Programme Specification: Undergraduate

For Academic Year 2026/27

1. Course Summary

Names of programme and award title(s)	MSci Forensic Biology MSci Forensic Biology with International Year (see Annex for details) MSci Forensic Biology with Work Placement Year (see Annex for details)
Award type	Single Honours (Masters)
Mode of study	Full-time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 7
Normal length of the programme	4 years; 5 years with either the International Year or Placement Year between years 2 and 3
Maximum period of registration	The normal length as specified above plus 3 years
Location of study	Keele Campus
Accreditation (if applicable)	Accreditation will be sought from the Chartered Society of Forensic Sciences and the Royal Society of Biology upon completion of a full degree cycle. See also the section on accreditation.
Regulator	Office for Students (OfS)
Tuition Fees	**UK students:** Fee for 2026/27 is £9,790* **International students:** Fee for 2026/27 is £18,200** 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. What is an Integrated Master's programme?

The Master's level programme described in this document allows you to focus exclusively on the study of Forensic Biology. Integrated master's awards are delivered through a programme that combines study at a bachelor's degree with honours with study at master's level. As such, a student graduates with an integrated master's degree after a single four-year programme of study. The Integrated Masters programme described in this document allows graduates to gain enhanced skills and knowledge to master's level.

3. Overview of the Programme

Forensic Biology is at the interface of forensic and biological sciences, drawing skills, concepts and ideas from both subjects to provide graduates with broad experience of both disciplines. In the first and second year, the core fundamentals of the subject, including forensic identification, investigation and analysis, forensic biology, anatomy, physiology and genetics are put into practice through regular practical sessions and activities. This is enhanced by knowledge of forensic chemistry, toxicology and analytical science, anthropology and taphonomy, and crime scene investigation. Optional modules will enable you to tailor your experience to your interests and future career needs and deepen your understanding of key topics such as genetics, wildlife crime and a broader range of evidence types and investigative skills. In the final year of your MSci studies you will gain advanced research skill as part of a the taught programme content and the year-long independent research project.

The course emphasizes professional practice enabling you to understand the diverse roles in which forensic biology knowledge is applied such as crime scene investigator or expert witness in the court. This includes certifications in expert witness training. You will undertake a range of practical work in our state-of-the-art laboratories and teaching facilities, linking your understanding of key theories and ideas to the practical skills in gathering, processing and evaluating evidence. You will gain hands-on practical experience with a wide range of equipment and techniques working with professional and research grade instrumentation. The teaching laboratories are well equipped with high quality standard laboratory facilities and modern analytical instrumentation. There are also dedicated crime scene simulation facilities which include both domestic and nondomestic indoor scenarios, and outdoor crime scenes, and outdoor taphonomy facility used for teaching and research projects. You will also gain experience by use of outdoor Faculty equipment for search and recovery work, and obtaining a practical endorsement in bioscience laboratory skills.

Forensic Biology skills development and graduate attributes are embedded throughout the course, which include a wide range of transferrable skills including research and investigative skills via the independent research project and use of problem-based and team-based learning. In year 3 you will progress through forensic science investigations to produce professional reports and defend them in a mock court exercises and . Your development as an independent researcher is a central theme throughout the degree with an independent research project in year 3 and in year 4, you will complete a year-long research project in the area of Forensic Biology. These activities will allow you to fully immerse yourself at the forefront of the subject, and apply your skills of scientific inquiry to explore the world of research as well as the opportunity to go on work or education placements.

4. Aims of the programme

The broad aims of the programme are informed by the QAA Benchmark Statement for Forensic Science, to satisfy the Chartered Society of Forensic Science Accreditation and to embed Keele curriculum expectations and graduate attributes, which are under the following generic categories:

Academic Knowledge and expertise

- engender and develop an enthusiasm for forensic science and provide an intellectually stimulating and beneficial learning experience
- enable development of a deep academic **subject knowledge** and experience of **interdisciplinary experience** and techniques relevant to forensic science to master's level.
- foster **critical thinking**, awareness of and engagement with current forensic science methods and techniques within forensic science, some of which are at, or informed by, the forefront of the discipline

Professional Skills

- develop practical, analytical, **problem-solving** and **numeracy and data literacy** skills, exploring new approaches to solving problems, within forensic science, to master's level
- develop **digital readiness**, literate, written and oral reporting skills to a level appropriate to the professional forensic scientist and the ability to convey scientific outcomes to non-scientists
- engender a sound understanding of continuity of evidence and how the forensic crime scene, the laboratory and the court contribute to the forensic and legal process
- **research skills** of devising, planning, executing and reporting on an original investigation or research project within the discipline, both as an individual and as part of a team
- **reflective practice** and **career management**

Personal effectiveness

- develop **leadership, communication** and **time management** skills, **collaborate** as part of a team
- become **adaptable**, **resilient**, **self-aware** and **empathetic** of others

Social and ethical responsibility

- recognise and respect **equality, diversity and inclusion,** acting **ethically** with **integrity and respect**
- developing **sustainability** knowledge and skills and aware of **global issues** and challenges.

