Programme Specification: Undergraduate

For Academic Year 2025/26

1. Course Summary

Names of programme and award title(s)	BSc (Hons) Biomedical Science BSc (Hons) Biomedical Science with International Year BSc (Hons) Biomedical Science with Work Placement Year BSc (Hons) Applied Biomedical Science BSc (Hons) Medical Sciences BSc (Hons) Medical Sciences with International Year BSc (Hons) Medical Sciences with Work Placement Year
Award type	Single Honours
Mode of study	Full-time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 6
Normal length of the programme	3 years, or 4 years for students that take a 46-week clinical placement, or who take an additional year to complete a work placement or international year
Maximum period of registration	The normal length as specified above plus 3 years
Location of study	Keele Campus
Accreditation (if applicable)	All awards, excluding those with Medical Sciences in the title, are accredited by the Institute of Biomedical Science (IBMS) and Royal Society of Biology (RSB). The Applied Biomedical Science award is also approved by the Health and Care Professions Council (HCPC).
Regulator	Office for Students (OfS)
Tuition Fees	**UK students:** Fee for 2025/26 is £9,535* **International students:** Fee for 2025/26 is £17,700** The fee for the international year abroad is calculated at 15% of the standard year fee The fee for the work placement year is calculated at 20% of the standard year fee

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.*

** 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/

*** These fees are for new students. 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. Overview of the Programme

Biomedical Science is a study of the human body and the disorders that can affect it. We start by looking at normal physiological function including whole systems and organs right down to a cellular, molecular and genetic level. We then explore the comprehensive range of diseases and disorders that can affect our body including infective entities such as bacteria and viruses. Ultimately, you will gain real insight into how we can exploit the difference between 'normal' and 'abnormal' bodily functions in order to make a difference. That could be through better diagnostic tests, more accurate monitoring systems, developing new treatment strategies and so on.

Biomedical Science is a multi- and inter-disciplinary subject. You will combine knowledge and understanding of different areas of biology to solve real-life problems for patients and the wider society. This will include human physiology, microbiology, immunology, molecular biology, and pathobiology of disease.

A comprehensive laboratory programmes runs throughout the course utilising our state-of-the-art David Attenborough laboratories, where you will develop key skills in diverse biomedical and molecular biology techniques. You will apply theoretical knowledge from across the programme and develop skills in experimental study design and optimisation through experiential, enquiry-based learning, culminating in your final year research project. You will also develop key transferable and employability skills related to the critical evaluation of scientific literature, data analysis and interpretation, including computational and bioinformatics tools, effective communication in a variety of formats, and teamwork. Options to include a work placement year, study abroad for a semester or an international year of study provide further experiential learning opportunities developing additional employability skills. Shorter optional placement modules provide added flexibility for experiential learning alongside your studies in a range of industries and employer settings, including an education-focused optional module for those interested in a career in teaching. A range of final year optional modules in areas of cutting-edge biomedical research gives you greater flexibility to tailor the structure and content of your programme to your own interests and career goals.

Distinctive features of the course include:

- Dual accreditation with both the Institute of Biomedical Science and the Royal Society of Biology. This puts clinical, diagnostic laboratories and patient pathways at the heart of your learning experience. You will learn how Biomedical Scientists working in UK Pathology Laboratories fulfil their role and contribute to patient pathways in effective healthcare delivery.
- Case-based learning across every level of study. You will work in small groups of approximately 10-14 students exploring realistic patient journeys. This will allow you to contextualise your learning, put patients at the heart of your curriculum, and develop key skills including evidence-based problem solving, communication, and leadership.
- Innovative and authentic assessments, designed to give you an opportunity to evidence the skills that employers are looking for.
- A comprehensive programme of academic and professional development workshops at every level of study that allows you to develop the skills needed to succeed and prepare for post-graduation.
- Our Undergraduate Student Research Conference, where you will present the outcomes of your final year research project in the context of a realistic research conference experience.
- Alongside opportunities to undertake short or year-long placements in industry, you may also have the opportunity to apply for clinical placements and international secondments. Students who successfully complete a clinical placement transfer to our *Applied Biomedical Science* programme that is also approved by the Health and Care Professions Council.
- The opportunity to study a language alongside your programme.
- Typical post-graduate destinations include entry to professions such as Medicine, practitioner Biomedical Scientists, academia and research, the private sector, or roles that include outreach, teaching, and science communication.

3. Aims of the programme

The broad aims of the programme are to enable you to:

- evidence compliance with the Health and Care Professions Council (HCPC) Standards of Education and Training, one of the requirements needed to work as a Biomedical Scientist in a diagnostic clinical laboratory.
- gain knowledge and understanding of key clinical laboratory specialities such as medical microbiology (including virology), clinical biochemistry, haematology, medical immunology, cellular pathology/histology, and clinical genetics.
- develop and evidence a range of key employability and professional skills such as critical thinking,

communication, evidence-based problem solving, and data analysis.
- undertake a meaningful piece of independent research and share findings with a wider audience.
- prepare you for a broad range of postgraduate opportunities, including further education or research, and employment in healthcare, industry, the private sector, science communication, and outreach.

In addition to these aims, our Applied Biomedical Science pathway also aims to enable you to:

- evidence compliance against the HCPC Standards of Proficiency through completion of the IBMS Registration Portfolio. Graduates are awarded the IBMS Certificate of Competence on graduation, conferring eligibility to register with the HCPC as a practitioner Biomedical Scientist.

4. 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
- Key or transferable skills (including employability skills)

Subject Knowledge and Understanding

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

- How the human body works including: human anatomy and physiology, molecular biology, genetics, cell signalling, and metabolism.
- The role of Biomedical Scientists working in clinical, diagnostic laboratories and their impact to a wide range of patient pathways.
- The importance of interdisciplinary and reflective practice to better inform patient outcomes and professional development.
- The scientific method including hypothesis-driven investigation, evidence-based problem solving, data collection, and data analysis.
- Cutting edge research including the fields of bioinformatics, biotechnology, parasitology, and a wide range of disease models.
- How to communicate effectively to a range of different audiences including clinicians, scientists and the general public.

Subject Specific Skills

Successful students will be able to:

- Work confidently in a laboratory environment, including a range of laboratory techniques used for the acquisition and analysis of data.
- Design, conduct, analyse, evaluate, and report the findings of biomedical experiments and methodologies.
- Work safely and responsibly in the laboratory by following standard operating procedures, developing COSHH, recognising and resolving ethical challenges, and adhering to the principles of health and safety and good laboratory practice.
- Interrogate current scientific literature to solve problems, develop reasoned arguments, and to evaluate the strengths and limitations of the available evidence.
- Undertake independent scientific research, contextualised within the broader literature, and communicated to different target audiences.
- Evidence compliance with the Health and Care Profession Council Standards of Proficiency for Biomedical Scientists through completion of the IBMS Registration Portfolio.

