

# **Programme Specification**

# Forensic Science (Foundation) [Frenchay]

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# **Section 1: Key Programme Details**

**Part A: Programme Information** 

**Programme title:** Forensic Science {Foundation} [Frenchay]

Highest award: BSc (Hons) Forensic Science

Interim award: BSc Forensic Science

Interim award: DipHE Forensic Science

Interim award: CertHE Forensic Science

Awarding institution: UWE Bristol

Teaching institutions: UWE Bristol

Study abroad: No

Year abroad: No

Sandwich year: Yes

Credit recognition: No

School responsible for the programme: CHSS School of Applied Sciences,

College of Health, Science & Society

Professional, statutory or regulatory bodies:

Chartered Society of Forensic Sciences (CSFC)

Modes of delivery: Full-time, Sandwich

Entry requirements: For the current entry requirements see the UWE public

website.

For implementation from: 01 September 2024

Programme code: F41F00

# **Section 2: Programme Overview, Aims and Learning Outcomes**

## Part A: Programme Overview, Aims and Learning Outcomes

**Overview:** BSc Forensic Science with Foundation Year gives you the opportunity to study science through its application to criminal and civil investigations. The programme has been designed to follow the journey of forensic evidence from the crime scene to the courtroom through teaching of the identification, recovery and preservation of evidence, the analysis of evidence within the laboratory, and the interpretation and presentation of evidence in accordance with the expectations of a professional forensic scientist. This learning is taught in combination with the required biology, chemistry, maths, and statistics for forensic scientists.

Level 3 has been designed to provide a solid underpinning to the BSc (Hons) award, embedding the fundamental biology, chemistry, physics, and numeracy skills to allow you to succeed as a forensic scientist, no matter your background. Level 3 is heavily supported by tutorial sessions and emphasises the importance of teamwork and communication.

The programme has been designed to allow you to specialise in Forensic Biology or Forensic Chemistry and this speciality can declared at either Level 5 or Level 6 allowing you to tailor your degree to your own preferences. Through specialisation you are able to focus your learning on key scientific theory and practical skills most aligned to your career aspirations. Additional optionality is available in Level 6 where modules can be chosen in a variety of specialist areas, including Forensic Psychology and Environmental Forensics, or in modules aligned with other scientific disciplines, such as Pathophysiology, to broaden your subject knowledge.

In keeping with the applied sciences, the course is heavily focussed on practical skills, with a significant portion of your teaching delivered as practical classes across all levels of study. These classes are designed to develop your ability across a wide range of practical skills relevant to forensic science and other applied science disciplines: building your confidence for your independent research project undertaken during Level 6, and your graduate employment. The Level 6 research project provides an authentic experience to demonstrate your skills as a mature and

independent scientist, whilst exploring the leading-edge of forensic science research.

To support the development of the aforementioned practical skills, you will learn within state-of-the-art simulation and laboratory facilities. These facilities are extensively equipped with industry-standard instrumentation and enable you to gain hands-on experience with equipment used in professional practice, further developing your skillset, confidence, and employability as a forensic science graduate.

BSc Forensic Science with Foundation Year is offered as an optional sandwich award, giving you the opportunity to take a placement year in industry if you choose to. Forensic Science students who choose this route spend up to 40 weeks undertaking a placement within a local, national, or international industrial or academic organisation in a research and development environment. Whilst on placement, in addition to gaining key scientific and employability skills, you will complete a module, which contributes to your Level 6 credit requirement.

By completing the BSc Forensic Science with Foundation Year, you are undertaking an approved programme of study accredited by the Chartered Society of Forensic Sciences in all core component standards which are crime scene investigation, laboratory analysis, and interpretation, evaluation, and presentation of forensic evidence.

**Features of the programme:** The BSc Forensic Science with Foundation Year programme has the following key features:

A broadly based core at Levels 3 and 4 designed to provide students with the requisite knowledge and scientific skills to develop as forensic scientists.

