

Definitive Programme Document: BSc (Hons) Forensic Science (Bachelors with Honours)

Awarding institution	Bath Spa University
Teaching institution	Bath Spa University
School	School of Sciences
Main campus	Newton Park
Other sites of delivery	n/a
Other Schools involved in delivery	n/a
Name of award(s)	Forensic Science
Qualification (final award)	BSc (Hons)
Intermediate awards available	CertHE, DipHE
Routes available	Single
Professional Placement Year	Optional
Duration of award	3 years full-time, 4 years with Professional Placement Year
	6 years part time
Modes of delivery offered	Campus-based
Regulatory Scheme <sup>1</sup>	Undergraduate Academic Framework
Exemptions from	No
regulations/framework <sup>2</sup>	
Professional, Statutory and	N/A at present.
Regulatory Body accreditation	
	Subject to the programme successfully accredited by The Chartered Society of Forensic Scientists

<sup>&</sup>lt;sup>1</sup> This should also be read in conjunction with the University's Qualifications Framework

<sup>&</sup>lt;sup>2</sup> See section on 'Exemptions'

Date of most recent PSRB approval (month and year)	n/a
Renewal of PSRB approval due (month and year)	September 2026
UCAS code	F410 (full-time); 350H (sandwich)
Route code (SITS)	
Relevant QAA Subject Benchmark Statements (including date of publication)	Forensic Science (March 2022)
Date of most recent approval	
Date specification last updated	

# **Exemptions**

The following exemptions are in place:

Programme/Pathwa y	Regulations/Framewor k	Brief description of variance	Approving body and date

#### **Programme Overview**

BSc (Hons) Forensic Science combines expertise in Biological Sciences, Criminology, and Forensic Psychology to form the basis of an existing interdisciplinary course. The course is structured to enable accreditation (starting with Conditional Educational Accreditation) by the Chartered Society of Forensic Scientists.

Forensic science is very broadly defined as the application of science to serve the purposes of the law and criminal justice. You will have the opportunity to learn how forensic science supports the investigation of crime and how vital it is in supporting law enforcement agencies investigate criminal activities. Due to the broad nature of crime, you will have the opportunity to learn a broad range of disciplines and skills, including laboratory-based analysis based on biology and chemistry, crime scene analysis, digital forensic based on computing), and theoretical modelling of criminality from forensic psychology and criminology.

While forensic science is a broadly-based science degree, it has a strong vocational focus in which you will have the opportunity to learn how to apply science and scientific knowledge and skills to support and underpin both investigation and the criminal justice system. You will have the opportunity to learn how vital it is that the evidence used in courts is underpinned by sound, peer-reviewed science.

The Forensic Science degree at Bath Spa University aims to equip students with upto-date skills suitable for working as a modern forensic scientist and expert witness. By building the course around the 2022 UK standards for forensic science, it will ensure graduates are familiar with correct policing, judicial, and investigative procedures used in the UK including the ability to work in interdisciplinary teams. A further focus will be on reconstructing, monitoring and preventing crime and security issues.

#### **Programme Aims**

- 1 To produce forensic science graduates with the scientific knowledge and understanding that serve to support criminal investigations;
- 2 To equip graduates with a breadth of skills in investigative laboratory techniques which are applicable to a range of scientific situations;
- 3 To equip graduates with key intellectual and transferable skills necessary for enhanced employability;
- 4 To provide graduates with the capability of postgraduate study and research in the field of forensic science and related disciplines;
- 5 To increase maturity, independence and confidence, so enhancing graduates' employability and encourage lifelong learning;
- 6 To provide attributes and skills that allow students to pursue a career related to forensic science.

