

## Programme Specification: Undergraduate

### For students starting in Academic Year 2017/2018

#### 1. Course Summary

<b>Names of programme(s) and award title(s)</b>	BSc (Hons) Neuroscience BSc (Hons) Neuroscience with International Year (see Annex A for details)
<b>Award type</b>	Single Honours
<b>Mode of study</b>	Full time
<b>Framework of Higher Education Qualification (FHEQ) level of final award</b>	Level 6
<b>Duration</b>	3 years 4 years if taken with an Industrial Placement Year or the International Year option
<b>Location of study</b>	Keele University – main campus
<b>Accreditation (if applicable)</b>	Not applicable
<b>Regulator</b>	Office for Students (OfS)
<b>Tuition Fees</b>	<p><b>UK/EU students:</b> Fee for 2017/18 is £9,250*</p> <p><b>International students:</b> Fee for 2017/18 is £15,250**</p> <p>The fee for the international year abroad is calculated at 15% of the standard year fee</p> <p>The fee for the placement year is calculated at 20% of the standard year fee</p>
<b>Additional Costs</b>	Refer to section 18

**How this information might change:** Please read the important information at <http://www.keele.ac.uk/student-agreement/>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

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\* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

\*\* We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

## **2. What is a Single Honours programme?**

The Single Honours programme described in this document allows you to focus more or less exclusively on Neuroscience. In keeping with Keele's commitment to breadth in the curriculum, the programme also gives you the opportunity to take some modules outside Neuroscience, in other disciplines and in modern foreign languages as part of a 360-credit Honours degree. Thus it enables you to gain, and be able to demonstrate, a distinctive range of graduate attributes.

## **3. Overview of the Programme**

The Programme aims to provide students with knowledge needed to understand current research in neuroscience and to provide them with a detailed appreciation of the subject. Most modules have a practical component, and practical skills are seen as useful in themselves and in enabling students to appreciate that neuroscience is a laboratory-based subject. Staff provide a friendly and supportive environment. Training is also provided in the employability skills that will help you to reach your potential in your chosen career.

## **4. Aims of the Programme**

The broad aims of the programme are to:

- provide you with knowledge, understanding and skills relevant to neuroscience
- produce skilled and motivated graduates who are suitably prepared for further study or for employment within or outside their field
- cultivate interest in neuroscience, within a caring and intellectually stimulating environment
- promote the development of a range of employability skills, for use in all areas where numeracy and an objective, scientific approach to problem-solving are valued

## **5. What you will learn**

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills
- Intellectual skills
- Key or transferable skills (including employability skills)

### **Subject knowledge and understanding**

Successful students will be able to demonstrate knowledge and understanding of:

- U1 cellular and gross anatomical features of the, developing and adult, peripheral and central nervous system
- U2 neuronal function, from a single cell to simple neuronal networks
- U3 the ionic principles underlying neuronal activity
- U4 the biochemical principles of cellular and systemic physiological systems
- U5 pharmacological principles of neuronal function, and the interaction with pharmaceutical agents
- U6 the basic experimental skills appropriate to the discipline of neuroscience
- U7 the approaches to acquiring, interpreting, analysing data from a variety of sources, including the use of statistics
- U8 neuronal mechanisms of cognitive function, and the relationship to the same phenomena at the behavioural level
- U9 cellular mechanisms underlying pathology of the nervous system
- U10 the contribution of research to the development of neuroscience knowledge
- U11 the use of anatomical and pharmacological terminology in neuroscience

- U12 the relevance of neuroscience to medical problems and improving the quality of life

### **Subject specific skills**

Successful students will be able to:

- S1 use a range of techniques for the acquisition and analysis of information relevant to the subject
- S2 use a range of laboratory techniques to ensure competence in experimental skills.
- S3 record and analyse data in a manner that ensure validity, accuracy, calibration, precision, and reliability
- S4 formulate a hypothesis to design, conduct, analyse, report and evaluate experiments.
- S5 recognise philosophical and ethical issues relevant to the subject, and appreciate the need for ethical standards and professional codes of conduct.
- S6 work safely and responsibly in the laboratory, with awareness of standard procedures

### **Intellectual skills**

Successful students will be able to:

