University of the West of Scotland

Undergraduate Programme Specification

Session: 2024/25
Last Modified: 12 June 2024
Status: Published

1	**Named Award Title:**	BSc (Hons) Forensic Science Single	
2	**Award Title for Each Award:** [1]	BSc (Hons) Forensic Science BSc Forensic Science Dip HE Forensic Science Cert HE Forensic Science	
3	**Date of Validation / Approval:**	[add date] (most recent approval)	
4	**Details of Cohorts Applies to:**	[click here to add detail]	
5	**Awarding Institution/Body:**	**University of the West of Scotland**	
6	**Teaching Institution(s)[2]:**	University of the West of Scotland	
7	**Language of Instruction & Examination:**		**English**
8	**Award Accredited By:**	Accredited by the Chartered Society of Forensic Sciences	
9a	**Maximum Period of Registration:**	6 Authorised Interruption Guidance notes (uws.ac.uk)	
9b	**Duration of Study:**	Full Time – 4 years	
10	**Mode of Study:**	Full Time	
11	**Campus:**	Paisley	
12	**School:**	School of Computing, Engineering and Physical Sciences	
13	**Programme Board:**	Physical Sciences	
14	**Programme Leader:**	Dr Ciaran Ewins	

15. Admission Criteria
Candidates must be able to satisfy the general admission requirements of the University of the West of Scotland as specified in Chapter 2 of the University Regulatory Framework together with the following programme requirements:

[1] Include main award and all exit awards e.g. BA / BSc / BEng / DipHE / CertHE
[2] University of the West of Scotland and include any collaborative partner institutions involved in delivery.

SQA National Qualifications:

Scottish Highers:

Standard Entry Requirements: BCCC (90 UCAS Tariff points) including Chemistry plus National 5 Maths/Applications of Maths at Grade B or above

Minimum Entry Requirements: CCCC (84 UCAS Tariff points) including Chemistry plus National 5 Maths/Applications of Maths at Grade B or above

or GCE

A Levels: CCD (88 UCAS Tariff Points) including Chemistry

or SQA National Qualifications/Edexcel Foundation

SQA HNC/BTEC Level 4 HNC: Applied Sciences

Other Required Qualifications/Experience

Scottish Wider Access Programme (SWAP): Access to Medicine or Access to Life Sciences or Access to Science (Grades BBB, including Chemistry)

Further desirable skills pre-application (i.e. to satisfy additional PSRB requirements or other)

16	**General Overview** Forensic Science is the application of science in support of the legal process. Forensic Scientists aim to gather evidence and analyse it for use in a court of law in a way that is impartial, expert and with a solid scientific basis. The great strides made in analytical chemistry and genetics in recent years have greatly increased the power of Forensic Science, and made the scientist central to the solving of many criminal cases. The scope of what can be achieved by Forensic Scientists is growing all the time with new techniques constantly being introduced and developed. The programme provides the students with the requisite underpinning knowledge in the chemical and biological sciences that are most important in forensic science. Criminalistic topics such as crime scene investigation, forensic statistics and fingerprinting are also studied in the first two years. In year 3 and 4 the treatment and analysis of evidence is developed in specialist modules covering fire investigation, explosives, fibre analysis, DNA profiling, chemical and biochemical analysis, evidence identification, toxicology and drugs. The final year of the programme features an extended research project and the study of in forensic biology, toxicology, evidence recovery and advanced analytical chemistry. Final year students also participate in an extended CSI project and present their findings in a mock court room. A variety of teaching methods will be employed during the programme including site visits, guest lectures, workshops, role-play and presentations. One of the key tenets of the programme is to train and develop students as practical scientists with highly developed analytical skills capable of identifying, recovering and examining evidence and presenting their findings both orally and in writing. A strength of this programme is that it provides students with a broad grounding in a number of scientific disciplines that allows graduates from the programme to find employment not only in the forensic sciences sector but also to have an analytical skills profile which makes them attractive to many other employers e.g. chemical, pharmaceutical and biotechnology industries, occupational safety and health sector, accident investigation, public sector employers and police graduate entry. The programme includes an optional industrial placement which allows the development of additional skills relevant to employment. Students with an Honours degree may proceed to postgraduate studies for MSc / PhD at this or other universities. The level and intensity of the programme is developed throughout the course in line with SCQF criteria for each level, while the content is closely aligned with QAA subject benchmark statements at all stages. Student autonomy and individual responsibility for learning is encouraged at all levels, and graduate attributes are developed throughout the programme.
17	**Graduate Attributes, Employability & Personal Development Planning**
	UWS' Graduate Attributes focus on academic, personal and professional skills. Throughout the programmes these skills develop graduates who are universally prepared, work-ready and successful. The attributes expected from our graduates are set out in the "I am UWS" programme.