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
- Key or transferable skills (including employability skills)

Subject knowledge and understanding

Successful students will be able to:

- the principles of biology, physiology, anatomy, analytical science, forensic chemistry, forensic biology, and crime scene investigation.
- selected topics in biology and forensic biology such as forensic anthropology, taphonomy, and toxicology and possess competence in applying these principles to appropriate areas of the discipline.
- a wide range of instrumental and other techniques relevant to forensic science and use them competently to analyse a range of relevant materials and with regard to quality assurance issues
- problem-solving within forensic science and biology by drawing on their scientific understanding and knowledge, and experience of experimental techniques
- an awareness of and engagement with current methods and techniques within forensic science and biology, some of which are at, or informed by, the forefront of the discipline
- the place of forensic science within the legal framework and the role of the expert witness in court
- the research literature across forensic biology, use it to advance their understanding and apply it in practice
- the legal and ethical issues which constrain the practice of the professional forensic scientist including ISO accreditation in the UK.

Subject specific skills

Successful students will be able to:

- execute practical work and critically analyse the results from experiments or investigations and draw valid conclusions.
- interpret and evaluate the significance of the results of a forensic investigation in the context of the circumstances of the crime, using appropriate statistical tools
- prepare written reports following formats used by crime scene personnel including crime scene reports, strategies, and statements and defend it under cross-examination in a court setting
- research, devise, plan, execute and report on an original investigation or research project within the discipline, both as an individual and as part of a team
- work safely in the laboratory and manage risk assessments and other practices in a competent fashion.
- select and utilise appropriate software, databases and other digital resources for the analysis and interpretation of instrumental and other laboratory data

Key or transferable skills (including employability skills)

Successful students will be able to:

- solve familiar, unfamiliar and complex problems with self-direction and originality, by clearly formulating the problem, identifying the key issues and generating different approaches to its solution
- analyse, synthesise and summarise data and information critically and appreciate its limitations
- assess the merits of contrasting theories, explanations and strategies
- make critical judgements by acquiring a range of evidence and information then formulating and testing hypotheses
- present complex concepts and information in a clear and concise manner, both orally, in writing and by other means and to interact and communicate effectively within a wide range of professional environments,

including to non-scientific audiences
- work both independently and as part of a team, to plan, organise and perform work efficiently and conscientiously in a timely way, and meet appropriate deadlines
- take responsibility for their own learning and develop a habit of critical reflection upon that learning
- utilise a wide range of ICT skills, including the use of databases, software packages and modern methods of communication
- work within an ethical framework and according to ethical, honest and acceptable practices
- develop confidence in their own understanding and skills as well as a self-critical attitude to their own work and achievements
- develop an adaptable and flexible approach to study, work and work-life balance
- identify and work towards targets for ongoing professional development

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 extracurricular 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, environmental 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 selfassessing 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.

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:

- Lectures, including those from guest speakers from the profession Digital material, including short videos and recorded lectures Tutorials
- Practical laboratory classes
- Practical simulated crime scene examination (indoor and outdoor)
- Problem-based learning (PBL) classes
- Oral presentations
- Poster presentations
- Presentation and cross-examination in a mock court setting or online Mini-projects
- Group/ teamwork Independent project work
- Literature research tasks
- Expert witness statement preparation
- Case studies
- Workshops
- Directed reading Independent study
- Use of e-learning/the Keele Learning Environment (KLE) (Blackboard) and MS Teams

The lectures (in-person and digital asynchronous) describe, explain and map out the academic content of modules as well as engendering and developing an enthusiasm for biology and forensic sciences. Through examples and case studies discussed in the lectures, students develop critical skills in reviewing ideas, principles and applications. Informal tutorials provide occasional small group support to material discussed in lectures and problem classes have a dual role, firstly in enabling students to apply theoretical ideas to new problems and secondly, to allow the tutor to provide formative feedback on the students' learning during these activities.

Forensic biology is a laboratory-based discipline and practical work is closely tied to the lectures, thus enabling students to gain competence and confidence in the investigation and analysis of forensic evidence, using laboratory instrumentation as well as developing a critical awareness of the range of techniques available, their capabilities and limitations. Students working in the laboratory quickly gain an understanding of health and safety issues, manage risk assessments, maintaining accurate and informative laboratory notes and working with others in a safe and productive fashion. In a similar way, through small-group, tutor-guided exercises and teamled investigations in indoor and outdoor simulated crime scenes, students apply the principles and procedures of crime scene investigation to novel incidents, develop practical skills and learn how to implement a forensic strategy and ensure a rigorous chain of custody.

In working with laboratory data, students develop skills and confidence in data analysis, the use of software tools and databases and in communicating the outcomes of such work in the form of reports, oral presentations and as conference posters. They will also develop skills in working within small groups of various sizes in laboratory mini-projects, team work and fieldwork exercises.

In preparing expert witness statements and through the presentation and cross-examination within the mock court, students develop understanding of the place of the forensic and investigative sciences within the legal framework, the role of the expert witness in court and some of the legal and ethical issues which constrain the practice of the professional forensic scientist.

By engaging in literature research tasks and through directed reading, students will advance their own understanding of the discipline, develop critical abilities, appreciate the limitations of information and assess the merits of contrasting theories, explanations and strategies. Through working on all assignments, students will develop organisational skills, efficient working practices and the ability to meet appropriate deadlines.

Through project work, students will research, devise, plan, execute and report on an original investigation within the discipline either as an individual or as part of a team. They will work safely in the laboratory and engage in ethical, honest and acceptable practices throughout. At level 6 the forensic biology research project focuses on developing these skills within the context of the research aims.