Key Employability Skills

Successful students will be able to:

- Develop and sustain effective approaches to lifelong learning, including effective time management, organisation, and reflective practice.
- Acquire, analyse, synthesise, evaluate, and summarise information and ideas from a wide range of sources including textual, numerical, verbal, and graphical.
- Prepare, process, and present data using a range of qualitative and quantitative techniques, including the use of specialist statistical programmes, spreadsheets, and relevant digital resources.
- Communicate effectively with a range of audiences using written, verbal, and graphical approaches with accurate scientific terminology.
- Work effectively in a team in a respectful manner that is inclusive of different points of view, lived experiences, and strengths and weaknesses to achieve collaborative goals.
- Apply the principles of good academic practice to ensure academic and professional integrity, including appropriate use of citations, references, and recognition of other sources such as generative AI.

Keele Graduate Attributes

The Keele Graduate Attributes are the qualities (skills, values and mindsets) which you will have the opportunity to develop during your time at Keele through both the formal curriculum and also through co- and extra-curricular activities (e.g., work experience, and engagement with the wider University community such as acting as ambassadors, volunteering, peer mentoring, student representation, membership and leadership of clubs and societies). Our Graduate Attributes consist of four themes: **academic expertise, professional skills, personal effectiveness, and social and ethical responsibility.** You will have opportunities to engage actively with the range of attributes throughout your time at Keele: through your academic studies, through self-assessing your own strengths, weaknesses, and development needs, and by setting personal development goals. You will have opportunities to discuss your progress in developing graduate attributes with, for example, Academic Mentors, to prepare for your future career and lives beyond Keele.

5. How is the programme taught?

Diversity, flexibility, and inclusivity is at the heart of our education strategy which is developed through close The delivery of our programme will include the following types of activities:

Laboratory practicals: Take place in one of our state-of-the-art science labs. These give you first-hand experience in a range of scientific techniques and have been designed to ensure you develop both independent and team-based skills.

Digital learning resources: Digital learning resources are designed to support in person teaching, ensuring that all core content is recorded. Our aim is to offer a more inclusive learning environment that gives you more flexibility to decide how, when, and where to study. This can include lecture capture recordings of live sessions or support for flipped classroom learning.

Live, campus-based interactive lectures: Delivered by experts in the field, including external guest speakers. Interactive lectures focus on active learning and aim to provide opportunities for you to discuss key content and consolidate your learning.

Live, campus-based tutorials and workshops: Often designed to support those areas that we know can be difficult, such as statistics. Tutorials and workshops are often delivered in small groups designed to promote social learning, develop a sense of community, and to give you an opportunity to apply your knowledge and deepen your understanding of core issues through discussion with other students and your tutors.

Live, case-based learning (CBL) tutorials: In CBL, you will work in small groups to discuss patient cases that help you to contextualise much of the taught content across the programme, highlighting how that applies to patient pathways, and helping you to develop key skills such as leadership, communication and evidence-based problem solving.

Live, online tutorials, workshops and drop-in sessions: Often used to host plenary sessions. These plenary sessions are optional, added value and may cover topics common to all students such as: note taking and meet your alumni at Level 4; IT and data analysis at Level 5 and writing retreats and career readiness at Level 6.

Apart from these formal activities, we operate an open-door policy so you can ask for a meeting with any of our tutors across the year to discuss particular areas of difficulty or concern. You will also have access to specialist advice and support through our Academic Mentors, Disability Inclusion Tutors, Student Experience and Support Officers, and a range of central services including Counselling and Mental Health, Careers and Employability, and Student Finance.

6. Teaching Staff

University life is not just about the content of your degree. It is also an opportunity to network, to speak to network, to speak to people working in fields that excite you. Here in Life Sciences, you will meet a diverse range of staff that you can see by using the following link: (https://www.keele.ac.uk/lifesci/ourpeople/).

We will also invite speakers from the School of Medicine, Pharmacy, and local NHS Trusts.

Our staff include world-leading researchers, clinical practitioners, and experts in learning and teaching. As part of their training, all staff complete post-graduate qualifications on learning and teaching. Some take this to Masters level and beyond, choosing to specialise in pedagogic research to ensure that our programmes are taught to the very highest standards.

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.

7. What is the structure of the Programme?

The academic year runs from September to June and is divided into two semesters. Each semester will generally have 12 weeks of teaching, and an additional 3 weeks of final assessments. Details of each semester can be found using the following link: https://www.keele.ac.uk/students/academiclife/keydates/.

Our programme is 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 two types of modules delivered as part of your programme. They are:

- Compulsory modules - a module that you are required to study on this course;
- Optional modules - these allow you some flexibility to specialise in areas you are interested in.

At Level 4, we have consolidated all of your modules into four, compulsory 30-credit modules. This will provide a solid foundation to your degree, regardless of your academic background. We assume no prior knowledge and will make sure that Level 4 gives you the skills needed to succeed at Levels 5 and 6.

At Level 5 25% of the modules are optional, and at Level 6 almost 40% are optional. This allows you to more flexibility to tailor your degree as you progress through it.

At Levels 5 and 6, optional modules include Global Challenge Pathways - a choice of modules from different subject areas that count towards the overall credit requirement but not the number of subject-related credits.

Global Challenge Pathways

This programme includes the option for you to take a Global Challenge Pathway. These modules offer you an exciting opportunity to work with students and staff from different disciplines to explore topical global issues such as power and conflict, health inequalities, climate change, generative AI, social justice, global citizenship, and enterprise from different perspectives.

Global Challenge Pathways can be taken as one 15-credit module at Levels 5 and 6. For more information about our Global Challenge Pathways please visit:
https://www.keele.ac.uk/study/undergraduate/globalchallengepathways/

Languages

Alternatively, you could choose to study a modern Language. Language modules are available separately for students at Level 4. At Levels 5 and 6 they are included within the Global Challenge Pathways.

If you choose the Language Specialist pathway, you will automatically be enrolled on a Semester 2 Modern Language module as a continuation of your language of choice as a faculty funded 'additional' module. Undertaking a Modern Languages module in Semester 2 is compulsory if you wish to continue to the Language Specialist Global Challenge Pathway the following academic year.

For more information about Languages option modules available to you please visit the following webpages.

For new (Level 4) students please visit: https://www.keele.ac.uk/study/languagecentre/

For current (Level 5 and Level 6) students please visit: https://www.keele.ac.uk/students/academiclife/global-challenge-pathways/

For further information on the content of modules currently offered, please visit:
https://www.keele.ac.uk/recordsandexams/modulecatalogue/

A summary of the credit requirements per year is as follows.

Year	Compulsory	Optional	
		Min	Max
Level 4	120	0	0
Level 5	90	30	30
Level 6	75	45	45

Module Lists

Level 4

Compulsory modules	Module Code	Credits	Period
Molecules of Life	LSC-10097	30	Semester 1
Clinical Applications of Biomedical Science I	LSC-10070	30	Semester 1-2
Human Physiology and Anatomy	LSC-10101	30	Semester 1-2
Practical and Academic Skills in Bioscience	LSC-10103	0	Semester 1-2
Molecular Cell Biology	LSC-10066	30	Semester 2

Level 4 Module Rules

LSC-10103 *Practical and Academic Skills in Bioscience* is a compulsory zero-credit module. All laboratory work across this Level of study will be coordinated through this module and assessed within other credit-bearing modules across the year, where appropriate. This module will also develop wider academic skills and includes additional academic support and development material to enhance your overall student experience and develop key employability skills. The module will be passed via attendance to a minimum of 70% of taught laboratory sessions and successful completion of a competency skills audit. Students unable to pass this module will transfer to our alternative, *Medical Sciences* pathway that is not accredited by the IBMS or RSB.