	Embedded employability activity will help ensure that graduates will be work-ready and will have globally relevant skills as British policing and forensic science is very highly regarded internationally. Ensuring students are highly employable and able to make a difference locally and globally' is a key aim of the University's Education Enabling Plan, Teaching and assessment methods are chosen to encourage graduates to develop an enthusiasm for learning and an ability to transfer knowledge into practice at diverse locations such as the laboratory, the crime scene and the court room. The Forensic Science programme provides opportunities throughout the levels to enable graduate attributes to be developed and focussed appropriately. The BSc (Hons) Forensic Science programme is Accredited by the Chartered Society of Forensic Sciences. Critical analytical and inquiry skills are developed and used to solve industry related problems wherever possible. The programme promotes awareness of work-related issues with a variety of group exercises such as laboratory investigations and mock crime scenes. Ethical awareness and social responsibility are developed throughout and formalised in the Level 10 research project where School/University ethical approval is sought if required. Links to current University research are promoted through the programme with examples embedded in teaching and opportunities for students to become involved. The School regularly engages with potential employers from outside organisations and supports their engagement with our students at invited talks and events. Personal Development Planning (PDP) within the programme is part of many modules in the programme and is also a major part of the Aspire programme. A personal tutor is identified for each student, with whom they are expected to meet at least once per term - to discuss academic progress, development goals and aspirations. Many modules core to the programme are strongly linked to PDP themes. The Honours year involves a research project in which students will apply many of these skills such as literature research and evaluation, time management and planning, research skills, report writing and presentation skills.
18	**Work Based Learning/Placement Details**
	Students have the option of a one-year placement after level 9 of the programme. If selected, the sandwich placement is designed for students to gain and reflect on work experience attained during their time in the workplace. Students undertaking a sandwich placement are required to undertake PDP and maintain a portfolio from which they will be required to produce a comprehensive learning log report charting their development during placement which is assessed on a pass /fail basis. The student will be required, through reflection, to explore their own role within their placement organisation and to take account of the roles and responsibilities of themselves and others in the context of the structures in which they operate. The placement will be governed by a tripartite learning agreement between the student, placement provider and the University which defines the learning outcomes and confirms

	elements of support and commitment from all parties. The agreement will be signed by each party prior to the start of the placement. Learning Outcomes At the end of the placement the student will be able to: • L1. Critically relate elements of the placement work experience to the main themes and issues of their subject discipline relevant within the workplace and be confident in articulating this to others • L2. Analyse organisational cultures, capabilities and structures with particular relevance to the current workplace and exhibit the ability to critically evaluate employee roles in an applied setting. • L3. Recognise, critically assess and be able to clearly demonstrate to others the personal development and application of essential employability skills and attributes within a real work situation. Assessment Assessment will be based on pass/fail only and all assessment elements must be passed for progression as part of the Sandwich programme. Assignments will be open to external examination in accordance with university regulations. Progression/Award • Placement students will be assigned to a specific School assessment panel. • The relevant Programme Panel will consider the performance of each sandwich placement student enrolled on that Programme and decide eligibility for reassessment, progression and awards in accordance with University Regulations. • A student who fails the sandwich placement after reassessment will no longer be eligible for a "with sandwich" award. They will either progress to level 9 or 10 (as appropriate) of a non-sandwich equivalent programme or exit with an equivalent non-sandwich award. Successful completion of the placement element will result in the award of Forensic Science (sandwich)
19	**Attendance and Engagement**
	In line with the Student Attendance and Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the library and on the VLE, and complete assessments and submit these on time.
20	**Equality and Diversity**

	The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. Please detail any specific arrangements for this programme. This should be considered and not just refer the reader to the UWS Equality and Diversity policy.