Throughout the programme students will undertake independent study that will require them to develop an adaptable and flexible approach to study, work and work-life balance. They will need to work towards identified targets for their own academic development, take responsibility for their own learning and thereby develop confidence in their own understanding and acquire a self-critical attitude to their own work and achievements. Consequently each student will develop practices which will enable them to engage with ongoing professional development throughout their careers.

All staff use the Keele Learning Environment and/or MS Teams to post learning resources for the modules on which they teach; these include lecture notes, recorded lectures and screencasts, module and laboratory handbooks, problem sheets, past exam papers, web- links to external resources, assignment briefs, assignment feedback and in some cases quizzes. Staff also use the KLE for electronic submission of work, marking and feedback and MS Teams to hold online tutorials, lectures and problem classes.

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 Academic Mentors 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.

7. Teaching Staff

Teaching on the Forensic Biology programme is split between staff in Life Sciences and staff in Forensic Science.

in Life Sciences, you will meet a diverse range of staff, all are active in research or scholarship. 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/

The Forensic Science academic staff have expertise and interests across the full spectrum of forensic science or related disciplines. All staff are active in research or scholarship and details can be found on the school web page at https://www.keele.ac.uk/scps/forensicscience/ourpeople/

There are a number of additional guest lecturers from the profession who contribute either a single or a short series of lectures, workshops or practical classes across the programme in topics such as crime scene examination and forensic toxicology. A strength of the programme lies in our specialist forensic science practitioners who bring their wealth of real-world experience and case work to the teaching of Forensic Science.

Many current teaching staff hold or are working towards an accredited Higher Education Teaching qualification and many are Fellows (FHEA) or Senior Fellows (SFHEA) of the Higher Education Academy, the professional body for teachers in Higher Education. Our staff regularly make scholarly contributions to national education conferences, journals and books, as well as attract funding for teaching innovation projects, on topics spanning authentic assessment, embedding technology in teaching, team-based and active learning, gamification and induction to HE, among others. Several of the teaching staff have established a national reputation for excellence in teaching and learning and have been recognised for their innovation in teaching through national teaching awards, for example:

- RSC Team Prize for Excellence in Higher Education
- AdvanceHE Collaborative Award for Teaching Excellence

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 two types of module 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 limited choice of what to study from a list of modules.

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 either be taken as one 15-credit module at Levels 4, 5 and 6, or 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/

Modern Languages or Certificate in TESOL

Alternatively, you could choose to study modules with the University Language Centre. The Language Centre offers three pathways; The Language Specialist, The Language Taster, and The Trinity Certificate in Teaching English to Speakers of Other Language (TESOL). Language Centre modules are available separately for students at Levels 4 and 5. At Level 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 Language Centre option modules available to you please visit the following webpages.

For Level 4 and 5 students please visit: https://www.keele.ac.uk/study/languagecentre/languagecentreoptions/

For Level 6 students please visit: https://www.keele.ac.uk/students/academiclife/global-challenge-pathways/

Course Transfers

The Level 4 structure builds a strong foundation in forensic science, providing you with the flexibility to transfer to BSc/MSci Forensic Science programmes at the end of Level 4.

Transfers to the BSc (Hons) (3 year) Programme: the Forensic Biology programmes are structured to allow flexibility to transfer between BSc and MSci routes throughout the programme. If you do not reach the Level 5 to 6, or Level 6 to 7 progression thresholds set out in Regulation D2 for Integrated Masters programmes, you will be automatically transferred to the corresponding BSc (Hons) route. You may also choose to transfer to the BSc (Hons) Forensic Biology route at any point before the end of year 3.

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	90	30	30
Level 7	105	15	15

Module Lists

Level 4

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 threshold of taught laboratory sessions and successful completion of a competency skills audit.

The FSC-10027 zero credit Employability Skills module will support you in identifying and evidencing subject and transferable skills developed in your programme.

Compulsory modules	Module Code	Credits	Period
Forensic Chemistry: Molecules under Investigation	FSC-10013	30	Semester 1-2
Forensic Investigation: From Documents to DNA	FSC-10019	30	Semester 1-2
Forensic Science Career Planning and Employability Skills	FSC-10027	0	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
Cells, Genetics and Evolution	LSC-10107	30	Semester 1-2

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 threshold of taught laboratory sessions and successful completion of a competency skills audit.

Level 5

Compulsory modules	Module Code	Credits	Period
Forensic Genetics: DNA and Crime	FSC-20035	15	Semester 1
Applications of Molecular Biology	LSC-20131	15	Semester 1
Forensic Anthropology: Decomposition and Skeletal Analysis	FSC-20033	30	Semester 1-2
Drugs of Abuse	FSC-20009	15	Semester 2
Crime Scenes: Blood, Marks and Prints	FSC-20031	15	Semester 2

Optional modules	Module Code	Credits	Period
Counterfeits, Fakes and Forgeries	FSC-20011	15	Semester 1
Human Genetics	LSC-20050	15	Semester 1
Flexible Work Placement (Level 5)	NAT-20011	15	Semester 1-2
Nutrition and Health	LSC-20123	15	Semester 2
Molecular Ecology and Plant Genetics	LSC-20125	15	Semester 2

Level 5 Module Rules

Please note: You cannot take both Flexible Work Placement (Level 5) and Flexible Work Placement (Level 6)