LSC-10070 *Clinical Applications of Biomedical Science I* is a compulsory 30-credit module, needed to evidence compliance against the HCPC Standards of Education and Training. Therefore, this module cannot be condoned unless students transfer to our non-accredited pathway *Medical Sciences*. In order to retain IBMS accreditation, you will also have to reach a pass mark of 40% in each item of assessment across this module and engage with a minimum threshold of case-based learning tutorials. If you are unable to meet these requirements, you may be able to repeat the year (either in full or on a modular basis), or transfer to our non-accredited pathway, *Medical Sciences*.

Level 5

Compulsory modules	Module Code	Credits	Period
Molecular, Cellular and Structural Immunology	LSC-20015	15	Semester 1
Applications of Molecular Biology	LSC-20131	15	Semester 1
Clinical Applications of Biomedical Science II	LSC-20089	30	Semester 1-2
Practical and Professional Skills in Bioscience	LSC-20127	0	Semester 1-2
Metabolism in Health and Disease	LSC-20016	15	Semester 2
Research and Analytical Skills	LSC-20056	15	Semester 2

Optional modules	Module Code	Credits	Period
Human Genetics	LSC-20050	15	Semester 1
Microbes, Viruses and Parasites	LSC-20073	15	Semester 1
Professional Relationships	LSC-20040	15	Semester 1-2
Flexible Work Placement (Level 5)	NAT-20011	15	Semester 1-2
Cell Signalling	LSC-20085	15	Semester 2

Level 5 Module Rules

LSC 20040 *Professional Relationships* is an optional 15-credit module that explores both the regulatory and professional considerations when working with patients. Only students enrolled on this optional module are eligible to apply for one of our clinical placements and subsequent transfer to our HCPC-approved *Applied Biomedical Science* pathway.

LSC-20107 *Practical and Professional Skills in Bioscience* is a compulsory zero-credit module. All laboratory work across this Level of study will be coordinated through this module and assessed within other credit-bearing modules across the year, where appropriate. This module will also develop advanced academic skills in literature searching and analysis and includes additional career development workshops, enhancing your overall student experience and developing key employability skills. The module will be passed via attendance to a minimum of 70% of taught laboratory sessions and successful completion of a competency skills audit. Students unable to pass this module will transfer to our alternative, *Medical Sciences* pathway that is not accredited by the IBMS or RSB.

LSC-20089 *Clinical Applications of Biomedical Science II* is a compulsory 30-credit module, needed to evidence compliance against the HCPC Standards of Education and Training. Therefore, this module cannot be condoned unless students transfer to our non-accredited pathway *Medical Sciences*. To retain IBMS accreditation, you will also have to reach a pass mark of 40% in each item of assessment across this module and engage with a minimum threshold of case-based learning tutorials. If you are unable to meet these requirements, you may be able to repeat the year (either in full or on a modular basis), or transfer to our non-accredited pathway, *Medical Sciences*.

Level 6

Compulsory modules	Module Code	Credits	Period
Professional Development in Bioscience	LSC-30090	0	Semester 1-2
Advanced Clinical Pathology	LSC-30100	30	Semester 1-2
Research Project	LSC-30102	30	Semester 1-2
Employability and Communication Skills in Bioscience	LSC-30106	15	Semester 1-2

Optional modules	Module Code	Credits	Period
Human Parasitology	LSC-30036	15	Semester 1
Tropical Biology Field Course	LSC-30066	15	Semester 1
Applied Regenerative Medicine	LSC-30068	15	Semester 1
Omics Technologies	LSC-30092	15	Semester 1
Structural Immunology	LSC-30110	15	Semester 1
Neuropathology	LSC-30118	15	Semester 1
Flexible Work Placement (Level 6)	NAT-30008	15	Semester 1-2
Professional Experience in Education	NAT-30012	15	Semester 1-2
Cancer Biology	LSC-30061	15	Semester 2
Epidemiology	LSC-30084	15	Semester 2
Physiology of Living and Dying	LSC-30094	15	Semester 2
VIrology	LSC-30108	15	Semester 2

Level 6 Module Rules

Biomedical Science pathways cannot condone LSC 30102 *Research Project*. Students unable to reach the 40% pass threshold for this module may be able to repeat to repeat the year (either in full or on a modular basis), or transfer to our non-accredited pathway, *Medical Sciences*.

Applied Biomedical Science students do not take LSC 30102 *Research Project*. Instead, they take LSC 30044 *Double Applied Biomedical Science Placement*. This module will allow you to evidence compliance with the HCPC Standards of Proficiency, needed to gain the IBMS Certificate of Competence and to apply for HCPC registration postgraduation. LSC 30102 cannot be condoned. Students that fail to achieve the 40% pass threshold for LSC 30102 may be able to repeat the year (either in full or on a modular basis), or transfer to our non-accredited pathway, *Medical Sciences*.

NAT-30008 *Flexible Work Placement (Level 6)* and NAT-30012 *Professional Experience in Education* cannot be taken together.

Learning Outcomes

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

Level 4

Learning outcomes are achieved in compulsory modules.

Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
How the human body works including: human anatomy and physiology, molecular biology, genetics, cell signalling, and metabolism.	All modules
The role of Biomedical Scientists working in clinical, diagnostic laboratories and their impact to a wide range of patient pathways.	Clinical Applications of Biomedical Science I - LSC-10070
The importance of interdisciplinary and reflective practice to better inform patient outcomes and professional development.	Clinical Applications of Biomedical Science I - LSC-10070
The scientific method including hypothesis-driven investigation, evidence-based problem solving, data collection, and data analysis.	Practical and Academic Skills in Bioscience - LSC-10103

Subject Specific Skills	
Learning Outcome	**Module in which this is delivered**
Work confidently in a laboratory environment, including a range of laboratory techniques used for the acquisition and analysis of data.	Practical and Academic Skills in Bioscience - LSC-10103
Work safely and responsibly in the laboratory by following standard operating procedures, developing COSHH, recognising and resolving ethical challenges, and adhering to the principles of health and safety and good laboratory practice.	Practical and Academic Skills in Bioscience - LSC-10103
Interrogate current scientific literature to solve problems, develop reasoned arguments, and to evaluate the strengths and limitations of the available evidence.	All modules, but particularly: LSC 10070 Clinical Applications of Biomedical Science I

Key or Transferable Skills (graduate attributes)	
Learning Outcome	**Module in which this is delivered**
Develop and sustain effective approaches to lifelong learning, including effective time management, organisation, and reflective practice.	All modules, but particularly: LSC 10070 Clinical Applications of Biomedical Science I LSC 10103 Practical and Academic Skills in Bioscience
Acquire, analyse, synthesise, evaluate, and summarise information and ideas from a wide range of sources including textual, numerical, verbal, and graphical.	Molecules of Life - LSC-10097 Clinical Applications of Biomedical Science I - LSC-10070
Prepare, process, and present data using a range of qualitative and quantitative techniques, including the use of specialist statistical programmes, spreadsheets, and relevant digital resources.	Molecules of Life - LSC-10097 Human Physiology and Anatomy - LSC-10101
Communicate effectively with a range of audiences using written, verbal, and graphical approaches with accurate scientific terminology.	Molecules of Life - LSC-10097 Clinical Applications of Biomedical Science I - LSC-10070 All modules
Work effectively in a team in a respectful manner that is inclusive of different points of view, lived experiences, and strengths and weaknesses to achieve collaborative goals.	Clinical Applications of Biomedical Science I - LSC-10070 Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103
Apply the principles of good academic practice to ensure academic and professional integrity, including appropriate use of citations, references, and recognition of other sources such as generative AI.	All modules

Level 5

Learning outcomes are achieved in compulsory modules and reinforced in optional modules.

Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
How the human body works including: human anatomy and physiology, molecular biology, genetics, cell signaling, and metabolism.	LSC-20131 Applications of Molecular Biology LSC 20015 Molecular, Cellular and Structural Immunology LSC 20089 Clinical Applications of Biomedical Science II LSC 2001 Metabolism in Health and Disease
The role of Biomedical Scientists working in clinical, diagnostic laboratories and their impact to a wide range of patient pathways.	LSC 20089 Clinical Applications of Biomedical Science II
The importance of interdisciplinary and reflective practice to better inform patient outcomes and professional development.	LSC 20089 Clinical Applications of Biomedical Science II
The scientific method including hypothesis-driven investigation, evidence-based problem solving, data collection, and data analysis.	LSC 20107 Practical and Professional Skills in Bioscience LSC 20056 Research and Analytical Skills
Cutting edge research including the fields of bioinformatics, biotechnology, parasitology, and a wide range of disease models.	LSC 20131 Applications of Molecular Biology LSC 20015 Molecular, Cellular and Structural Immunology LSC 20016 Metabolism in Health and Disease LSC 20056 Research and Analytical Skills
How to communicate effectively to a range of different audiences including clinicians, scientists and the general public.	All compulsory modules, but particularly: LSC 20089 Clinical Applications of Biomedical Science II

Subject Specific Skills	
Learning Outcome	**Module in which this is delivered**
Work confidently in a laboratory environment, including a range of laboratory techniques used for the acquisition and analysis of data.	LSC 20107 Practical and Professional Skills in Bioscience
Design, conduct, analyse, evaluate, and report the findings of biomedical experiments and methodologies.	All compulsory modules, particularly: LSC 20107 Practical and Professional Skills in Bioscience LSC 20016 Metabolism in Health and Disease LSC 20056 Research and Analytical Skills LSC 20015 Molecular, Cellular and Structural Immunology
Work safely and responsibly in the laboratory by following standard operating procedures, developing COSHH, recognising and resolving ethical challenges, and adhering to the principles of health and safety and good laboratory practice.	LSC 20107 Practical and Professional Skills in Bioscience LSC 20089 Clinical Applications of Biomedical Science II
Interrogate current scientific literature to solve problems, develop reasoned arguments, and to evaluate the strengths and limitations of the available evidence.	All compulsory modules, particularly LSC 20056 Research and Analytical Skills

Key or Transferable Skills (graduate attributes)	
Learning Outcome	**Module in which this is delivered**
Develop and sustain effective approaches to lifelong learning, including effective time management, organisation, and reflective practice.	All compulsory modules, but particularly: LSC 20089 Clinical Applications of Biomedical Science II LSC 20107 Practical and Professional Skills in Bioscience
Acquire, analyse, synthesise, evaluate, and summarise information and ideas from a wide range of sources including textual, numerical, verbal, and graphical.	All compulsory modules
Prepare, process, and present data using a range of qualitative and quantitative techniques, including the use of specialist statistical programmes, spreadsheets, and relevant digital resources.	All compulsory modules
Communicate effectively with a range of audiences using written, verbal, and graphical approaches with accurate scientific terminology.	All compulsory modules
Work effectively in a team in a respectful manner that is inclusive of different points of view, lived experiences, and strengths and weaknesses to achieve collaborative goals.	LSC 20107 Practical and Professional Skills in Bioscience LSC 20056 Research and Analytical Skills
Apply the principles of good academic practice to ensure academic and professional integrity, including appropriate use of citations, references, and recognition of other sources such as generative AI.	All compulsory modules

Level 6

Learning outcomes are achieved through a mix of compulsory and optional modules

Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
How the human body works including: human anatomy and physiology, molecular biology, genetics, cell signaling, and metabolism.	LSC 30102 Research Project LSC 30100 Advanced Clinical Pathology LSC 30068 Applied Regenerative Medicine LSC 30XXX Neuropathology LSC 30092 Omics LSC 30110 Structural Immunology LSC 30061 Cancer Biology LSC 30094 Physiology of Living and Dying
The role of Biomedical Scientists working in clinical, diagnostic laboratories and their impact to a wide range of patient pathways.	LSC 30100 Advanced Clinical Pathology LSC 30044 Double Applied Biomedical Science Placement
The importance of interdisciplinary and reflective practice to better inform patient outcomes and professional development.	LSC 30100 Advanced Clinical Pathology LSC 30068 Applied Regenerative Medicine LSC 30090 Professional Development in Bioscience
The scientific method including hypothesis-driven investigation, evidence-based problem solving, data collection, and data analysis.	All modules, particularly: LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only)
Cutting edge research including the fields of bioinformatics, biotechnology, parasitology, and a wide range of disease models.	LSC 30102 Research Project LSC 30044 Double |Applied Biomedical Science Placement (ABMS only) LSC 30068 Applied Regenerative Medicine LSC 30036 Human Parasitology LSC 30XXX Neuropathology LSC 30110 Structural Immunology LSC 30061 Cancer Biology LSC 30084 Epidemiology LSC 30108 Virology
How to communicate effectively to a range of different audiences including clinicians, scientists and the general public.	All modules, particularly: LSC 30102 Research Project LSC 30044 Double |Applied Biomedical Science Placement (ABMS only)

Subject Specific Skills	
Learning Outcome	**Module in which this is delivered**
Work confidently in a laboratory environment, including a range of laboratory techniques used for the acquisition and analysis of data.	LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only)
Design, conduct, analyse, evaluate, and report the findings of biomedical experiments and methodologies.	LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only)
Work safely and responsibly in the laboratory by following standard operating procedures, developing COSHH, recognising and resolving ethical challenges, and adhering to the principles of health and safety and good laboratory practice.	LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only)
Interrogate current scientific literature to solve problems, develop reasoned arguments, and to evaluate the strengths and limitations of the available evidence.	All modules
Undertake independent scientific research, contextualised within the broader literature, and communicated to different target audiences.	LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only)
Evidence compliance with the Health and Care Profession Council Standards of Proficiency for Biomedical Scientists through completion of the IBMS Registration Portfolio.	LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only)