Programme structures and requirements, SCQF level, term, module name and code, credits and awards (Chapter 1, Regulatory Framework)

21	**Learning Outcomes (Maximum of 5 per heading)**
	Outcomes should incorporate those applicable in the relevant QAA Benchmark statements. Please ensure that Learning Outcomes are appropriate for the level of study. Further information is available via SCQF: https://scqf.org.uk/support/support-for-educators-and-advisers/support-for-colleges-heis/ and a Level Descriptors tool is available (SCQF Level Descriptors Tool | Scottish Credit and Qualifications Framework) and ensure appropriate cognisance of Chapter 1, Regulatory Framework. https://www.uws.ac.uk/media/6514/regulatory-framework-2023-2024.pdf

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	SCQF LEVEL 7 **Learning Outcomes (Maximum of 5 per heading)**
Knowledge and Understanding	
A1	Demonstrate a broad knowledge of chemical and biological sciences
A2	Relate scientific knowledge to a forensic science context
A3	Show familiarity with some of the routine materials, techniques and practices of Forensic Science.
A4	
A5	
Practice - Applied Knowledge and Understanding	
B1	Apply basic knowledge and skills to routine problems in Chemical and Biological sciences.
B2	Demonstrate the practice of basic laboratory skills
B3	Demonstrate skills for the gathering and basic analysis of routine information, ideas, concepts and quantitative and qualitative data within a clearly defined context. This will include the use of information and communications technology (ICT).
B4	

B5	
Communication, ICT and Numeracy Skills	
C1	Tackle a range of numerical and non-numerical problems in theoretical and practical situations
C2	Present information in a variety of forms relevant to context
C3	Demonstrate skills for the gathering and basic analysis of routine information, ideas, concepts and quantitative and qualitative data within a clearly defined context. This will include the use of information and communications technology (ICT).
C4	
C5	
Generic Cognitive Skills - Problem Solving, Analysis, Evaluation	
D1	Present and evaluate information and ideas in the handling of scientific issues including specifically forensic applications
D2	Use a range of approaches to the solution of routine problems
D3	
D4	
D5	
Autonomy, Accountability and Working With Others	
E1	Exercise some initiative and take responsibility for defined activities
E2	Undertake practical work and further learning within a structured and managed environment
E3	Work with others in defined group exercises
E4	
E5	

Learning Outcomes - Level 7 Core Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	

7	CHEM07003	Structure of Chemistry	20	✓			
7	APPD07001	ASPIRE	20	✓			
7	CHEM07006	Science & Crime	20	✓			
7	MATH07001	Analysis Data	20		✓		
7	CHEM07011	Chemistry & Reactions	20		✓		
7	CHEM07013	Molecules of Life	20		✓		

Footnotes for Core Modules:

[click here to add detail]

Learning Outcomes - Level 7 Optional Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	

Footnotes for option modules

22 a	**Level 7** **Criteria for Progression and Award**

	To progress to L8, students must meet the criteria outlined in University Regulation, Chapter 3 (3.13 – 3.14). For information on progression with credit deficit in core and optional modules please refer to University Regulation, Chapter 3 (3.13). Those students entering the programme at SCQF level 7, and who successfully achieve 120 credits at SCQF level 7 (including all core modules) can exit with Cert HE in Criminal Justice and Forensic Science should they choose not to progress to the next level of the programme. For information on the award of distinction please refer to University Regulation, Chapter 3 (3.25 – 3.26). Students successfully achieve 120 credits at SCQF level 7 (but not including all core modules) can exit with Cert HE in Combined Studies, see Reg 1.61 Distinction will be awarded in line with University Regulations and no imported credit can be used. (Regulations 3.35 & 3.26) Links: UWS Regulatory Framework; and Student Experience Policy Statement.

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	Level 8 **Learning Outcomes (Maximum of 5 per heading)**
Knowledge and Understanding	
A1	Demonstrate a broad knowledge of aspects of chemistry, biology and criminalistics related to forensic science
A2	Display a knowledge of some major principles in chemical and biological science
A3	Show some knowledge of major current issues in forensic science
A4	
A5	
Practice - Applied Knowledge and Understanding	
B1	Use a range of routine skills, techniques and practices in science
B2	Carry out routine investigations into practical and theoretical issues
B3	
B4	

B5	
Communication, ICT and Numeracy Skills	
C1	Use a range of standard applications to obtain and process data
C2	Apply and evaluate numerical and graphical procedures to laboratory and other data
C3	Present numerical, graphical and verbal information in a variety of forms suitable for scientific and non-scientific audiences
C4	
C5	
Generic Cognitive Skills - Problem Solving, Analysis, Evaluation	
D1	Undertake critical analysis, evaluation and synthesis of information relating to the main ideas and concepts relevant to forensic science
D2	Use a variety of approaches to develop solutions to defined problems
D3	Display a critical evaluation of solutions and explanations of experimental information and observations
D4	
D5	
Autonomy, Accountability and Working With Others	
E1	Exercise autonomy and initiative in defined professional activities
E2	Take responsibility for work planning and time management within specified contexts
E3	Co-operate in group working exercises
E4	Work under guidance on current professional practice and issues
E5	

Learning Outcomes - Level 8 Core Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	