Level 6

Compulsory modules	Module Code	Credits	Period
Topics in Forensic Biology	FSC-30061	15	Semester 1
Forensic Biology Research Project	FSC-30047	30	Semester 1-2
Crime Scene to Court	FSC-30049	30	Semester 1-2
Forensic Toxicology: Ingestion to Detection	FSC-30039	15	Semester 2

Optional modules	Module Code	Credits	Period
Marks and Traces Examination	FSC-30053	15	Semester 1
Conservation Biology	LSC-30043	15	Semester 1
Flexible Work Placement (Level 6)	NAT-30008	15	Semester 1-2
Professional Experience in Education	NAT-30012	15	Semester 1-2
Environmental and Wildlife Forensics	FSC-30029	15	Semester 2
Animal Welfare	LSC-30072	15	Semester 2

Level 6 Module Rules

Please note: You cannot take both Flexible Work Placement (Level 5) and Flexible Work Placement (Level 6). You also cannot take both Flexible Work Placement (Level 6) and Professional Experience in Education.

Level 7

At Level 7, students take 90 credits of compulsory modules. The remaining 30 credits may either be used to take optional modules listed below.

Compulsory modules	Module Code	Credits	Period
Forensic Research Skills	FSC-40045	15	Semester 1
MSci Forensic Biology Research Project	FSC-40063	60	Semester 1-2
Major Scene Investigation: From Crime to Trial	FSC-40039	15	Semester 2
Forensic Anthropology: Complex Scenes, Recovery and Analysis	FSC-40049	15	Semester 2

Optional modules	Module Code	Credits	Period
Marks and Traces Advanced Examination	FSC-40041	15	Semester 1
Contemporary Topics in Forensic Science	FSC-40051	15	Semester 1-2
Advanced Environmental and Wildlife Forensics	FSC-40029	15	Semester 2

Level 7 Module Rules

You cannot select FSC-40029 if you have previously studied FSC-30029. You cannot select FSC-40041 if you have previously studied FSC-30053.

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

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.

Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
Demonstrate knowledge and understanding of a broad range of chemical concepts spanning the full breadth of chemistry, with focus in forensic and analytical chemistry.	Forensic Chemistry: Molecules under Investigation - FSC-10013
Demonstrate knowledge and understanding of the principles of crime scene investigation, the place of forensic science within the legal framework, and the role of the expert witness in court	Forensic Investigation: From Documents to DNA - FSC-10019
Demonstrate knowledge and understanding of the major physiological systems and anatomical structures of the human organism, including the digestive, cardiovascular and endocrine systems.	Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103
Demonstrate knowledge and understanding of the structure and function of biological macromolecules, cellular organisation and division, foundations of genetics to evolutionary theory and the organisation of life	Practical and Academic Skills in Bioscience - LSC-10103 Cells, Genetics and Evolution - LSC-10107

Subject Specific Skills	
Learning Outcome	**Module in which this is delivered**
Be able to work safely and ethically, managing documentation including COSHH, risk assessments and SOPs.	Forensic Chemistry: Molecules under Investigation - FSC-10013 Forensic Investigation: From Documents to DNA - FSC-10019 Practical and Academic Skills in Bioscience - LSC-10103
Be able to demonstrate practical competence in laboratory techniques, including operation of a range of instrumentation.	Forensic Chemistry: Molecules under Investigation - FSC-10013 Forensic Investigation: From Documents to DNA - FSC-10019 Practical and Academic Skills in Bioscience - LSC-10103
Be able to formulate, test and refine scientific hypotheses through investigation.	Forensic Investigation: From Documents to DNA - FSC-10019 Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103 Cells, Genetics and Evolution - LSC-10107
Be able to interpret and evaluate the significance of the results of a forensic investigation in the context of the circumstances of the crime, using appropriate statistical tools.	Forensic Investigation: From Documents to DNA - FSC-10019 Practical and Academic Skills in Bioscience - LSC-10103
Be able to process, transform and critically evaluate qualitative and quantitative datasets.	Forensic Investigation: From Documents to DNA - FSC-10019 Practical and Academic Skills in Bioscience - LSC-10103
Be able to think independently to apply subject knowledge and understanding to address familiar and unfamiliar problems; to plan tasks and solve problems	Forensic Chemistry: Molecules under Investigation - FSC-10013 Forensic Investigation: From Documents to DNA - FSC-10019 Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103 Cells, Genetics and Evolution - LSC-10107

Key or Transferable Skills (graduate attributes)	
Learning Outcome	**Module in which this is delivered**
Be able to conduct research, engaging with scientific literature to source, interpret, collate and cite relevant information.	Forensic Investigation: From Documents to DNA - FSC-10019 Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103 Cells, Genetics and Evolution - LSC-10107
Be able to demonstrate numeracy and digital skills, working confidently with mathematical concepts and employing a range of computational tools, including specialist scientific software.	Forensic Chemistry: Molecules under Investigation - FSC-10013 Forensic Investigation: From Documents to DNA - FSC-10019 Practical and Academic Skills in Bioscience - LSC-10103
Be able to communicate scientific information and ideas through oral and written methods as appropriate to a range of different audiences.	Forensic Chemistry: Molecules under Investigation - FSC-10013 Forensic Investigation: From Documents to DNA - FSC-10019 Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103 Cells, Genetics and Evolution - LSC-10107
Be able to work both independently and as part of a team to plan, organise and perform work efficiently and conscientiously, and meet appropriate deadlines.	Forensic Chemistry: Molecules under Investigation - FSC-10013 Forensic Investigation: From Documents to DNA - FSC-10019 Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103 Cells, Genetics and Evolution - LSC-10107
Be able to solve complex problems with self-direction and originality, by clearly formulating the problem, identifying the key issues and generating different approaches to its solution.	Forensic Chemistry: Molecules under Investigation - FSC-10013 Forensic Investigation: From Documents to DNA - FSC-10019 Human Physiology and Anatomy - LSC-10101 Practical and Academic Skills in Bioscience - LSC-10103 Cells, Genetics and Evolution - LSC-10107