A flexible modular structure through Level 5 and Level 6 to allow Forensic Science students to tailor their degree to their own interests and career aspirations.

A strong practical provision providing subject specific learning and generic scientific

skills to enhance student confidence and employability.

State-of-the-art and extensively equipped crime scene simulation and laboratory facilities to enable experiential learning.

An independent research project at Level 6 enabling students to apply the knowledge and skills learned at Levels 4 and 5 through their own independent research.

An optional sandwich award through completion of a placement year in industry or academia.

Accredited by the Chartered Society of Forensic Sciences for all core component standards.

**Educational Aims:** This programme aims:

To impart broad knowledge of the appropriate application and limitations of forensic science, including current regulatory guidance and requirements of professional practice.

To provide opportunities to develop the key practical skills required in crime scene processing and laboratory analysis for a career as a professional forensic scientist, a scientist in an allied discipline, or to undertake further study.

To understand the theory and practical application of a wide range of technologies for experimental and data analysis relevant to forensic science, and more broadly the fields of chemistry and biology.

To engage with, appropriately use, and critically evaluate scientific literature and other sources of information.

To develop both written and verbal communication skills to present complex scientific ideas and interpretations to varied audiences, including specialists and laypersons, using appropriate language.

### **Programme Learning Outcomes:**

On successful completion of this programme graduates will achieve the following learning outcomes.

## **Programme Learning Outcomes**

- PO1. Experience and competence in a broad range of crime scene processing techniques including the appropriate location, recovery, and preservation of forensic evidence from crime scenes of varied complexity.
- PO2. Demonstrate theoretical knowledge and operational competence in the use of a range of analytical instrumentation for both qualitative and quantitative analysis of samples, including any required preparatory or extraction methods.
- PO3. The ability to interpret qualitative and quantitative data and provide suitable conclusions with consideration to the framework of hypothesis testing and evaluative opinions required in Forensic Science.
- PO4. An appreciation of ethical issues in Forensic Science and how they underpin professional integrity with an awareness of relevant legislation, regulation, and standards aligned to the requirements of professional practice, including good laboratory practice.
- PO5. To use both written and verbal communication skills to present complex scientific ideas and interpretations to varied audiences, including specialists and laypersons, using appropriate language with recognition of any associated interpretative limitations.
- PO6. The ability to plan, execute and present a piece of independently produced work which includes analysis or evaluation of data within a supported framework, demonstrating evidence of time management, problem-solving and independence.
- PO7. Demonstrate engagement with and critical evaluation of scientific literature and other sources of information to develop insight into the subject and to achieve evidence-based understanding.

**Assessment strategy:** Effective learning is achieved by employing a range of assessment approaches, embedded within the compulsory modules, and reinforced within the optional modules that recognise differential approaches to learning. These include opportunities for work-based learning and placements. The development of a flexible, inclusive, and accessible assessment strategy ensures a high-quality

learning experience for all students. The programme incorporates a range of authentic assessments designed to suitably prepare you for graduate roles as a professional forensic scientist. For example, crime scene processing simulations (PO1), including the completion of industry standard documentation (PO4), in Level 4 to the presentation of expert witness testimony under cross-examination in a mock courtroom (PO5) at Level 6.

Preparing laboratory reports detailing completed sample analysis in Level 5 provides valuable learning experience that scaffolds to your larger, independent research project at Level 6 and addresses learning outcomes PO2, PO5, PO6, and PO7 derived from QAA benchmark statement Forensic Science (2022) for professional behaviours. Unseen written exams are used to demonstrate your ability to evaluate information and communicate this in writing in an organized way (PO5).

Where appropriate assessments are scaffolded to enable students to progressively build and develop key skills as they are applied to more complex scenarios. For example, in Level 4 students will complete a 10-minute presentation on a forensic science topic of their choosing to develop their presentation and communication skills (PO5). This is expanded in Level 5 through a viva voce on the laboratory examination of an item of forensic evidence (PO2, PO3), which expands your communication skills to responding to questions. These preceding assessments scaffold to your assessment in Level 6, where you present verbal expert witness testimony via cross-examination to a layperson jury (PO3, PO4, PO5).