8	CHEM08001	Physical Chemistry 2	20	✓			
8	CHEM08002	Organic Chemistry 2	20	✓			
8	CHEM08007	Evaluating Forensic Evidence	20	✓			
8	APPD08001	ASPIRE 2	20		✓		
8	CHEM08004	Chemical Analysis & Evaluation	20		✓		
8	CHEM08017	Forensic Genetics	20		✓		

Footnotes for Core Modules:

Learning Outcomes - Level 8 Optional Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	

Footnotes for option modules

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22b	**Level 8** **Criteria for Progression and Award**
	To progress to L9, students must meet the criteria outlined in University Regulation, Chapter 3 (3.13 – 3.14). For information on progression with credit deficit in core and optional modules please refer to University Regulation, Chapter 3 (3.13). Those students who successfully achieve 240 credits at SCQF level 7 & 8 (including all core modules) can exit with Dip HE in Forensic Science should they choose not to progress to the next level of the programme. For information on the award of distinction please refer to University Regulation, Chapter 3 (3.25 – 3.26). Students successfully achieve 240 credits at SCQF level 7 & 8 (but not including all core modules) can exit with Dip HE in Combined Studies, see Reg 1.61 Distinction will be awarded in line with University Regulations and no imported credit can be used. (Regulations 3.35 & 3.26) Links: UWS Regulatory Framework; and Student Experience Policy Statement.

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	SCQF LEVEL 9 **Learning Outcomes (Maximum of 5 per heading)**
Knowledge and Understanding	
A1	Demonstrate a broad and integrated knowledge and understanding of major areas relevant to forensic science
A2	Display a critical understanding of some principal theories, concepts and terminologies relevant to forensic science, and of the ways in which these are developed through progress in science
A3	Show a broad and comparative knowledge of the general scope of Forensic Science and a knowledge of how the legal context affects the work of the forensic scientists.
A4	
A5	
Practice - Applied Knowledge and Understanding	
B1	Use a selection of skills, techniques and practices in handling scientific concepts and experimental information
B2	Display skills in selected techniques, practices and information at a specialised level

B3	Use their knowledge, understanding and applied skills, to identify and analyse problems and issues in formulating, evaluating and applying evidence-based enquiries.
B4	
B5	
Communication, ICT and Numeracy Skills	
C1	Make formal and informal presentations on topics relevant to forensic science by a variety of methods to a range of audiences
C2	Use a range of IT applications to obtain and manage information and to gather, process and present experimental data
C3	Display the utilisation of a range of sources in making judgments on matters relating to forensic science
C4	
C5	
Generic Cognitive Skills - Problem Solving, Analysis, Evaluation	
D1	Undertake critical analysis, evaluation and synthesis of ideas, concepts, information and issues in forensic science
D2	Identify and analyse routine professional problems and issues in forensic science
D3	Make use of a range of sources in making judgments on matters relating to forensic science
D4	
D5	
Autonomy, Accountability and Working With Others	
E1	Exercise some autonomy and initiative in dealing with activities at a professional level
E2	Take some responsibility for the work of others and for the use of resources
E3	Practise working in group exercises taking account of others' roles and responsibilities
E4	Work under guidance on aspects of professional skills and ethical codes
E5	

Learning Outcomes - Level 9 Core Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	
9	CHEM09024	Forensic Toxicology	20	✓			
9	CHEM09008	Trace Evidence & Microscopy	20	✓			
9	CHEM09011	Fires & Explosives	20		✓		
9	CHEM09009	Forensic Laboratory Techniques	20		✓		
9	CHEM09002	Analytical Chemistry	20		✓		

Footnotes for Core Modules:

Learning Outcomes - Level 9 Optional Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	
9	CHEM09023	Designer Drugs	20	✓			

Footnotes for option modules

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22c	Level 9 Criteria for Progression and Award
	To progress to L10, students must meet the criteria outlined in University Regulation, Chapter 3 (3.13 – 3.14). Those students entering the programme at SCQF level 9, and who successfully achieve 120 credits at SCQF level 9 (including all core modules) can exit with BSc Forensic Science should they choose not to progress to the next level of the programme. For information on the award of distinction please refer to University Regulation, Chapter 3 (3.25 – 3.26). Students who successfully achieve 120 credits at SCQF level 9 (but not including all core modules) can exit with BSc in Combined Studies, see Reg 1.61 Distinction will be awarded in line with University Regulations and no imported credit can be used. (Regulations 3.35 & 3.26) Links: UWS Regulatory Framework; and Student Experience Policy Statement.