Level 5

Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
Demonstrate knowledge, understanding and the importance of biological genetic material in forensic and life-sciences	Forensic Genetics: DNA and Crime - FSC-20035 Applications of Molecular Biology - LSC-20131
Demonstrate knowledge and understanding of CSI skills and the scientific basis behind the enhancement of different types of evidence.	Crime Scenes: Blood, Marks and Prints - FSC-20031
Demonstrate knowledge and understanding of a broad range of chemical concepts and how these are applied to the investigation of drugs and drugs related crime.	Drugs of Abuse - FSC-20009
Demonstrate knowledge and understanding of postmortem changes, skeletal and muscular anatomy, and how variation between individuals can be used to build a biological profile of the victim.	Forensic Anthropology: Decomposition and Skeletal Analysis - FSC-20033
Demonstrate knowledge of chemical and analytical analysis and how this can be used to detect counterfeits and forgeries.	Flexible Work Placement (Level 5) - NAT-20011
Demonstrate knowledge of the applications of molecular genetics and genomic tools.	Human Genetics - LSC-20050 Molecular Ecology and Plant Genetics - LSC-20125
Demonstrate knowledge and understanding of critical roles of macronutrients and micronutrients in nutrition and health.	Nutrition and Health - LSC-20123

Level 7

Subject Knowledge and Understanding	
Learning Outcome	**Module in which this is delivered**
Forensic Science Knowledge: Critically describe and discuss in detail the full breadth of key forensic science concepts confidently, accurately and in detail, using appropriate terminology, including selected aspects at the forefront of forensic science.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063
Problem Solving: Critically apply knowledge, understanding and critical judgement of modern forensic science theories and practices to solve new, qualitative and quantitative problems that may be multi-layered and/or cross disciplinary in nature.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063
Sustainability and Global Awareness: Appreciate the contribution of forensic science to the innovations that characterise the modern world, and the potential of forensic science to develop solutions to current and future challenges.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063
Interdisciplinarity: Recognise the relationships and interfaces between forensic science and other subjects, applying forensic science concepts effectively in a multidisciplinary environment.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063

Subject Specific Skills	
Learning Outcome	**Module in which this is delivered**
Safety and Ethics: Demonstrate critical skills in the design and implementation of safe forensic science procedures and processes, including production of new risk assessments, COSHH documentation and/or research ethics documentation as appropriate	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 MSci Forensic Biology Research Project - FSC-40063
Practical Competence: Use independent judgement to select and operate the appropriate advanced laboratory instrumentation, equipment, techniques and sampling tools to address recovery, extraction and analysis of advanced trace forensic samples and crucially analyse results from experiments or investigations to draw valid conclusions.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 MSci Forensic Biology Research Project - FSC-40063
Scientific Investigation: Plan, formulate and test original forensic science hypotheses by designing, observing, recording and critically interpreting data collections, professionally documenting methodologies and findings, and critically evaluate the results of open-ended and original scientific investigations	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 MSci Forensic Biology Research Project - FSC-40063
Data Literacy: Process, transform and critically evaluate original qualitative and quantitative datasets and use judgement informed by theory to build robust arguments based on data from complementary sources	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 MSci Forensic Biology Research Project - FSC-40063

Key or Transferable Skills (graduate attributes)	
Learning Outcome	**Module in which this is delivered**
Research Skills: Engage with peer reviewed forensic science literature, critically evaluating, interpreting and synthesizing forensic science information to construct and critically evaluate scientific research.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063
Numeracy and Digital Skills: Deploy mathematical, statistical and computational methods for data analysis to solve forensic science problems and evaluate forensic science data, using a broad range of general and specialist software to investigate, interpret and manipulate forensic science information.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063
Scientific Communication: Communicate effectively in both oral and written formats, critically selecting appropriate content, media and methods for the audience, purpose and subject, and using a broad range of general and specialist software to create forensic science materials for presentation.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063
Reflective Practice and Professionalism: Demonstrate the ability to plan, critically review and manage progress individually and collaboratively, working successfully with others, reviewing and managing progress, prioritising tasks and meeting deadlines.	Advanced Environmental and Wildlife Forensics - FSC-40029 Major Scene Investigation: From Crime to Trial - FSC-40039 Forensic Research Skills - FSC-40045 Forensic Anthropology: Complex Scenes, Recovery and Analysis - FSC-40049 Contemporary Topics in Forensic Science - FSC-40051 MSci Forensic Biology Research Project - FSC-40063

9. Final and intermediate awards

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

Master in Science (MSci) Forensic Biology	480 credits	You will require at least 120 credits at levels 4, 5, 6 and 7 You must accumulate at least 360 credits in your main subject (out of 480 credits overall) to graduate with a named single honours degree in this subject.
Honours Degree	360 credits	You will require at least 120 credits at levels 4, 5 and 6 You must accumulate a minimum of 270 credits in your main subject (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 this subject.
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

International Year option: in addition to the above students must pass a module covering the international year in order to graduate with a named degree including the 'international year' wording. Students who do not complete, or fail the international year, will be transferred to the four-year version of the programme.