# **Programme Intended Learning Outcomes (ILOs)**

# A Subject-Specific Skills and Knowledge

	Programme Intended Learning Outcomes (ILOs)  On Achieving Level 6, students should be able to	On Achieving Level 5, students should be able to	On Achieving Level 4, students should be able to
A1	Demonstrate the systematic and detailed understanding and application of the core scientific methods involved in forensic investigations and techniques associated with the discipline, including an understanding of how cognitive biases affect the forensic processes.	Demonstrate knowledge and critical understanding of the application of core scientific methods involved in forensic investigations and an understanding of the techniques associated with the discipline.	Describe core scientific principles involved in forensic investigations and show a familiarity with the techniques associated with the discipline.
A2	Deploy appropriate laboratory skills, including selecting appropriate experimental techniques and using appropriately laboratory equipment, to carry out a range of tasks and technical processes with a degree of autonomy.	Use appropriate laboratory skills and techniques to carry out a range of experimental tasks associated with forensic science.	Use appropriate laboratory skills and techniques to carry out scientific tasks.
A3	Conduct and interpret the results of laboratory and other investigations, with an appreciation of their limitations both scientifically and legally, in order to reach appropriate evidence-informed decisions and recommendations.	Conduct and interpret the results of laboratory and other investigations (including crime scene analysis), identifying the limitations in both a research and applied context.	interpret the results of basic laboratory tests associated with the discipline and evaluate the appropriateness of scientific methods.
A4	Demonstrate a comprehensive conceptual understanding of the theory, techniques and skills required for the investigation of crime	Demonstrate a critical understanding of the theory, techniques, and skills required to investigate crime scenes accurately, extract	Demonstrate a knowledge of the theory and techniques associated with analysis of

	scenes, extraction of evidence, and subsequent laboratory analysis of forensic evidence.	evidence, and analyse the resulting information in a professional manner.	crime scenes, evidence extraction and analysis.
A5	Demonstrate a comprehensive practical knowledge and understanding of various legal and law enforcement environments in which forensic science is practiced and how data collected by forensic scientists can be used for intelligence and evidence.	Demonstrate a detailed knowledge and critical understanding of the various legal and law enforcement environments in which forensic science is practiced and how data collected by forensic scientists can be used as evidence.	Demonstrate a knowledge of the various legal and law enforcement environments in which forensic science is practiced and how the evidence is used in legal settings.
A6	Organise data, critically analyse those data to make deductions, possibly from incomplete data and clearly present the results of investigations to make, both in written and oral form, in a manner that can be readily assimilated within a legal, law enforcement or court environment.	Organise data, critically evaluate those data to make deductions and present the results of such investigations, both in written and oral form, in a manner that can be assimilated within a legal environment.	Keep data in an organised manner, interpret the results and present these results, in both written and oral forms, in a coherent and easy-to-read manner that can be assimilated by a non-academic audience.
A7	Formulate and justify expert opinion using impartial, transparent, and comprehensive arguments, including the ability to quantify and clearly communicate the levels of uncertainty in expert evidence or data.	Formulate and justify deductions made as the result of forensic investigations, ensuring that the arguments made are impartial, evidence-based, and articulated clearly when there is a level of doubt over the confidence in such data.	Demonstrate an understanding of forensic formulations and deductions and the importance of making arguments in a clear manner, ensuring that any doubt or limitation is expressed openly.
A8	Demonstrate knowledge and of the ethical, legal, statutory obligations, and practical issues (including health and safety and quality assurance) and progression within the discipline with a commitment to uphold these in a professional setting.	Demonstrate knowledge and critical understanding of the various ethical and legal obligations working as a professional forensic scientist entails and an awareness of the importance of upholding these values.	Demonstrate knowledge of the professional roles of forensic scientists and the ethical and legal manner with which they must operate, including operating in multidisciplinary teams.

# **B Cognitive and Intellectual Skills**

	Programme Intended Learning Outcomes (ILOs)  On Achieving Level 6, students should be able to	On Achieving Level 5, students should be able to	On Achieving Level 4, students should be able to
B1	Communicate coherently, accurately, and reliably, ideas, arguments, problems with their solutions, and knowledge to specialist and nonspecialist audiences both orally and in writing.	Communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences and deploy key techniques of the discipline.	Communicate, using cogent argument supported by relevant evidence and sensitive to the needs and expectations of an audience.
B2	Effectively collect and analyse information and data using a variety of discipline-specific techniques accurately and reliably to the appropriate scientific standards.	Record information and evidence accurately and reliably, in accordance with appropriate scientific standards for the discipline.	Demonstrate scientific laboratory and reasoning skills and be computer literate in the use of word processing, databases, and analytic software packages.
B3	Demonstrate the ability to use and critically review knowledge of essential facts, concepts, principles and theories obtained from primary sources relating to the subject and to apply such knowledge and understanding to the solution of novel qualitative and quantitative research problems.	Effectively apply research skills (gathering of accurate information) to aide in the enquiry into subject-specific research problems.	Knowledge of where to find sources (libraries, books, and journals) to support arguments and help explain results.
B4	Creatively and enterprisingly recognise and critically analyse novel	Demonstrate strategic and creative thinking by generating original and	Demonstrate the ability to identify contemporary issues and opportunities to

contemporary problems and provide adaptable solutions by the evaluation, interpretation and synthesis of scientific information and data by a variety of computational methods.

realistic ideas for solving identified issues and/or to achieve a specific outcome.

apply learning to create solutions.