**Student support:** Students are supported through their programme by their personal tutor; the tutor provides support in academic skill development throughout the programme and is reinforced by the addition of a project supervisor during Level 6.

# **Part B: Programme Structure**

#### Year 1

Full time and sandwich students must take 120 credits from the modules in Year 1.

### **Year 1 Compulsory Modules (Full Time and Sandwich)**

Full time and sandwich students must take 120 credits from the modules in Compulsory Modules (Full Time and Sandwich).

Module Code	Module Title	Credit
USSKCJ-30-0	Biology in Practice 2024-25	30
USSKCK-30-0	Chemistry in Practice 2024-25	30
USSKCM-30-0	Investigating and Communicating Science 2024-25	30
USSKCL-30-0	Skills for Science 2024-25	30

#### Year 2

Full time and sandwich students must take 120 credits from the modules in Year 2.

### **Year 2 Compulsory Modules (Full Time and Sandwich)**

Full time and sandwich students must take 120 credits from the modules in Compulsory Modules (Full Time and Sandwich).

Module Code	Module Title	Credit
USSJRT-30-1	Chemistry in Context 2025-26	30
USSJRU-30-1	Human Biological Systems 2025-26	30
USSJRV-30-1	Scientific Investigation of Crime 2025-26	30
USSJRW-30-1	Scientific Skills 2025-26	30

#### Year 3

Full time and sandwich students must take 120 credits from the modules in Year 3.

# **Year 3 Compulsory Modules (Full Time and Sandwich)**

Full time and sandwich students must take 90 credits from the modules in Compulsory Modules (Full Time and Sandwich).

Module Code	Module Title	Credit
USSKAV-30-2	Drugs and Toxicology 2026-27	30
USSKAU-30-2	Forensic Analysis 2026-27	30
UJUUJD-30-2	Law and Expert Evidence 2026-27	30

#### **Year 3 Optional Modules Semester 1 (Full Time and Sandwich)**

Full time and sandwich students must take 15 credits from the modules in Optional Modules Semester 1 (Full Time and Sandwich).

Full time and sandwich students must study either USSKB9-15-2 AND/OR USSKB7-15-2

Module Code	Module Title	Credit
USSKB8-15-2	Forensic Biology 2026-27	15
USSKB9-15-2	Instrumental Analytical Science 2026-27	15

### **Year 3 Optional Modules Semester 2 (Full Time and Sandwich)**

Full time and sandwich students must take 15 credits from the modules in Optional Modules Semester 2 (Full Time and Sandwich).

Full time and sandwich students must study either USSKB9-15-2 AND/OR USSKB7-15-2

Module Code	Module Title	Credit
USSKFQ-15-2	Genetics 2026-27	15
USSKB5-15-2	Medicinal Chemistry 2026-27	15

#### Year 4

Full time students must take 120 credits from the modules in Year 3. Sandwich students must take 15 credits from the modules in Year 3.

Sandwich students elect to spend a year out working for an organisation, in an appropriate placement to gain relevant work experience. Professional Services will support students in this endeavour. Credit is achieved through the USSK57-15-3 Professional Practices in Applied Sciences module.

# **Year 4 Compulsory Modules (Full Time)**

Full time students must take 60 credits from the modules in Compulsory Modules (Full Time).

Module Code	Module Title	Credit
USSJKW-30-3	Crime Scene to Court 2027-28	30
USSKBC-30-3	Research Dissertation Project 2027-28	30

# **Year 4 Compulsory Modules (Sandwich)**

Sandwich students must take 15 credits from the modules in Compulsory Modules (Sandwich).