Work Placement Year option: in addition to the above students must pass a non-credit bearing module covering the work placement year in order to graduate with a named degree including the 'with Work Placement Year' wording. Students who do not complete, or fail the work placement year, will be transferred to the four-year version of the programme.

Students may elect to do a work placement year, or international year option, but cannot do both.

10. 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. The following list is representative of the variety of assessment methods used on your programme:

Class tests assess the understanding of concepts and the application of theories to solve familiar and unfamiliar problems. They also allow students to experience time-constrained assessment as well as acting to provide feedback on their progres

- **End of module examinations, open book assessments and case work portfolios** test the ability of the student to describe, explain, and critically discuss the principles of biology and forensic science, and to demonstrate competence in applying these principles to applications and to solve problems from appropriate areas of the disciplines
- **Problems sheets and data analysis exercises** assess the student's skills in solving numerical and other problems by drawing on their scientific understanding and knowledge, and experience of experimental techniques
- **Group/Team Scenarios** - students work in teams or groups to investigate scenarios and case studies, simulating the role of teamwork in the real world work of Forensic Biology analysts.

Throughout the extensive laboratory and other practical work in this programme, many types of assessment are

utilised to achieve the learning outcomes.

- **Laboratory portfolios** are used to communicate the results of work accurately and reliably and to encourage good working practice, including managing risk assessments and following safe working practices. Together with laboratory proformas, they allow students to demonstrate their skills in the critical analysis and interpretation of data, test the uncertainty in knowledge and show the ability to draw valid conclusions from their work
- **Laboratory reports** communicate the execution of practical work, the ability to describe the results of work accurately and reliably, with structured and coherent arguments and to enable students to evaluate the outcomes of data analysis in a critical fashion
- **Court expert witness statements** enable students o prepare a written statement of expert testimony and to understand the place of forensic science within the legal framework and the role of the expert witness in court. These reports test the student's ability to interpret and evaluate the significance of the results of a forensic investigation in the context of the circumstances of the crime, using appropriate statistical tools
- **Oral presentations, digital presentations and poster presentations** demonstrate the ability of the student to present complex concepts and information in a clear and concise manner, to interact and communicate effectively to a wide range of professional environments, including to both scientific and nonscientific audiences
- **Crime scene investigation** and **strategic forensic reports** enable students to apply the principles and procedures for crime scene investigation to a scenario, to critically review data and outcomes in light of the chain of custody for evidence and the appropriate forensic strategy, to make critical judgments and to present in a clear and concise manner
- **Essays** and the production of **technical leaflets** enable students to analyse, synthesise and summarise data and information critically, to appreciate its limitations, to assess the merits of contrasting theories, explanations and strategies and to present, in writing, complex concepts and information in a clear and concise manner
- **Dissertation and research paper / literature / critical reviews** enable the student to demonstrate their effective engagement with the research literature across forensic biology and use it to advance their understanding. In this way, the assessment may test their awareness of, and engagement with, current methods and techniques, some of which are at, or informed by, the forefront of the discipline. The assessment enables the student to present complex concepts and information in a clear and concise manner in writing, and to communicate effectively to a wide range of scientific and professional environments
- **Project plans, project presentations and examinations** test the student's skills in working both independently and as part of a team, in planning, organising and carrying out practical and other work efficiently, including making appropriate ethical assessments, and meeting appropriate deadlines
- **Project reports** demonstrate how the student has taken responsibility for their own learning, has critically assessed a wide range of techniques and methodologies relevant to the forensic and analytical sciences and used them competently to analyse relevant materials and has selected and utilised appropriate software, databases and other digital resources for the analysis and interpretation of laboratory data. The report also tests the student's achievement in presenting complex concepts and information in a clear and concise manner in writing and communicating effectively to a scientific audience
- **Presentation and cross-examination** assessments test the student's ability to interpret and evaluate the significance of the results of a forensic investigation in the context of the circumstances of the crime, to demonstrate their understanding of the place of forensic science within the legal framework and the role of the expert witness in court and test their ability to defend a written witness statement under cross examination in a court setting

Through working on a diverse range of assessments, linked to a curriculum that is in its latter stages closely based around the professional forensic science context, the student will demonstrate confidence in their own understanding and skills as well as a self-critical attitude to their own work and achievements, an adaptable and flexible approach to study, work and work-life balance and the ability to identify and work towards targets for ongoing professional development.

Although there are some explicit formal exercises providing formative assessment throughout the programme, the majority of formative assessment and feedback is generated informally through a variety of tutor-led activities. For example:

- Tutor-led comments on the work in the laboratory notebook or on calculations encountered in data analysis during laboratory classes
- Tutor feedback and advice on calculations undertaken during problems classes
- Tutor-led discussions on project plans, literature reviews and project results during viva interviews
- Written formative feedback on non-summative laboratory work
- Written formative feedback provided from the tutor reading a draft of a major piece of work such as the dissertation or a project report

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

	Scheduled learning and teaching activities	Guided independent Study	Placements
Year 1 (Level 4)	42.1%	57.9%	0%
Year 2 (Level 5)	31.3%	68.7%	0%
Year 3 (Level 6)	33.1%	66.9%	0%
Year 4 (Level 7)	18.3%	81.7%	0%

12. Accreditation

This programme carries full accreditation status from The Chartered Society of Forensic Sciences. Further details on the accreditation requirements for these programmes can be found on the society web page below.