## C Skills for Life and Work

	Programme Intended Learning Outcomes (ILOs)  On Achieving Level 6, students should be able to demonstrate	On Achieving Level 5, students should be able to demonstrate	On Achieving Level 4, students should be able to demonstrate
C1	Autonomous learning <sup>3</sup> (including time management) that shows the exercise of initiative and personal responsibility and enables decision-making in complex and unpredictable contexts.	Autonomous learning (including time management) as would be necessary for employment requiring the exercise of personal responsibility and decision-making such that significant responsibility within organisations could be assumed.	Autonomous learning (including time management) as would be necessary for employment requiring the exercise of personal responsibility.
C2	Team working skills necessary to flourish in the global workplace with an ability both to work in and lead teams effectively.	Teamwork as would be necessary for employment requiring the exercise of personal responsibility and decision-making for effective work with others such that	Teamwork as would be necessary for employment requiring the exercise of personal responsibility for effective work with others.

<sup>&</sup>lt;sup>3</sup> i.e. the ability to review, direct and manage one's own workload

		significant responsibility within organisations could be assumed.	
C3	Communication skills that ensure information, ideas, problems and solutions are communicated effectively and clearly to both specialist and nonspecialist audiences.	Communication skills commensurate with the effective communication of information, arguments and analysis in a variety of forms to specialist and nonspecialist audiences in which key techniques of the discipline are deployed effectively.	Communication skills that demonstrate an ability to communicate outcomes accurately and reliably and with structured and coherent arguments.
C4	IT skills and digital literacy that demonstrate core competences and are commensurate with an ability to work at the interface of creativity and new technologies.	IT skills and digital literacy that demonstrate the development of existing skills and the acquisition of new competences.	IT skills and digital literacy that provide a platform from which further training can be undertaken to enable development of new skills within a structured and managed environment.

## **Programme content**

This programme comprises the following modules

Key:

Core = C

Required = R

Required\* =  $R^*$ 

Optional = O

Not available for this status = N/A

If a particular status is greyed out, it is not offered for this programme.

Subject offered as single award

	BSc (Hons) Forensic Science				Status
Level	Code	Title	Credits	Single	Joint
4	FSC4000 -20	Forensic Science Techniques	20	С	
4	BIO4101- 20	Introduction to Biochemistry	20	С	
4	CRI4000- 20	Crime and Disorder in Everyday Life	20	С	
4	LAW4001 -20	Criminal Law; case and matter analysis	20	С	
4	BIO4203- 20	Cell Biology and Genetics	20	С	
4	CYS4001 -20	Digital Forensics	20	С	
5	FSC5000 -20	Research Skills for Forensic Science	20	С	
5	CRI5000- 20	Policing; crime control & prevention	20	С	
5	CRI5001- 20	Criminal Justice: Theory, Policy and Practice	20	0	
5	BIO5202- 20	Pharmacology and Toxicology	20	С	
5	FSC5001 -20	Forensic Casework and Analysis	20	С	
5	FPS5001 -20	The Psychology of Criminal Investigations	20	0	
5	CRI5100- 20	Criminal Justice: Theory, Policy and Practice	20	0	

#### TEMPLATE V1.5 June 2022

5	BIO5004- 20	Applied Microbiology	20	0	
5	PPY5100 -120	Professional Placement Year	120	0	
6	FSC- 6000-20	Dissertation Planning for Forensic Science	20	С	
6	FSC6001 -20	Dissertation Publication for Forensic Science	20	С	
6	FSC6002 -20	Contemporary Topics in Forensic Science	20	С	
6	BIO6703- 20	Mechanisms of Disease	20	0	
6	FSC6003 -20	Advanced Criminal and Forensic Psychology	20	0	
6	BIO6702- 20	Clinical Biochemistry	20	0	
6	FSC6004 -20	Forensic Science Work Placement	20	0	
6	CCO6002 -20	Cybersecurity	20	0	
6	CYS6000 -20	Cyber Crime, Law and Ethics	20	0	

#### **Assessment methods**

A range of summative assessment tasks will be used to test the Intended Learning Outcomes in each module. These are indicated in the attached assessment map which shows which tasks are used in which modules.

Students will be supported in their development towards summative assessment by appropriate formative exercises.

<u>Please note</u>: if you choose an optional module from outside this programme, you may be required to undertake a summative assessment task that does not appear in the assessment grid in order to pass that module.