Module Code	Module Title	Credit
USSK57-15-3	Professional Practice in Applied Sciences 2027-28	15

# **Year 4 Compulsory Modules Choice (Full Time)**

Full time students must take 30 credits from the modules in Compulsory Modules Choice (Full Time).

Module Code	Module Title	Credit
USSJUR-30-3	Forensic Analysis and Toxicology 2027-28	30
USSJUP-30-3	Forensic Biology and Genetics 2027-28	30

## **Year 4 Optional Modules Choice A (Full Time)**

Full time students must take 15 credits from the modules in Optional Modules Choice A (Full Time).

Module Code	Module Title	Credit
USSKCH-15-3	Forensic Psychology 2027-28	15
USSKBW-15-3	Pathophysiology 2027-28	15
USSKBX-15-3	Pharmacology and Toxicology 2027-28	15

# **Year 4 Optional Modules Choice B (Full Time)**

Full time students must take 15 credits from the modules in Optional Modules B (Full Time).

<b>Module Code</b>	Module Title	Credit
USSKCD-15-3	Environmental Forensics 2027-28	15
USSKCA-15-3	Neuroscience and Neuropharmacology 2027-28	15
USSKCE-15-3	Science Communication 2027-28	15

### Year 5

Sandwich students must take 105 credits from the modules in Year 5.

### **Year 5 Compulsory Modules (Sandwich)**

Sandwich students must take 60 credits from the modules in Compulsory Modules (Sandwich).

<b>Module Code</b>	Module Title	Credit
USSJKW-30-3	Crime Scene to Court 2028-29	30
USSKBC-30-3	Research Dissertation Project 2028-29	30

# **Year 5 Compulsory Modules Choice (Sandwich)**

Sandwich students must take 30 credits from the modules in Compulsory Modules Choice (Sandwich).

Module Code	Module Title	Credit
USSJUR-30-3	Forensic Analysis and Toxicology 2028-29	30

USSJUP-30-3	Forensic Biology and Genetics 2028-29	30

# **Year 5 Optional Modules (Sandwich)**

Sandwich students must take 15 credits from the modules in Optional Modules (Sandwich).

<b>Module Code</b>	Module Title	Credit
USSKCD-15-3	Environmental Forensics 2028-29	15
USSKCH-15-3	Forensic Psychology 2028-29	15
USSKCA-15-3	Neuroscience and Neuropharmacology 2028-29	15
USSKBW-15-3	Pathophysiology 2028-29	15
USSKBX-15-3	Pharmacology and Toxicology 2028-29	15
USSKCE-15-3	Science Communication 2028-29	15

#### Part C: Higher Education Achievement Record (HEAR) Synopsis

This programme has been designed to deliver a broad subject base, from crime scene investigation through to laboratory analysis resulting in the interpretation, evaluation, and presentation of a range of forensic evidence types. Graduates will have an understanding of the application of forensic science including challenges, limitations, current regulatory guidance, and requirements of professional practice. Graduates will have learned to conduct hypothesis-driven scientific process and will be equipped with crime scene processing, laboratory, and analytical skills. Additionally, graduates have the ability to engage in evidence-based debate and can communicate scientific ideas to a broad range of audiences.

#### Part D: External Reference Points and Benchmarks

The programme has been predominately designed within the framework of the QAA Subject Benchmark Statement: Forensic Science including Masters (2022). The design of the programme has also been supported by QAA Subject Benchmark

Statements: Chemistry (2022) and Biosciences (2023). This has not constrained the development of the programme but has provided relevant context to review the programme offer.

Additionally, Forensic Science is accredited by the Chartered Society of Forensic Sciences across the three core component standards: Crime Scene Investigation (2022 v2), Laboratory Analysis (2022 v1), Interpretation, Evaluation, and Presentation of Evidence (2022 v1).

## Part E: Regulations

Approved to University Regulations and Procedures.

It is the Award Board's responsibility to determine whether the student's attainment at FHEQ level 3 is sufficient to progress to level 4.