The Chartered Society of Forensic Sciences accreditation web page: http://www.csofs.org/Accreditation.

13. 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'.

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

See the relevant course 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; ENL90002 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; ENL90002 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; ENL90002 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/

15. How are students supported on the programme?

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

All the academic staff in Forensic Science and Life Sciences operate an open door policy for students; in other words if they are available at any time in the working day then they are happy to discuss any matter a student raises with them; if they are not free then a future meeting will be arranged for a later time.

All students have many opportunities for close contact with the staff - through laboratory sessions, problems classes, tutorials, workshops and other teaching activities, including online sessions. Consequently, students and staff get to know each other fairly quickly and all students should feel free to approach any lecturer, module tutor or other colleagues whom they believe may be able to provide them with help and assistance on any academic issue. Feedback on formative and summative assessment is usually best obtained from the tutor who set and marked the work but after the whole semester's assessment is complete, it may be that the student's Academic Mentor is best placed to discuss their overall progress.

The Programme Directors for Forensic Science have oversight of all aspects of delivery of the Forensic Biology programme. There is a School Disability Inclusion Tutor (DIT), Director of Education, and a School assigned Student Experience and Support Officer (SESO). In addition we have programme tutors in Assessments, Admissions, Engagement and Careers & Employability.

Help, support and advice are also available from each student's Academic Mentor who is allocated by the School. Academic Mentors will make contact with each student in their first few days at Keele to arrange an introductory meeting and will contact them at various key points throughout their degree to check on their progress and to determine whether any specific discussion is needed. From the student's perspective, the Academic Mentor should be seen as someone they can approach with confidence for advice on any matter whether academic or personal; if the mentors themselves cannot help directly then they know who within the university should be able to provide the help the student needs. As well as reviewing overall academic progress, the Academic Mentor can advise on general matters relating to the whole programme of study.

A Student Engagement and Retention Lead overviews the work of academic mentors across the school of chemical and physical sciences, and monitoring student attendance and engagement. They are available to provide additional guidance or to help if any problems arise with academic mentoring.

16. Learning Resources

Forensic Biology at Keele is based in the Central Science and David Attenborough Laboratories, which both house modern, well-equipped teaching and research facilities. The teaching laboratories are all well equipped with high quality standard laboratory facilities and modern forensic science and analytical instrumentation, with many multiple sets of commonly used techniques. There are also dedicated crime scene simulation facilities which include both domestic and non-domestic indoor scenarios, and outdoor crime scenes, vehicle examination and a dedicated taphonomy facility used for teaching and research projects.

Our students gain hands-on experience with a wide range of equipment and techniques working with professional and research-grade instruments across both the School of Chemical and Physical Sciences and the School of Life Sciences. These include the handling, analysing and interpreting biological materials, including a range of microscopy, cell culture, immunoassay, and genetic practices, including PCR and Electrophoresis. The Central Science Laboratory hosts dark-room suites for forensic imaging with a range of high-specification cameras and specialist forensic equipment such as document examination apparatus (VSC-4 and ESDA-2), comparison microscopes and several specialist phase-contrast and polarising microscopes- these include variable temperature stages for glass analysis - and high-resolution micro spectrophotometers. Finger and palm print analysis may be undertaken on our dedicated AFIS system. The analytical laboratories are fully equipped with multiple sets of FTIR spectrometers, UV-visible spectrometers, fluorescence spectrometers, HPLC and GCMS instrumentation, and two NMR spectrometers. We also make extensive use of our large and diverse campus environment for fieldwork and Faculty equipment for search and recovery work.

Students also have access to various online databases and scientific journals, both in electronic and paper form, through the university library.

17. Other Learning Opportunities

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 5-year 'with Work Placement Year' degree programme or to transfer onto the 5-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 5-year degree programme may transfer onto the 4-year degree programme at any point in time, prior to undertaking their year-long placement. Eligibility rules are included in the Annex.

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.

18. Additional Costs

Activity	Estimated Cost
Equipment - All PPE equipment (laboratory coats and glasses) are provided by the School at no cost to the student. Students will be required to have two laboratory notebooks, these are provided at no cost to the student in the induction session and can be used for multiple modules/years. Replacement items are available from the School Stores, the 2025/26 price for these are listed below: Laboratory Book - £2.00 Laboratory Glasses - £3.50 Laboratory Coat - £15 Students will be required to supply appropriate writing equipment but this would be a minimal (<£10) cost. All core textbooks are available in the main University Library. To increase the availability of these resources, eBooks are also purchased alongside the printed text where available; these can be accessed through the University Library Catalogue. Additional costs may be incurred if the student wishes to purchase any book for themselves. In general we only recommend they purchase the core textbook which is available for approximately £50.	£60

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.