Key or Transferable Skills (graduate attributes)	
Learning Outcome	**Module in which this is delivered**
Develop and sustain effective approaches to lifelong learning, including effective time management, organisation, and reflective practice.	All modules, but particularly: LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMs only) LSC 30090 Professional Development in Bioscience
Acquire, analyse, synthesise, evaluate, and summarise information and ideas from a wide range of sources including textual, numerical, verbal, and graphical.	All modules
Prepare, process, and present data using a range of qualitative and quantitative techniques, including the use of specialist statistical programmes, spreadsheets, and relevant digital resources.	All modules, but particularly: LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only)
Communicate effectively with a range of audiences using written, verbal, and graphical approaches with accurate scientific terminology.	All modules, but particularly: LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMs only) LSC 30106 Employability and Communication Skills in Bioscience
Work effectively in a team in a respectful manner that is inclusive of different points of view, lived experiences, and strengths and weaknesses to achieve collaborative goals.	All modules, but particularly: LSC 30102 Research Project LSC 30044 Double Applied Biomedical Science Placement (ABMS only) LSC 30100 Advanced Clinical Pathology LSC 30090 Professional Development in Bioscience LSC 30068 Applied Regenerative Medicine
Apply the principles of good academic practice to ensure academic and professional integrity, including appropriate use of citations, references, and recognition of other sources such as generative AI.	Applied Regenerative Medicine - LSC-30068 All modules

8. Final and intermediate awards

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

Honours Degree **BSc (Hons) Biomedical Science**	360 credits	You will require at least 120 credits at Levels 4, 5 and 6 You must accumulate at least 270 credits in *Biomedical Science* or *Applied Biomedical Science* (out of 360 credits overall), with at least 90 credits in each of the three years of study*, to graduate with a named single honours degree in *Biomedical Science* or *Applied Biomedical Science*. *An exemption applies for students transferring from a Combined Honours programme - see point 3.4 here: https://www.keele.ac.uk/regulations/regulationc3/ N.B. The award will be '*Medical Sciences*' if a pass standard is not achieved in the Level 4 *Core Practical Skills*, Level 5 *Practical Skills in Bioscience* or in your Level 6 *Independent Student Research* modules. '*Medical Sciences*' pathways are not accredited by the Institute of Biomedical Science or Royal Society of Biology.
Diploma in Higher Education	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
Certificate in Higher Education	120 credits	You will require at least 120 credits at level 4 or higher

Ordinarily, you will graduate with the degree title *BSc (Hons) Biomedical Science*. However, alternative titles are awarded in the following situations:

BSc (Hons) Medical Sciences: Students that fail to meet PSRB requirements as outlined in section 8 transfer to our non-accredited route, *Medical Sciences*. This includes students who are unable to meet competency and performance requirements for the following modules: LSC 10103, 10070, 20107, 20089, and 30102.

BSc (Hons) Applied Biomedical Science: Students who are able to evidence compliance against the HCPC Standards of Proficiency transfer to our *Applied Biomedical Science* route, which is accredited by the IBMS and RSB, and approved by the HCPC. This includes successful completion of LSC 20040, clinical placement, and LSC 30044.

International Year Option: *Biomedical Science* or *Medical Sciences* students who successfully complete an international year have the following suffix added to their degree title: *with International Year*. Students who transferred to our *Applied Biomedical Science* programme are not eligible to undertake an international year.

Work Placement Year Option: *Biomedical Science* or *Medical* Sciences students who undertake an industrial placement and successfully complete NAT-30010 have the following suffix added to their degree title: *with work placement year*. Students who transferred to our *Applied Biomedical Science* programme are not eligible to undertake an industrial placement or complete LSC-30010.

9. How is the Programme Assessed?

The wide variety of assessment methods used on this programme 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.

Our assessment strategy will help you to develop and evidence your ability to:

Provide evidence-based solutions to current scientific problems. Most often this is assessed through a range of case report, portfolios and literature reviews.

Present scientific findings. Often these are lab reports or experimental projects that test your ability to pose scientific hypotheses, design experiments, understand methodologies, present findings, analyse data and situate your work in the current literature. Other assessments will also develop your skills in accessing, manipulating and presenting the outcomes of computational investigations, including in bioinformatics and the use of small molecule and macromolecular databases.

Communicate effectively with a range of audiences. These can include scientific posters, patient information leaflets, wikis, blogs or oral presentations, as well as more standard laboratory reports, proformas and literature reviews.

Work professionally. Your final year, independent research project will give you an opportunity to demonstrate a range of professional skills such as leadership, innovation, time keeping, communication and the ability to work safely and ethically.

Work effectively in a team. Most often this is assessed through group presentations but can also include competencies such as working together in the lab or other group assignments, such as an assessment where you will work in a group on the optimisation and production of commercial laboratory assay kit for metabolite quantification.

Solve problems in a time-limited fashion. Often in the work environment we are asked to solve problems in a relatively short amount of time. Online tests and end-of-semester, online, open-book examinations will help you to evidence these skills.

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.

10. 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: 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

	Scheduled learning and teaching activities	**Guided independent Study**	**Placements**
Year 1 (Level 4)	42.2%	57.8%	0%
Year 2 (Level 5)	45.4%	54.6%	0%
Year 3 (Level 6)	25.2%	74.8%	0%

11. Accreditation

All awards, with the exception of *Medical Sciences*, are accredited both by the Institute of Biomedical Science (IBMS) and Royal Society of Biology (RSB). To gain an accredited degree, you must meet the following criteria, otherwise you will be transferred to our non-accredited pathway, *Medical Sciences*.

Laboratory competence: Achieve a pass mark for the two, zero-credit and year-long modules at Level 4 (*Practical and Academic Skills in Bioscience)* and 5 (*Practical and Professional Skills in Bioscience)*. This includes attendance to at least 70% of labs and appropriate sign-off for key lab-based competencies identified at each Level.

Vocational knowledge and understanding: Achieve a pass mark of at least 40% for all assessments delivered as part of the two 30-credit, vocational and year-long modules, *Clinical Applications of Biomedical Science I* and *II*. Evidence personal levels of knowledge and understanding of vocational subjects through satisfactory attendance and engagement with case-based learning, also delivered as key aspects of these two modules.

Independent research and professional skills: Achieve a pass mark of at least 40% for your 30-credit,

year-long independent research project module. This includes an assessment of your professional skills across the year.

This programme also includes the opportunity to apply for a clinical placement and transfer to our *Applied Biomedical Science (ABMS)* award. ABMS is accredited by the RSB and IBMS and approved by the Health and Care Professions Council (HCPC). Successful attainment of this award makes you eligible to apply for registration with the HCPC. You will also receive the IBMS Certificate of Competence, making you eligible for Licentiate membership of the IBMS. In order to gain this award, you must meet the criteria listed above and:

Standards of Proficiency: Demonstrate compliance with the HCPC Standards of Proficiency through successful completion of the IBMS Registration Portfolio and achieving a pass mark of at least 40% for the *Double Applied Biomedical Science Placement* at Level 6.

12. University 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/

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

13. What are the typical admission requirements for the Programme?

See the relevant programme page on the website for the admission requirements relevant to this programme: https://www.keele.ac.uk/study/

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.