#### Work experience and placement opportunities

Work Placement opportunities are available as an optional module at level 6 (Forensic Science Work Placement) or as a Professional Placement Year (PPY) between levels 5 and 6. These could be with local or international organisations as arranged by the students and advised by a variety of tutors with a range of contacts. All placements will be dependent on the external conditions at the time and may be affected by factors beyond our control including public health concerns (such as measures to control infectious disease epidemics).

## **Graduate Attributes**

	Bath Spa Graduates	In Forensic Science, we enable this
	Dati Opa Gradatos	The Gronold Colonice, we chaple this
1	Will be employable: equipped with the skills necessary to flourish in the global workplace, able to work in and lead teams	By using a variety of teaching, learning and assessment techniques which expose and engage the students with authentic real-world scenarios.
		Students work collaboratively at all levels with opportunities for group work and are encouraged to undertake work experience and exchange opportunities.
2	Will be able to understand and manage complexity, diversity and change	By introducing our students to topical issues within Forensic Sciences. Students will have to understand and interpret the complex, sometimes changing and opposing evidence.
3	Will be creative: able to innovate and to solve problems by working across disciplines as professional or artistic practitioners	By developing our students' understanding of creativity and giving them the opportunity for their creative skills to flourish through problem solving and working with others.  Many modules are available which involve collaborative working across disciplines on real-world projects.
4	Will be digitally literate: able to work at the interface of creativity and technology	Providing a curriculum which includes regular and diverse interaction with digital technology that develops skills and deep understanding. We provide opportunities for students to write for different audiences with different needs and interests using different digital communication techniques.  Forensic Science students are taught the digital literacy skills that are required to conduct the activities (writing scientific papers, blogging, creating multimedia presentations,

		online discussion fora etc) that form part of the daily university life.
		Students will also learn appropriate data analysis techniques throughout the Programme.
5	Will be internationally networked: either by studying abroad for part of the their programme, or studying alongside students from overseas	By encouraging students to take opportunities to study or work abroad (e.g., BSU's Global Citizenship Award), and by using our internationally relevant curriculum to build their confidence to do so.
		We endeavour to ensure our graduates are culturally aware and are able to connect with communities both here in the UK, Europe and abroad and make a valuable contribution to the world economy. We equip our students with the knowledge and skills to work in the UK, Europe and abroad.
6	Will be creative thinkers, doers and makers	By giving students opportunities to think creatively and imaginatively in their interpretation and presentation of scientific information. As part of the curriculum our students explore and reflect on different methods of solving problems and generating ideas.
		Students will be equipped with a toolkit of strategies and will be able to select and use them to deliver results in appropriate contexts. The programme has developed assessments which mimic what happens in the workplace. This provides students with a portfolio of work which they can show to potential employers.

7	Will be critical thinkers: able to	By setting assessments that allow
	express their ideas in written and oral	students to develop their creative
	form, and possessing information	skills within the context of Forensic
	literacy	Science. Our students will be able to
		operate in complex and unpredictable
		contexts demanding the selection
		and application from a wide range of
		innovative or standard techniques.
		They will be able to work
		independently to plan and manage
		work.
		They will also have the ability to be a member of a team and accept responsibility for determining and achieving personal and/or group outcomes. They will also have an awareness of the different methods of communication and an ability to choose the most appropriate method for a given situation.
8	Will be ethically aware: prepared for citizenship in a local, national and global context	Embedding ethics and professional conduct throughout the programme, adhering to professional standards and guidance on ethics and conduct in reporting and using evidence, and to reflect on practice at all levels.

#### **Modifications**

## Module-level modifications

Code	Title	Nature of modification	Date(s) of approval and approving bodies	Date modification comes into effect

## Programme-level modifications

Nature of modification	Date(s) of approval and approving bodies	Date modification comes into effect

## Attached as appendices:

- 1. Programme structure diagram
- 2. Map of module outcomes to level/programme outcomes
- 3. Assessment map
- 4. Module descriptors