19. 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 the 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 Postgraduate Taught Experience Survey (PTES), 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 on 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/

20. 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: Forensic Science (2022)
https://www.qaa.ac.uk/docs/qaa/sbs/sbsforensic-science-22.pdf
c. Keele University Regulations and Guidance for Students and Staff: http://www.keele.ac.uk/regulations
d. Chartered Society of Forensic Science (CSFS) Accreditation Scheme; Criteria and Standards; available at:http://www.csofs.org/Accreditation

21. Annex - International Year

Forensic Biology with International Year

International Year Programme

Students registered for this Single Honours programme may either be admitted for or apply to transfer during their period of study at Level 5 to the International Year option. Students accepted onto this option 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 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 detail contained in this annex will pertain solely to students registered for the International Year option.

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 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

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 Academic Mentoring 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:

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. Reflect upon the international nature of crime and describe and discuss differences between investigative approaches taken in different countries.
5. Evaluate the merits and limitations of the different approaches taken to investigating crime in different countries.
6. Apply their experiences abroad to the specific graduate attributes associated with their Forensic Biology degree.

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.

22. Annex - Work Placement Year

Forensic Biology with Work Placement Year

Work Placement Year summary

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 detail contained in this annex will pertain solely to students registered for the Work Placement Year option.

Work Placement Year Programme Aims

In addition to the programme aims specified in the main body of this document, the Work Placement Year aims to provide students with:

1. the opportunity to carry out a year long work placement in the broad field of forensic biology between Years 2 and 3 (Levels 5 and 6) of their degree programme. The module will be underpinned by reflective assessment, employer and tutor evaluation, and support from academic tutors.

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 (minimum 30 weeks full time (1,050 hours), or equivalent, work placement), will be automatically transferred onto the 3-year degree programme.

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)
- 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. apply the forensic science theories and laboratory skills learnt to real situations in the workplace to design, plan and critically evaluate workplace tasks.
2. advance key professional skills in the accurate documentation of information.
3. advance employability skills in the presentation and communication of data/information; the writing of reports; and the ability to work effectively both individually and as part of a team.
4. explain how their perspective on forensic science has been influenced by working in a forensic science workplace.

These learning outcomes will be assessed through the non-credit bearing Work Placement Year module (NAT30010) which involves:

1. submittal of a reflective diary on the student's placement experience, documenting key activities and reflecting on skills gained from those activities
2. report summarising the background to the work completed, the results obtained, and the methodology used
3. oral presentation on the forensic science work undertaken by the student on their placement year
4. evaluation of student's performance on placement by the work placement host

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 rated Work Placement Year module (NAT-30010)
- 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

Students will have to bear the costs of travelling to and from their 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. Students should budget with the assumption that their 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. Students are required to confirm eligibility with their 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 they are not contravening their visa requirements.

23. Annex - Programme-specific regulations

Programme Regulations: MSci Forensic Science

Final Award and Award Titles	MSci Forensic Biology MSci Forensic Biology with International Year MSci Forensic Biology with Work Placement Year
Intermediate Award(s)	BSc Honours Diploma in Higher Education Certificate in Higher Education
Last modified	n/a
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.

A) EXEMPTIONS

The clause(s) listed below describe where an exemption from the University's Academic Regulations exists:

For the whole duration of their studies, students on this Programme are exempt from the following regulations:

- **No exemptions apply.**

B) VARIATIONS

The clause(s) listed below describe where a variation from the University's Academic Regulations exists:

Variation 1: Coursework Assessment

Failure to engage appropriately with a module's coursework assessment items without good cause (that is, by failing to submit more than 50% of coursework items) may result in reassessment being denied.

Variation 2: Detail of the Award

1. Any student who fails to satisfy the requirements for progression to Level 7 shall revert to BSc Honours Degree candidature and be considered for the award of an Honours Degree (BSc Forensic Biology) under the provisions of regulation C3.
2. Any student who fails to satisfy the requirements for the award of a Master's degree shall revert to BSc Honours Degree candidature and be considered for an award as detailed in part 1 above.

Additional Requirements

The programme requirements listed below are in addition to the University's Academic Regulations:

Additional requirement 1: Practical Classes

1. Practical classes are compulsory and are an essential part in fulfilling the intended learning outcomes of modules of which they are part, and a requirement of Chartered Society of Forensic Science and Royal Society of Biology accreditation. Over a semester, failure to attend >70% of the laboratory/practical classes without approval, may result in failure of the relevant modules with no reassessment being offered. In addition, students must meet any ILOs related to practical sessions in each module, where appropriate. Failure to attend laboratory/practical sessions in a given module, without approval, may result in failure of the relevant modules with no reassessment being offered.
2. Any student failing to follow the health and safety guidelines in the laboratory will be asked to leave. This may include inappropriate dress, refusal to follow reasonable requests of staff, late attendance resulting in missed safety briefings, or attending under the influence of alcohol or other substances. The student will not be permitted to make up the missed session.
3. Student may be given opportunity to submit assessed work based on an alternative practical session, in agreement with the module leader; with the approval of the Chemical and Physical Sciences Local Module Board, a small element of the laboratory assessment (up to 33%) may be disregarded with the final mark for the assessment being recalculated from the remaining elements.

Additional requirement 2: Transferring from another institution

Any student who is wishing to transfer to this programme from another institution, at Level 5 or above, must demonstrate that they have transferred from a programme that is accredited by The Chartered Society of Forensic Sciences. If the original programme is not accredited the student must demonstrate that they have covered the same material in their Level 4 year as would be covered at Level 4 on this programme.

[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: 20 March 2026

Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes