6	The skills required to monitor and assess brain and nerve functions
A7	Neurophysiological techniques
A8	Ethical issues related to clinical and research procedures
	Skills
B1	Solve neurophysiological problems
B2	Critically appraise and synthesise information to gain new insights into aspects of neuroscience
B3	Present information in the most effective format to communicate ideas clearly
B4	Design and carry out research project
B5	Perform range of neurological investigative techniques in accordance with health and safety guidelines
B6	Develop other employability skills, such as leadership, collaborative working, project management and IT skills

Programme outcomes														
A1	A2	A3	A4	A5	A6	A7	A8		B1	B2	B3	B4	B5	B6
Highest level achieved by all graduates														
6	6	6	6	6	6	6	6		6	6	6	6	6	6

Module Title	Module Code by Level	Programme outcomes														
		A1	A2	A3	A4	A5	A6	A7	A8		B1	B2	B3	B4	B5	B6
Contemporary Neuroscience and Professional Development	BMS1414	x			x	x	x		x		x	x	x			x
Introduction to Neurology	BMS1424	x	x			x	x		x			x	x		x	
Fundamental Neuroscience	BMS1494	x	x			x	x					x	x			
Mind and Behaviour in Context	PSY1020			x		x	x						x		x	
Research Methods and Statistics	BMS2105				x							x	x	x		
Neuropharmacology	BMS2415	x		x								x	x			
Neurophysiology	BMS2955	x		x		x	x	x			x	x	x		x	
Science Innovation	MGT2991	x			x						x	x				x
Brain, Body and Mind	PSY2006		x	x		x	x					x	x		x	
Placement for Employability	BMS3006				x						x	x	x		x	x
Dissertation	BMS3336				x		x		x		x	x	x	x		
Neuroanatomy and Pathology	BMS3976	x		x		x	x	x			x		x		x	
Applied Clinical Neurophysiology II	BMS3956	x		x		x	x	x			x		x		x	
Clinical Neurology	BMS3496	x		x			x				x	x	x		x	
Neuropsychology of Language & Communication	PSY3053		x				x					x	x			
Neuropsychology: The healthy brain and what can go wrong with it	PSY3052		x				x					x	x			
Fundamentals of Cognition: Human Memory	PSY3036		x	x			x					x	x			
Primatology	PSY3057		x				x					x	x			

http://www.mdx.ac.uk/about-us/policies/academic-quality/handbook/