English for Academic Purposes

Please note: All new international students entering the university will provide a sample of Academic English during their registration Using this sample, the Language Centre may allocate you to an English language module which will become compulsory. This will replace any GCP modules. *NB:* students can take an EAP module only with the approval of the English Language Programme Director and are not able to take any other Language modules in the same academic year.

English Language Modules at Level 4:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2)
- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

English Language Modules at Level 5:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2)
- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

English Language Modules at Level 6:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2); ENL-90005 Advanced Business English Communication
- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

Recognition of Prior Learning (RPL) 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: https://www.keele.ac.uk/qa/programmesandmodules/recognitionofpriorlearning/

Admission with advanced standing for direct entry into Level 5 is considered on an individual basis for students

who have successfully completed studies equivalent to Level 4 of an IBMS-accredited Biomedical Science programme.

Students on the Applied Biomedical Science programme cannot be exempted from any module that assesses any of the HCPC's standards of proficiency.

14. How are students supported on the programme?

The School of Life Sciences operates an open door policy. This means that you can contact any of our staff via email to request a meeting or discus any problem that you may be experiencing.

In addition to the open door policy, you can also contact the following people across Life Sciences for help and support:

- Programme Director or Director of Education for programme-, discipline- or School-related issues
- Module Manager for module-related issues
- Demonstrators for help during labs
- Academic mentors for academic help and guidance
- Student Experience and Support Officers for more personal or pastoral help
- Early Resolution Officer to help advocate for you, for example, if you would like to raise a concern
- Student Voice are a group of students from your programme that can advocate for you to the School

Student Services also offer a comprehensive range of specialist services that help you at any time from enrolment to graduation. The following link will provide more information:
https://www.keele.ac.uk/students/studentservices/

15. Learning Resources

Workshops and tutorials are delivered in modern teaching rooms across the University, including up-to-date PC suites for data analysis and bioinformatics workshops.

Practical sessions are held in dedicated teaching laboratories within the School of Life Sciences. Over recent years these have been completely refitted, providing modern and well-equipped facilities supporting delivery of a diverse practical programme (including the David Attenborough laboratories, opened in person by Sir David in

2019).

The learning resources available to you on the Programme include:

- An extensive collection of books and journals held in the University Library on campus, or the health library situated at the University Hospital of North Staffordshire.
- Access to a comprehensive range of ebooks, journals and published papers all available online
- The Keele Learning Environment (KLE) which provides easy access to a wide range of learning resources including lecture materials and other guidance/supporting resources, and Microsoft Teams for further content development and to facilitate live and interactive discussions.

16. Other Learning Opportunities

We are committed to offering a rich and diverse student experience that goes far beyond your degree.

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 in the Annex for the International Year.

Work Placement Year

Students have the opportunity to apply directly for the 4-year 'with Work Placement Year' degree programme or to transfer onto the 4-year degree programme at the end of Year-1 and in Year-2 at the end of Semester 1. Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking their year-long placement. Eligibility for the Work Placement Year is stated in the Annex.

Students wishing to take the work placement year should meet with the Programme Director to obtain their signature to confirm agreement before they will be allowed to commence their placement.

International students who require a Tier 4 visa must check with the Immigration Compliance Team prior to commencing any form of placement.

A summary of the Work Placement Year, which is a potential option for students after completion of year 2

(Level 5), is provided in the Annex for the Work Placement Year.

Secondments: These are shorter industrial placements that usually take place over the summer in between Level 5 and 6 and usually last between 2-8 weeks. They can be based locally in one of our research labs here at Keele, nationally or internationally. For example, often some our students will travel to Malaysia to work with our partner *Universiti Sains Malaysia*.

Tropical field trip: You could apply for our School tropical field course that takes place in Malaysia. These are often more ecology and conservation in nature, and again provide fantastic international experience.

Operation Wallacea: This is a private company that supports a wide range of student projects with a particular focus on biodiversity and climate research. More information can be found at: https://www.opwall.com

Clinical placements: You could apply for a clinical placement. These differ from industrial placements in that they give you an opportunity to demonstrate compliance with the HCPC Standards of Proficiency. Successful students transfer to our *Applied Biomedical Science* degree that is accredited by the HCPC. Graduates of our *Applied* route receive an IBMS Certificate of Competence along with their degree.

Other opportunities. There are a number of schemes available from e.g. the Wellcome Trust that provide bursaries for students to gain laboratory experience in the summer vacation between level 5 and 6. Staff in Life Sciences have hosted these bursaries in the past and students who are interested can approach staff, who will have to submit an application on the students' behalf to the funding bodies (usually in January or February). Staff may also be willing to host students in their laboratories during the summer vacation on a voluntary basis. Other learning opportunities for Biomedical Science students vary from year to year but include 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 as part of a school-wide seminar programme but are widely advertised and undergraduate students are always welcome to attend.

Note: the opportunities described above are limited and dependent on external providers.

17. Additional Costs

Applied Biomedical Science students may have to pay for a full course of Hepatitis B vaccination and a Disclosure and Barring Service (DBS) enhanced check prior to starting clinical placement.

Activity	**Estimated Cost**
Optional field course hosted at USM, Malaysia	£1,200
Replacement lab coat (if you lose the free one we provide)	£10
Total estimated additional costs	£1,210

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

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 costs for this programme.

18. Quality management and enhancement

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

- The School Education Committee is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of each academic year.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Revalidation process.

Student evaluation of, and feedback on, the quality of learning on every 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 annual programme review.
- Findings related to the programme 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 programme is considered and acted on at regular meetings of the Student-Staff Voice 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/

19. The principles of programme design

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

a. UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education: http://www.qaa.ac.uk/quality-code

b. QAA Subject Benchmark Statement: Biomedical Sciences (2023) https://www.qaa.ac.uk/quality-code/subject-benchmark-statements?indexCatalogue=document-search&searchQuery=biomedical&wordsMode=AllWords

c. Keele University Regulations and Guidance for Students and Staff: http://www.keele.ac.uk/regulations

d. Health and Care Professions Council Standards of Education & Training, 2017

e. Health and Care Professions Council Standards of Proficiency - Biomedical Scientists, 2014

f. Health and Care Professions Council Standards of Conduct, Performance & Ethics, 2024

g. Accreditation Guidance Documentation of the Institute of Biomedical Science

20. Annex - International Year

Biomedical Science with International Year

International Year Programme
At Level 5 you can apply to transfer onto our International Year pathway. If successful, you will have an additional year of study at one of our international partner Universities once you have completed Level 5 here 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 standard programme 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 information below only applies to those students taking *Biomedical Science with International Year*.
International Year Programme Aims
In addition to the programme aims for *Biomedical Science*, we also aim to: 1. Enhance your personal development give you an insight into the international dimension of Biomedical Science 2. Give you an 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 55% across all modules in Semester 1 at Level 5 is normally required. Places on the International Year are then conditional on achieving an average mark of 55% across all Level 5 modules. Students with up to 15 credits of re-assessment who meet the 55% requirement may progress to the International Year. Where no Semester 1 marks have been awarded performance in 1st year marks and ongoing 2nd year assessments are taken into account)
- General Aptitude (to be demonstrated by application for study abroad, interview during the 2nd semester of year 2 (Level 5), and by recommendation of the student's Academic Mentor, 1st and 2nd year tutors and programme director)

Students may not register for both an International Year and a Placement Year.