- I1 assess the merits of contrasting theories, paradigms, concepts or principles
- I2 think independently, set tasks and solve problems by a variety of methods
- I3 make reasoned decisions and develop reasoned arguments
- I4 obtain and interpret several lines of subject-specific evidence to formulate and test hypotheses
- I5 make critical interpretations, evaluations and judgements of data and text
- I6 analyse, synthesise and summarise information critically, including published research or reports
- I7 apply scientific understanding to familiar and unfamiliar problems, and emphasise the interdisciplinary nature of science and the validity of different points of view
- I8 take responsibility for their own learning and reflect upon that learning

### **Key or transferable skills (including employability skills)**

Successful students will be able to:

- E1 develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and intellectual integrity
- E2 acquire, analyse, synthesise, summarise and present information and ideas from a wide range of sources: textual, numerical, verbal, graphical
- E3 prepare, process, interpret and present data using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets and programs for presenting data visually
- E4 use the internet and other electronic sources critically as a means of communication and a source of information
- E5 cite and reference work in an appropriate manner, avoiding issues with plagiarism
- E6 communicate effectively to a variety of audiences by written, spoken and graphical means using appropriate techniques and scientific language
- E7 develop skills necessary for self-managed and lifelong learning, including working independently, organisational, enterprise and knowledge transfer skills
- E8 work with others to achieve an objective in a respectful manner that is accepting of the viewpoints and opinions of others and evaluates the roles and development of team members
- E9 motivate themselves and sustain that motivation over an extended period of time
- E10 identify and work towards targets for personal, academic and career development

### **Keele Graduate attributes**

Engagement with this programme will enable you to develop your intellectual, personal and professional capabilities. At Keele, we call these our ten Graduate Attributes and they include independent thinking, synthesizing information, creative problem solving, communicating clearly, and appreciating the social,

environmental and global implications of your studies and activities. Our educational programme and learning environment is designed to help you to become a well-rounded graduate who is capable of making a positive and valued contribution in a complex and rapidly changing world, whichever spheres of life you engage in after your studies are completed.

Further information about the Keele Graduate Attributes can be found here: <http://www.keele.ac.uk/journey/>

## 6. How is the Programme taught?

Learning and teaching methods used on the programme vary according to the subject matter and level of the module. They include the following:

- **Traditional lectures** where the lecturer provides students with a framework for reading and independent study. Some lecture classes may feature guest speakers from a clinical or research-based area
- **Interactive learning** in large classes where students have the opportunity to work together in smaller groups, interact with the lecturer and reflect on their own learning
- **Practicals** in laboratories are particularly important and involve the study of processes relevant to neuroscience and provide training in a wide range of research techniques
- **Tutorials and seminars** in small groups of students where key issues can be discussed in more depth. Students are expected to play a full part and, occasionally, to lead these discussions. Some tutorials and seminars consist largely of student presentations and some are based on scientific papers studied in advance
- **Independent study** based on directed reading from text books, research papers and research reviews
- **Web-based learning** using the University's virtual learning environment (KLE). The KLE is used to give students easy access to a wide range of resources and research tools, and as a platform for online discussions and quizzes
- Students will be expected to undertake a substantive **research project** supervised and supported by a member of staff

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Personal Tutors or module lecturers on a one-to-one basis.

These learning and teaching methods enable students to achieve the learning outcomes of the programme in a variety of ways. For example:

- Lectures and independent study allow students to gain knowledge and understanding of neuroscience and its component subjects such as physiology and genetics
- Seminars, tutorials and online discussions provide opportunities for students to ask questions about the subject, and to present their own ideas to members of staff and other students using an appropriate medium of communication
- Interactive lectures, seminars, tutorials and web-based activities encourage students to reflect on their own learning and take responsibility for its development by addressing areas of difficulty, perhaps by discussing them with their fellow students or by getting additional help from a member of staff
- Laboratory practicals allow students insight into the practical aspect of neuroscience and use a range of relevant scientific techniques
- Undertaking an experimental project with the support of an experienced researcher allows students to formulate relevant research questions and devise, carry out and analyse experiments to answer them

## 7. Teaching Staff

The teaching staff are mainly from the School of Life Sciences. For information on the research interests and qualifications of staff from the School of Life Sciences, please see the School web page at: <https://www.keele.ac.uk/lifesci/people/>. In addition, some elements of the course will be delivered by staff from the School of Medicine, the Royal Stoke University Hospital, and the School of Pharmacy.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

## 8. What is the Structure of the Programme?

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching will vary from course to course, but you can generally expect to attend scheduled teaching sessions between the end of September and mid-December, and from mid-January to the end of April.