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	SCQF LEVEL 10 Learning Outcomes (Maximum of 5 per heading)
Knowledge and Understanding	
A1	Demonstrate a systematic, extensive and comparative knowledge and understanding of Forensic Science as a whole and its links to related subjects. A detailed knowledge of a few specialisms and developments, some of which are at, or informed by, the forefront of the subject.
A2	A critical understanding of the established theories, principles and concepts, and of a number of advanced and emerging issues at the forefront of the Forensic Science.
A3	A critical understanding of the uncertainty and limits of knowledge and how it is developed, and an ability to deploy established techniques of analysis and enquiry within Forensic Science.
A4	Exemplify application of scientific principles in forensic investigation

A5	Illustrate the interaction between social, legal and technical aspects of forensic science.
Practice - Applied Knowledge and Understanding	
B1	Demonstrate practical skills in laboratory techniques related to forensic science including some at the forefront of the subject.
B2	Show the development of investigative and evaluative skills in Forensic Science
B3	Display knowledge and awareness of laboratory issues in forensic science including quality assurance, health and safety and record keeping.
B4	Demonstrate the investigation and reporting of crime scenes
B5	Demonstrate practical skills in laboratory techniques related to forensic science including some at the forefront of the subject.
Communication, ICT and Numeracy Skills	
C1	Demonstrate the ability to present scientific information to a specialist and non-specialist audience
C2	Skills in identifying information needs, and in the systematic gathering, analysis and interpretation of ideas, concepts and qualitative and quantitative data and information from a range of evaluated sources including current research, scholarly, and/or professional literature.
C3	Present scientific information in a variety of forms suitable for scientific and non-scientific audiences
C4	Show competence in information management skills, especially IT skills including databases and on-line searches
C5	Demonstrate the ability to present scientific information to a specialist and non-specialist audience
Generic Cognitive Skills - Problem Solving, Analysis, Evaluation	
D1	Develop and demonstrate rigour in investigation, evaluation and analysis
D2	Display synthesis of materials from different sources for understanding of theory and investigation of problems in forensic science
D3	Illustrate investigative skills and strategies in problem solving in forensic science

D4	
D5	
Autonomy, Accountability and Working With Others	
E1	Operate effectively in a group / team situation
E2	Systematically identify and address their own learning needs both in current and in new areas, making use of research, development and professional materials as appropriate, including those related to the forefront of developments
E3	Apply their science-related and transferable skills in contexts where there is a requirement for: - the exercise of personal responsibility and initiative - decision-making in complex and unpredictable contexts - the ability to undertake further developments of a professional or equivalent nature.
E4	
E5	

Learning Outcomes - Level 10 Core Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	
10	CHEM10001	Science Project	40	✓	✓		
10	CHEM10002	Advanced Analytical Techniques	20	✓			
10	CHEM10008	Forensic Evidence	20	✓			
10	CHEM10010	Forensic Biology	20		✓		

Footnotes for Core Modules:

Learning Outcomes - Level 10 Optional Modules

SCQF Level	Module Code	Module Name	Credit	Term			Footnotes
				1	2	3	
10	CHEM10018	Drugs and Human Interactions	20		✓		

Footnotes for option modules

This is the recommended optional module. Other optional modules may be taken subject to pre-requisite requirements being met. When choosing optional modules please note that a minimum of 200 credits Points are required at SCQF Levels 9 and 10, and of which a minimum of 90 are at SCQF Level 10 for the award of BSc (Hons) Forensic Science

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22d	Level 10 Criteria for Award
	The award of BSc (Hons) Forensic Science is awarded to students who have at least 480 credits of which a minimum of 200 credits Point are at SCQF Levels 9 and 10, and of which a minimum of 90 are at SCQF Level 10. Honours Classification will be awarded in line with the University Regulations, Chapter 3 (3.20 – 3.24). Students who have at least 480 credits of which a minimum of 200 Point are at SCQF Levels 9 and 10, and of which a minimum of 90 are at SCQF Level 10, but not including all core modules can exit with BSc (Hons) in Combined Studies, see Reg 1.61. No Distinction is awarded at Honours level (Regulation 3.25). Links: **UWS Regulatory Framework;** and Student Experience Policy Statement.

Change/Version Control

Changes made to the programme since it was last published:

What	When	Who

Updated Links: • Academic Engagement Procedure • Equality and Diversity • University Regulatory Framework • Removed invalid links	19/10/2023	C Winter
Guidance Note 2023-24 provided	12/12/23	D Taylor
General housekeeping to text across sections and addition of links and some specific guidance. Addition of Duration of Study and some other text – for CMA.	12/12/23	D Taylor

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