Student Support

We have a dedicated Study Abroad tutor within Life Sciences that will will stay in touch with you throughout your International Year, effectively acting as an additional Academic Mentor. There is also support available for Keele's Global Opportunities Team (https://www.keele.ac.uk/study/studyabroad/)

Learning Outcomes

In addition to the learning outcomes for *Biomedical Science*, students who graduate with *Biomedical Science with International Year* will be able to:

1. Describe, discuss and reflect upon the cultural and international differences and similarities of different learning environments
2. Discuss the benefits and challenges of global citizenship and internationalisation
3. Explain how their perspective on their academic discipline has been influenced by locating it within an international setting.
4. Use independent research skills to identify relevant information resources on a range of subjects related, or complementary, to Biomedical Science.
5. Demonstrate the use of critical thinking skills, augmented by creativity and curiosity, in discussing the application of their International Year studies to Biomedical Science.

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.

Regulations

Students registered for the International Year are subject to the programme-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 module with significant overlap to the Level 6 modules they will study 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

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 who meet external eligibility criteria 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.

21. Annex - Work Placement Year

Biomedical Science with Work Placement Year

Work Placement Year summary

At Level 4 or 5 you can apply to transfer onto our Work Placement Year pathway.

Students registered for this programme may either be admitted for or apply to transfer during their studies to the 'with Work Placement Year' option (NB: for Combined Honours students the rules relating to the work placement year in the subject where the placement is organised are to be followed). Students accepted onto this programme will have an extra year of study (the Work Placement Year) with a relevant placement provider after they have completed Year 2 (Level 5) at Keele.

Students who successfully complete both the second year (Level 5) and the Work Placement Year will be permitted to progress to Level 6. Students who fail to satisfactorily complete the Work Placement Year will normally revert to the 3-year programme 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 information below only applies to those students taking *Biomedical Science with Work Placement Year*.

Work Placement Year Programme Aims

In addition to the programme aims for *Biomedical Science*, we also aim to:

1. Provide experience of working in a subject-related laboratory or work place within an industrial, academic or public institution either in the UK or abroad.

Entry Requirements for the Work Placement Year

Admission to the Work Placement Year is subject to successful application, interview and references from appropriate staff. Students have the opportunity to apply directly for the 4-year 'with work placement year' degree programme, or to transfer onto the 4-year programme at the end of Year-1 and in Year-2 at the end of Semester 1. Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking the year-long work placement. Students who fail to pass the work placement year, and those who fail to meet the minimum requirements of the work placement year module, (* or equivalent, work placement), will be automatically transferred onto the 3- year degree programme.

* We recommend where possible students undertake a placement of between 9 - 12 months on a full-time basis to maximize academic and personal growth. However, the Faculty of Natural Sciences Work Placement Year mandates a minimum of 24 weeks in duration, ideally on a full-time basis, but no less than 21 hours per week. This enables those undertaking an unpaid placement to work on a part-time basis alongside their placement.

The criteria to be applied are:

- A good University attendance record and be in 'good academic standing'.
- Academic Performance (an average of 50% across all modules in Semester 1 at Level 5 is normally required. Places on the Work Placement Year are then conditional on achieving an average mark of 50% across all Level 5 modules. Students with up to 15 credits of re-assessment who meet the 50% requirement may progress to the Work Placement Year. Where no Semester 1 marks have been awarded performance in 1st year marks and ongoing 2nd year assessments are taken into account)
- General Aptitude (to be demonstrated by application(s) to relevant placement providers with prior agreement from the Programme Lead, interview during the 2nd semester of year 2 (Level 5), and by recommendation of the student's Academic Mentor, 1st and 2nd year tutors and Programme Lead)
- Students undertaking work placements will be expected to complete a Health and Safety checklist prior to commencing their work experience and will be required to satisfy the Health and Safety regulations of the company or organisation at which they are based.
- *(International students only)* Due to visa requirements, it is not possible for international students who require a Tier 4 Visa to apply for direct entry onto the 4-year with Work Placement Year degree programme. Students wishing to transfer onto this programme should discuss this with student support, the academic tutor for the work placement year, and the Programme Lead. Students should be aware that there are visa implications for this transfer, and it is the student's responsibility to complete any and all necessary processes to be eligible for this programme. There may be additional costs, including applying for a new Visa from outside of the UK for international students associated with a transfer to the work placement programme.

Students may not register for both an International Year and a Work Placement Year.

Student Support

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

- Regular contact between the student and a named member of staff who will be assigned to the student as their University supervisor. The University supervisor will be in regular contact with the student throughout the year, and be on hand to provide advice (pastoral or academic) and liaise with the Placement supervisor on the student's behalf if required.
- Two formal contacts with the student during the placement year: the University supervisor will visit the student in their placement organization at around 5 weeks after the placement has commenced, and then visit again (or conduct a telephone/video call tutorial) at around 15 weeks into the placement.
- Weekly supervision sessions will take place with the placement supervisor (or his/her nominee) throughout the duration of the placement.

Learning Outcomes

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete the 'with Work Placement Year' option will be able to:

1. Demonstrate an ability to successfully work within their placement institution and to learn practical skills and develop their science base within the scope of their work project.

These learning outcomes will be assessed through the non-credit bearing Work Placement Year module (NAT-30010 *Work Placement Year).*

Regulations

Students registered for the 'with Work Placement Year' option are subject to programme-specific regulations (if any) and the University regulations. In addition, during the Work Placement Year, the following regulations will apply:

- Students undertaking the Work Placement Year must successfully complete the zero-credit module NAT-30010 *Work Placement Year*
- In order to ensure a high quality placement experience, each placement agency will sign up to a placement contract (analogous to a service level agreement).
- Once a student has been accepted by a placement organisation, the student will make a pre-placement visit and a member of staff identified within the placement contract will be assigned as the placement supervisor. The placement supervisor will be responsible for ensuring that the placement experience meets the agreed contract agreed with the University.
- The placement student will also sign up an agreement outlining his/her responsibilities in relation to the requirements of each organisation.

Students will be expected to behave professionally in terms of:

(i) conforming to the work practices of the organisation; and

(ii) remembering that they are representatives of the University and their actions will reflect on the School and have an impact on that organisation's willingness (or otherwise) to remain engaged with the placement.

Additional costs for the Work Placement Year

Tuition fees for students on the Work Placement Year will be charged at 20% of the annual tuition fees for that year of study, as set out in Section 1. The Work Placement Year can be included in your Student Finance allocation; to find out more about your personal eligibility see: www.gov.uk

You will have to bear the costs of travelling to and from your placement provider, accommodation, food and personal costs. Depending on the placement provider additional costs may include parking permits, travel and transport, suitable clothing, DBS checks, and compulsory health checks.

A small stipend may be available to students from the placement provider during the placement but this will need to be explored on a placement-by-placement basis as some organisations, such as charities, may not have any extra money available. You should budget with the assumption that your placement will be unpaid.

Eligibility for student finance will depend on the type of placement and whether it is paid or not. If it is paid, this is likely to affect student finance eligibility, however if it is voluntary and therefore unpaid, should not affect student finance eligibility. You are required to confirm eligibility with your student finance provider.

International students who require a Tier 4 visa should check with the Immigration Compliance team prior to commencing any type of paid placement to ensure that you are not contravening visa requirements.

22. Annex - Programme-specific regulations

Programme Regulations: Biomedical Science (Single Honours)

Final Award and Award Titles	BSc (Hons) Biomedical Science BSc (Hons) Biomedical Science with International Year BSc (Hons) Biomedical Science with Work Placement Year BSc (Hons) Applied Biomedical Science BSc (Hons) Medical Sciences BSc (Hons) Medical Sciences with International Year BSc (Hons) Medical Sciences with Work Placement Year
Intermediate Award(s)	Diploma in Higher Education Certificate in Higher Education
Last modified	October 2024
Programme Specification	https://www.keele.ac.uk/qa/programmespecifications

The University's Academic Regulations which can be found on the Keele University website (https://www.keele.ac.uk/regulations/)[1] apply to and regulate the programme, other than in instances where the specific programme regulations listed below over-ride them. These programme regulations list:

- *Exemptions* which are characterised by the omission of the relevant regulation.
- *Variations* which are characterised by the replacement of part of the regulation with alternative wording.
- *Additional Requirements* which set out what additional rules that apply to students in relation to this programme.

The following **exemptions, variations** and **additional requirements** to the University regulations have been checked by Academic Services and have been approved by the Faculty Education Committee.

The following **additional requirements** to the University academic regulations apply to Biomedical Science.

Regulations applying to Biomedical Science

1. A pass mark must be obtained in both of our zero-credit, lab-based modules (one at Level 4 and the other Level 5) and the relevant experimental project module at Level 6 to be awarded an IBMS and RSB accredited programme. Students who do not fulfil these conditions will be transferred to the '*Medical Sciences*' route. This degree is NOT accredited by the IBMS and therefore will not fulfil the required academic qualification for eligibility for HCPC registration as a Biomedical Scientist. The degree award of '*Medical Sciences*' in not accredited by the Royal Society of Biology.

Regulations applying to Biomedical Science and Applied Biomedical Science

1. Wearing a laboratory coat is compulsory in all laboratories. Students will not be allowed to attend the laboratory class without a laboratory coat.
2. 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.
3. 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.
4. Students who display serious misconduct in any class may, at the discretion of the member of staff in charge, be excluded from the class and recorded as being absent without good cause. Serious misconduct involves wilful damage to property, injury or threat to persons, or persistent disruption of teaching.
5. The unauthorised use of mobile phones or headphones is not permitted in any class.
6. Students are not permitted to record, video or photograph taught sessions or meetings with staff, except

with the permission in advance of the staff concerned. Permission will be given where this is part of an approved disability adjustment. Any permission to record, video or photograph is for personal use only and all recordings, videos or photographs remain the property of the presenter and Keele University.
7. Students are required to read and follow the procedures in the School of Life Sciences Safety Handbook, which is available from the School Noticeboard on KLE.

Applied Biomedical Science-specific regulations

The Applied Biomedical Science programme is subject to further criteria required by the Health and Care Professions of Council (HCPC):

1. Students on the Applied Biomedical Science programme are subject to the University Regulation on Fitness to Practise (University Regulation B5).
2. Demonstrate that they have no medical/health issues that may affect their fitness to practise. This will be assessed by the University's Occupational Health department either before (if medical issues have been identified) or at the start of the programme. A health screening questionnaire must be completed by students holding a place on prior to the start of their Level 5 studies.
3. Applied Biomedical Science students must attend full-time at their allocated hospital(s) during the full period of their vacation placement periods, abide by their conditions of contract and partake fully in the provided training programme. Students who do not fulfil the conditions of this regulation satisfactorily will revert to the Biomedical Science route.
4. Applied Biomedical Science students must achieve a pass grade for the Double Applied Biomedical Science Placement module. If this module is failed, the student will revert to the *Biomedical Science* route (or *Studies in Biomedical Sciences* award, if all of the requirements of the Biomedical Science award are not met (i.e. if a mark of less than 40% is achieved: see point 9 above (see BMS-specific regulations above)). In this case, the mark for the Double Applied Biomedical Science Placement module will be substituted *in lieu* of the Life Sciences Double Experimental Project (with research skills assessment) module.
5. Students who are awarded an Applied Biomedical Science degree will have met the HCPC's Standards of Proficiency for Biomedical Scientists and will be eligible to apply for HCPC registration (subject to the conditions given in point 9 above).
6. Applied Biomedical Science students must complete a course of vaccination against hepatitis B before starting their placement.
7. Students should note that an aegrotat award cannot provide eligibility for admission to the HCPC register. In addition, applicants for registration are required to provide further information to the HCPC, including a health reference from a medical practitioner (who must not be a relative) and a character reference from 'someone of professional standing in the community'. Registration is required to work as a qualified Biomedical Scientist in the NHS.
8. Applied Biomedical Science graduates will also receive the IBMS Certificate of Competence and are eligible for Licentiate Membership of the IBMS.
9. Selection criteria apply to transfer onto the Applied Biomedical Science programme from Level 4 Biomedical Science. Successful candidates are required to:
    i. Demonstrate a good command of reading, writing and spoken English, evidenced by their Level 4 coursework;
    ii. Successfully complete Level 4;
    iii. Demonstrate an aptitude for the role of a Biomedical Scientist through interviewers applying the NHS person specification for a trainee Biomedical Scientist post;
10. Undergo an enhanced Disclosure and Barring Service (DBS) check prior to acceptance onto the course, including any spent and unspent criminal convictions and cautions. The University follows the DBS Code of Practice and can provide a copy of this Code on request.
(see https://www.gov.uk/government/publications/dbs-code-of-practice).

Please note that having a criminal record is not necessarily a bar to obtaining a place on this course. Disclosure is mandatory but each case will be considered individually. demonstrate that they have completed a course of Hepatitis B vaccination prior to undertaking their placement.

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[1] References to University Regulations in this document apply to the content of the University's Regulatory Framework as set out on the University website here https://www.keele.ac.uk/regulations/.

Version History

This document

Date Approved: 07 July 2025

What's Changed

Compulsory module changes: LSC-10062 replaced with LSC-10066; LSC-10097 renamed Molecules of Life; LSC-20107 replaced with LSC-20127.

Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes
1	2025/26	GLENN HUSSEY	05 March 2025	
1	2024/25	GLENN HUSSEY	14 June 2024	
1	2023/24	GLENN HUSSEY	08 February 2023	
1	2022/23	GLENN HUSSEY	01 February 2022	
1	2021/22	GLENN HUSSEY	08 February 2021	
1	2020/21	GLENN HUSSEY	18 December 2019	
1	2019/20	GLENN HUSSEY	18 December 2019	