Our degree courses are organised into modules. Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort. An outline of the structure of the programme is provided in the tables below.

There are four types of module delivered as part of this programme. They are:

- Compulsory core module – a module that you are required to study on this course;
- Optional core module – these allow you some limited choice of what to study from a list of modules;
- Programme approved elective module – subject-related modules that count towards the number of subject credits required by your degree;
- Free-standing elective module – a free choice of modules that count towards the overall credit requirement but not the number of subject-related credits.

Students must take 120 credits of Neuroscience modules at Levels 4, 5 and 6 (Table 1). At level 6, students must select 45 credits of independent study modules (ISP).

### Year 1 (Level 4)

Core modules	Credits	Elective modules	Credits
Introduction to Neuroscience	30	None	
Cell and Molecular Biology	15		
Neurophysiology	15		
Metabolism: Major Metabolic Pathways	15		
Human Physiology and Pathology	15		
Genetics and Evolution	15		
Cells and Organelles: Biochemical Aspects of Cell Biology	15		

### Year 2 (Level 5)

Core modules	Credits	Elective modules	Credits
Neuroscience Research Methods	30	None	
From Neurone to Brain	15		
Neurodevelopment	15		
Neuroanatomy	15		
Learning and Memory	15		
Neuropharmacology	15		
Cell Signalling	15		

### Placement Year

Students may wish to take a Placement Year following completion of Level 5. These students will take the module 'Double Applied Life Sciences Placement ISP' at Level 6.

### Year 3 (Level 6)

Core modules	Credits	Option modules	Credits
Behavioural Neuroscience	15	<i>Choose 1 module</i>	
Brain Disease	15	Special Senses	15
Regeneration and Repair in the Nervous System	15	Advances in Medicine LSC-30028	15
Current Topics in Neuroscience	15	Clinical Pathology LSC-30009	15
Life Sciences Double Experimental Research Project (ISP) Or Double Applied Life Sciences Placement ** (ISP)	30 30	Applied Regenerative Medicine LSC-30068	15
Life Sciences Non-Experimental Project (ISP) Or Life Sciences Dissertation (ISP)	15 15		

\*\* This module to be taken by students who complete the Placement Year.

For further information on the content of modules currently offered please visit:

[www.keele.ac.uk/recordsandexams/az](http://www.keele.ac.uk/recordsandexams/az)

### Learning Outcomes

Subject Knowledge and Understanding		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to demonstrate knowledge &amp; understanding of:</i>		
U1 cellular and gross anatomical features of the, developing and adult, peripheral and central nervous system.	All modules	All assessments
U2 neuronal function, from a single cell to simple neuronal networks.	All modules	All assessments
U3 the ionic principles underlying neuronal activity.	All modules	All assessments
U4 the biochemical principles of cellular and systemic physiological systems.	All modules	Multiple-choice class tests and examinations, lab reports, project reports, dissertations
U5 pharmacological principles of neuronal function, and the interaction with pharmaceutical agents.	All modules	Multiple-choice class tests and examinations, lab reports, project reports, dissertations
U6 the basic experimental skills appropriate to the discipline of	All modules	All assessments

neuroscience.		
U7 the approaches to acquiring, interpreting, analysing data from a variety of sources, including the use of statistics.	All modules	All assessments
U8 neuronal mechanisms of cognitive function, and the relationship to the same phenomena at the behavioural level.	All modules	All assessments
U9 cellular mechanisms underlying pathology of the nervous system.	All modules	All assessments
U10 the contribution of research to the development of neuroscience knowledge.	All modules	All assessments

<b>Subject Specific Skills</b>		
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>	<b>Principal forms of assessment (of the Level Outcome) used</b>
<i>Successful students will be able to:</i>		
S1 use a range of techniques for the acquisition and analysis of information relevant to the subject	All modules with practical sessions, particularly Neuroscience Research Methods, Research and Analytical Skills and level 6 Experimental ISP	Laboratory reports, laboratory performance, data analysis exercises, project reports, dissertations
S2 use a range of laboratory techniques to ensure competence in experimental skills.	All modules with practical sessions, particularly Neuroscience Research Methods, Research and Analytical Skills and level 6 Experimental ISP	Laboratory reports, laboratory performance, data analysis exercises, project reports, dissertations
S3 record and analyse data in a manner that ensure validity, accuracy, calibration, precision, and reliability	All modules with practical sessions, particularly Neuroscience Research Methods, Research and Analytical skills and level 6 Experimental ISP	Essays, project reports, dissertations
S4 formulate a hypothesis to design, conduct, analyse, report and evaluate experiments.	All modules with practical sessions, particularly, Neuroscience Research Methods Research and Analytical Skills and level 6 Experimental ISP	Laboratory reports, laboratory performance, data analysis exercises, project reports, dissertations
S5 recognise philosophical and ethical issues relevant to the subject, and appreciate the need for ethical standards and professional codes of conduct.	Genetics and Evolution, Neuroscience Research Methods, Research and Analytical Skills and level 6 ISPs	Dissertations, essays, multiple choice tests
S6 work safely and responsibly in the laboratory, with awareness of standard procedures	All modules with practical sessions	Laboratory reports, project reports

<b>Intellectual Skills</b>		
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>	<b>Principal forms of assessment (of</b>

<i>Successful students will be able to:</i>		<b>the Level Outcome) used</b>
I1 assess the merits of contrasting theories, paradigms, concepts or principles	All modules, particularly those at level 6	Essays, reports, examinations, project reports, dissertations
I2 think independently, set tasks and solve problems by a variety of methods	All modules with a practical component	Laboratory reports, project reports, dissertations
I3 make reasoned decisions and develop reasoned arguments	All modules, particularly those at level 6	Essays, data analysis exercises, project reports, dissertations
I4 obtain and interpret several lines of subject-specific evidence to formulate and test hypotheses	Most modules at level 5 and all modules at level 6	Essays, data analysis exercises, project reports, dissertations
I5 make critical interpretations, evaluations and judgements of data and text	Most modules at level 5 and all modules at level 6	Essays, data analysis exercises, project reports, dissertations
I6 analyse, synthesise and summarise information critically, including published research or reports	Neuroscience Research Research and Analytical Skills, and all level 6 modules	Essays, project reports, dissertations
I7 apply scientific understanding to familiar and unfamiliar problems, and emphasise the interdisciplinary nature of science and the validity of different points of view	All modules – especially those at level 6	Essays, project reports, dissertations
I8 take responsibility for their own learning and reflect upon that learning	All modules – especially those at level 6	Laboratory performance, Personal Development Planning

<b>Key or Transferable Skills (graduate attributes)</b>		
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>	<b>Principal forms of assessment (of the Level Outcome) used</b>
<i>Successful students will have the opportunity to develop:</i>		
E1. develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and intellectual integrity	All modules	Essays, dissertations, experimental projects. laboratory performance
E2. acquire, analyse, synthesise, summarise and present information and ideas from a wide range of sources: textual, numerical, verbal, graphical	All modules, particularly ISPs	Essays, dissertations
E3. prepare, process, interpret and present data using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets and programs for	All modules with practical sessions, particularly Neuroscience Research Methods, Research and Analytical Skills and Experimental Project	Project reports, data analysis exercises, laboratory reports

presenting data visually		
E4. use the internet and other electronic sources critically as a means of communication and a source of information	All modules	Presentations, data analysis exercises, project reports
E5. cite and reference work in an appropriate manner, avoiding issues with plagiarism	All modules	Essays, reports, presentations, project reports, dissertations
E6. communicate effectively to a variety of audiences by written, spoken and graphical means using appropriate techniques and scientific language	All modules	Essays, reports, presentations, project reports, dissertations
E7. develop skills necessary for self-managed and lifelong learning, including working independently, organisational, enterprise and knowledge transfer skills	All modules particularly level 6 ISPs	Essays, dissertations, project reports
E8. work with others to achieve an objective in a respectful manner that is accepting of the viewpoints and opinions of others and evaluates the roles and development of team members	All modules	Laboratory performance, dissertation, experimental project
E9. motivate themselves and sustain that motivation over an extended period of time	All modules	Essays, reports, presentations, project reports, dissertations
E10. identify and work towards targets for personal, academic and career development	All modules	Essays, reports, presentations, project reports, dissertations

## 9. Final and intermediate awards

Credits required for each level of academic award are as follows:

<b>Honours Degree</b>	360 credits	You will require at least 120 credits in Neuroscience at levels 4, 5 and 6 to graduate with a named single honours degree in Neuroscience.
<b>Diploma in Higher Education</b>	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
<b>Certificate in Higher Education</b>	120 credits	You will require at least 120 credits at level 4 or higher

**Neuroscience with International Year:** in addition to the above students must pass a module covering the international year in order to graduate with a named degree in Neuroscience with International Year. Students who do not complete, or fail the international year, will be transferred to the three-year Neuroscience programme.

## 10. How is the Programme assessed?

The wide variety of assessment methods used within Neuroscience at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used within Neuroscience:

- **Unseen examinations** in different formats test students' knowledge and understanding of neuroscience. Examinations may consist of essay, short answer and/or multiple choice questions.
- **Essays**, including those based on case study material, also test the quality and application of subject knowledge. In addition they allow students to demonstrate their ability to carry out basic bibliographic research and to communicate their ideas effectively in writing in an appropriate scholarly style using the Harvard system of referencing. The portfolio (Current Research Topics in Neuroscience) is similar, but has an additional emphasis on concisely summarising current research papers and emphasising what is new and important about the research paper.
- **Class tests** taken either conventionally or online via the Keele Learning Environment (KLE) assess students' subject knowledge and their ability to apply it in a more structured and focused way. These tests may for example focus on comprehension of a relevant research paper published in a science journal.
- **Dissertations** are critical reviews of other scholars' work and test students' ability to identify and summarise the key points of a text and to evaluate the quality of arguments and the evidence used to support them. In the case of work based on empirical research, reviews also assess students' knowledge of research methodologies and their ability to make critical judgements about the appropriateness of different strategies for collecting and analysing data.
- **Experimental projects** test students' knowledge of research methodologies and their ability to carry them out. They also enable students to demonstrate their ability to formulate research questions, design experiments, carry them out and analyse the results.
- **Non-Experimental projects** test students' knowledge of research methodologies and their ability to carry them out. They are presented with some data which they analyse and report upon, in the context of current knowledge in that specific area.
- **Laboratory reports** are formal summaries of work carried out in the laboratory, presenting analysed data and conclusions. They test a range of practical laboratory skills and the ability to collect analyse and present data.
- **Oral presentations** assess students' subject knowledge and understanding. They also test their ability to work effectively as members of a team, to communicate what they know orally and visually, and to reflect on these processes as part of their own personal development.
- **Case-based tutorials allow small group interactive learning**

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

## 11. Contact Time and Expected Workload

This contact time measure is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data is a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data is representative and not specific.

Undergraduate courses at Keele contain an element of module choice; therefore, individual students will experience a different mix of contact time and assessment types dependent upon their own individual choice of modules. The figures below are an example of activities that a student may expect on your chosen course by year/stage of study. Contact time includes scheduled activities such as: lecture, seminar, tutorial, project supervision, demonstration, practical classes and labs, supervised time in labs/workshop, fieldwork and external visits. The figures are based on 1,200 hours of student effort each year for full-time students.

Activity	Year 1 (Level 4)	Year 2 (Level 5)	Placement Year	Year 3 (Level 6)
Scheduled learning and teaching activities	28%	24%	0%	17%
Guided independent Study	72%	76%	0%	83%
Placements	0%	0%	100%	0%

## 12. Accreditation

This programme does not have accreditation from an external body.

## 13. Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: <http://www.keele.ac.uk/student-agreement/>

The following course specific regulations should be noted:

- Wearing a laboratory coat is compulsory in all laboratories. Students will not be allowed to attend the laboratory class without a laboratory coat.
- Students must wear appropriate clothing in the laboratories, including sensible footwear. Closed shoes and low heels should be worn. This is to avoid tripping and to protect the feet in the case of spillages. Long hair must be tied back. Students who are inappropriately dressed may, at the discretion of the member of staff in charge, be excluded from the class and recorded as being absent without good cause.
- Students who arrive late to laboratory classes may, at the discretion of the member of staff in charge, be excluded from the class and recorded as being absent without good cause.

## 14. What are the typical admission requirements for the programme?

Subject	A-level	Subjects not included	International Baccalaureate	BTEC	Access to Higher Education Diploma	GCSE requirements
Neuroscience (Single Honours)	<p>ABB</p> <p>A level Applied Science, Biology, Chemistry, Human Biology, Maths, Sports Science or Statistics.</p> <p>A Pass in Science Practical will be required if applicant is taking A level Biology, Chemistry or Physics (England) **</p> <p>** Science practical only required from applicants taking reformed A level Biology, Chemistry or Physics in England.</p>	General Studies and Critical Thinking	34 points to include Higher Level Chemistry at 6 or above.	DDM  You must have taken sufficient Science units, please contact us for advice.	Obtain Access to Higher Education Diploma with 30 Level 3 credits at Distinction and 15 Level 3 credits at Merit. You must also have taken sufficient Science credits, please contact us for advice.	Maths @ C (or 4) English Lang @ C (or 4)

Applicants who are not currently undertaking any formal study or who have been out of formal education for more than 3 years and are not qualified to A-level or BTEC standard may be offered entry to the University's Foundation Year Programme.

Applicants for whom English is not a first language must provide evidence of a recognised qualification in English language. The minimum score for entry to the Programme is Academic IELTS 6.0 or equivalent.

Please note: All non-native English speaking students are required to undertake a diagnostic English language assessment on arrival at Keele, to determine whether English language support may help them succeed with their studies. An English language module may be compulsory for some students during their first year at Keele.

Accreditation of Prior Learning (APL) is considered on a case-by-case basis and those interested should contact the Programme Director. The University's guidelines on this can be found here:

<http://www.keele.ac.uk/qa/accreditationofpriorlearning/>

## **15. How are students supported on the programme?**

Support for student learning on the programme is provided in the following ways:

- Module tutors are responsible for providing support for learning on the modules. They also give individual feedback on in-course assessments and more general feedback on examinations.
- Tutors and demonstrators provide help and advice to students in laboratory sessions.
- Every student is allocated to a personal tutor who is responsible for reviewing and advising on students' academic progress on the programme.
- Personal tutors also act as a first point of contact for students on non-academic issues which may affect their learning and can refer students on to a range of specialist health, welfare and financial services co-ordinated by the University's Student Services Centre.

All members of teaching staff on the neuroscience programme are available to see students during office hours, if available, and by appointment.

## **16. Learning Resources**

Neuroscience is taught in modern teaching rooms across the University, almost all of which are equipped with computers, internet access and electronic whiteboards or projection equipment. Rooms may be arranged either in traditional lecture format or more informally to allow students to work together in small groups.

Practical sessions are held in dedicated and up-to-date teaching laboratories within the School of Life Sciences.

The learning resources available to students on the Programme include:

- The extensive collection of books and journals relevant to undergraduate study held in the University Library. Much of this material is also accessible online to Keele students from anywhere in the world with a University username and password.
- A smaller collection of textbooks held in the Undergraduate Resource Room in the School of Life Sciences. The Resource Room is open at regular times during teaching periods and the resources are specifically related to the needs of students on programmes in the School of Life Sciences.
- The Keele Learning Environment (KLE) which provides easy access to a wide range of learning resources including lecture notes, electronic materials available in a repository maintained by the University Library and other resources – video, audio and text-based – accessible from external providers via the internet.

## **17. Other learning opportunities**

## **Work Placement Year**

Students have the option of spending a year between Level 5 and Level 6 on a placement year. Students may choose to spend the placement in the research laboratory or a partner university, or in industry.

## **Study Abroad (International Year)**

A summary of the International Year, which is a potential option for students after completion of year 2 (Level 5), is provided at Annex A.

## **Other opportunities**

During their time at Keele, Neuroscience students also have the opportunity to hear from, and talk to, a range of guest speakers and presenters including researchers from around the world. Some of these activities are timetabled as part of taught modules, others are organised separately but are widely advertised and undergraduate students are always welcome to attend.

## **18. Additional costs**

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation.

We do not anticipate any further additional costs for this undergraduate programme.

## **19. Quality management and enhancement**

The quality and standards of learning in Neuroscience are subject to a continuous process of monitoring, review and enhancement.

- The Learning and Teaching Committee of the School of Life Sciences is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the Neuroscience Programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year and as part of the University's Curriculum Annual Review and Development (CARD) process.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Internal Quality Audit (IQA) process.

Student evaluation of, and feedback on, the quality of learning on every Neuroscience module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of the Curriculum Annual Review and Development (CARD) process.
- Findings related to the Neuroscience Programmes from the annual National Student Survey (NSS), and from regular surveys of the student experience conducted by the University, are subjected to careful analysis and a planned response at programme and School level.
- Feedback received from representatives of students in all three years of the Neuroscience Programme is considered and acted on at regular meetings of the Programmes Staff/Student Liaison Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree

- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:

<http://www.keele.ac.uk/qa/externalexaminers/currentexternalexaminers/>

## 20. The principles of programme design

The Neuroscience Programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

- UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education: <http://www.qaa.ac.uk/quality-code/>
- QAA Subject Benchmark Statement: Biosciences (2015) [http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-biosciences-15.pdf?sfvrsn=4eef781\\_24](http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-biosciences-15.pdf?sfvrsn=4eef781_24)
- Keele University Regulations and Guidance for Students and Staff: <http://www.keele.ac.uk/regulations>

## 21. Document Version History

Version history	Date	Notes
Date first created	October 2016	
Revision history	V2.0: 07/2018	Semester Abroad option removed due to the timetabling issues caused by scheduling alternative modules [Major change: reissued]
	V2.1: 12/2018	Updates to year 3 module list with additional choices [minor change]
	V3.0: 04/2019	Level 6: 'Life Sciences Non-experimental project'/Dissertation changed from option to core; 'Developmental Biology' option module replaced by 'Advances in Medicine', 'Clinical Pathology' and 'Applied Regenerative Medicine'
Date approved	06/07/18 (FLTC)	

## Annex A

### BSc (Hons) Neuroscience with International Year

#### International Year Programme

Students registered for Single Honours Neuroscience may either be admitted for or apply to transfer during their period of study at Level 5 to the Single Honours 'Neuroscience with International Year'. Students accepted onto this programme will have an extra year of study (the International Year) at an international partner institution after they have completed Year 2 (Level 5) at Keele.

Students who successfully complete both the second year (Level 5) and the International Year will be permitted to progress to Level 6. Students who fail to satisfy the examiners in respect of the International Year will normally revert to the BSc (Hons) Neuroscience and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.

Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for 'BSc (Hons) Neuroscience with International Year'.

#### International Year Programme Aims

In addition to the programme aims specified in the main body of this document, the international year programme of study aims to provide students with:

1. Personal development as a student and a researcher with an appreciation of the international dimension of their subject
2. Experience of a different culture, academically, professionally and socially

#### Entry Requirements for the International Year

Students may apply to the 4-year programme during Level 5. Admission to the International Year is subject to successful application, interview and references from appropriate staff.

The criteria to be applied are:

- Academic Performance (an average of 60% across all modules at Level 5 is normally required)
- General Aptitude (to be demonstrated by application for study abroad, interview during the 2<sup>nd</sup> semester of year 2 (Level 5), and by recommendation of the student's personal tutor, 1<sup>st</sup> and 2<sup>nd</sup> year tutors and programme director)

#### Student Support

Students will be supported whilst on the International Year via the following methods:

- Phone or Skype conversations with Study Abroad tutor, in line with recommended Personal Tutoring meeting points.
- Support from the University's Global Education Team

#### Learning Outcomes

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete a Keele undergraduate programme with International Year will be able to:

- a. Describe, discuss and reflect upon the cultural and international differences and similarities of different learning environments
- b. Discuss the benefits and challenges of global citizenship and internationalisation
- c. Explain how their perspective on their academic discipline has been influenced by locating it within

an international setting.

In addition, students who complete 'BSc (Hons) Neuroscience with International Year' will be able to:

- i) Use independent research skills to identify relevant information resources on a range of subjects related, or complementary, to Neuroscience.
- ii) Demonstrate the use of critical thinking skills, augmented by creativity and curiosity, in discussing the application of their International Year studies to Neuroscience.

These learning outcomes will all be assessed by the submission of a satisfactory individual learning agreement, the successful completion of assessments at the partner institution and the submission of the reflective portfolio element of the international year module.

### **Course Regulations**

Students registered for the 'BSc (Hons) Neuroscience with International Year' are subject to the course specific regulations (if any) and the University regulations. In addition, during the International Year, the following regulations will apply:

Students undertaking the International Year must complete 120 credits, which must comprise *at least 40%* in the student's discipline area.

This may impact on your choice of modules to study, for example you will have to choose certain modules to ensure you have the discipline specific credits required.

Students are barred from studying any Neuroscience module with significant overlap to Level 6 modules to be studied on their return. Significant overlap with Level 5 modules previously studied should also be avoided.

### **Additional costs for the International Year**

Tuition fees for students on the International Year will be charged at 15% of the annual tuition fees for that year of study, as set out in Section 1. The International Year can be included in your Student Finance allocation, to find out more about your personal eligibility see: [www.gov.uk](http://www.gov.uk)

Students will have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Students studying in Erasmus+ destinations may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible income dependent bursaries at Keele.

Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some Governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.