# **Appendix 1: Programme Structure**

Level 4 – 120 Credits of Co	re Modules (all 20 credits)
Semester 1	Semester 2
Introduction to Biochemistry (C) - BIO4101-20	Cell Biology and Genetics (C) - BIO4203-20
Forensic Science Techniques (C) - FSC4000-20	Digital Forensics (C) - CYS4001-20
Crime and Disorder in Everyday Life (C) - CRI4000-20	Criminal Law; case and matter analysis (C) - LAW4001-20
Level 5 – 80 Credits of Core Modules and 40	Credits of Optional Modules (all 20 credits)
Semester 1	Semester 2
Research Skills for Forensic Science (C) - FSC5000-20	Forensic Casework and Analysis (C) - FSC5001- 20
Policing; crime control & prevention (C) - CRI5000-20	Pharmacology and Toxicology (C) - BIO5202-20
The Psychology of Criminal Investigations (O) - FPS5001-20	Criminal Justice: Theory, Policy and Practice (O) - CRI5001-20
Crime, Law and Society (O) - CRI5100-20	Applied Microbiology (O) - BIO5004-20
Optional Professional Placement	Year - 120 Credits - PPY5100-120
Level 6 – 60 Credits of Core Modules and 60	Credits of Optional Modules (all 20 credits)
Semester 1	Semester 2
Dissertation Planning for Forensic Science (C) - FSC6000-20	Dissertation Publication for Forensic Science (C) - FSC6001-20
Clinical Biochemistry (O) - BIO6702-20	Contemporary Topics in Forensic Science (C) - FSC6002-20
Cybersecurity (O) - CCO6002-20	Mechanisms of Disease (O) - BIO6703-20
Cyber Crime, Law and Ethics (O) - CYS6000-20	Advanced Criminal and Forensic Psychology (O) - FSC6003-20
Forensic Science Work Placement (O) - FSC6004-20 *	Forensic Science Work Placement (O) - FSC6004-20 *

<sup>\*</sup> This module cannot be taken twice

# Map of Intended Learning Outcomes (ILOs) against modules BSc (Hons) Forensic Science



									lr	tende	d Lear	ning O	utcom	es						
Level	Module Code	Module Title	Status (C,R,R*,O) <sup>4</sup>	Subject-specific Skills and Knowledge									Cognitive and Intellectual Skills				Skills for Life and Work			
				A1	A2	А3	A4	A5	A6	A7	A8	B1	B2	В3	B4	C1	C2	C3	C4	
4	FSC4000- 20	Forensic Science Techniques	С	х	х	х			х	х		х	х	х	х	х			х	
4	BIO4101- 20	Introduction to Biochemistry	С	х	х	х			х		х		х			х	х	х	х	
4	CRI4000- 20	Crime and Disorder in Everyday Life	С				х	х	х					х	х	х			х	
4	LAW4001 -20	Criminal Law; case and matter analysis	С				х	х	х	х	х	х		х		х				
4	BIO4203- 20	Cell Biology and Genetics	С		х	х			х			х	х	х		х		х		
4	CYS4001- 20	Digital Forensics	С	х	х	х	х	х	х		х	х		х	х	х	х	х	х	

<sup>&</sup>lt;sup>4</sup> C = Core; R = Required; R\* = Required\*; O = Optional

5	FSC5000-	Research Skills for	С	х	х	Х				Х	Х	х	Х	х	Х	х	х	х	х
	20	Forensic Science																	
5	CRI5000- 20	Policing; crime control & prevention	С				х	х	х			х		х	х	х		х	
5	BIO5202- 20	Pharmacology and Toxicology	С		х				х			х	х			х			х
5	FSC5001- 20	Forensic Casework and Analysis	С	х	Х	х	х	х	х	х	х	х	х	х	х		х	х	х
5	CRI5001- 20	Criminal Justice: Theory, Policy and Practice	0					х	х				х	х	х	х	х	х	х
5	FPS5001- 20	The Psychology of Criminal Investigations	0	х		х	х		х	х	х	х	х			х	х	х	х
5	CRI5100- 20	Crime, Law and Society	0					х	х					х	х	х		х	х
5	BIO5004- 20	Applied Microbiology	0		х	х							х	х		х	х	х	х
5	PPY5100- 120	Professional Placement Year	0						х		х	х				х	х	х	х
6	FSC6000- 20	Dissertation Planning for Forensic Science	С			х	х	х		х		х	х			х		х	х
6	FSC6001- 20	Dissertation Publication for Forensic Science	С	х	Х	х	Х	х	х	х	Х	х	х	х		х		Х	х
6	FSC6002- 20	Contemporary Topics in Forensic Science	С	х	х	х	х	х			х			х	х	х	х	Х	х

## Template V1.2 February 2018

6	BIO6703- 20	Mechanisms of Disease	0		х				Х				Х	Х		Х	Х	Х	Х
6	FSC6003- 20	Advanced Criminal and Forensic Psychology	0	х		х	х	х	х		х	х	Х			х	х	х	х
6	BIO6702- 20	Clinical Biochemistry	0		х	х			х	х			Х	х		х	х	х	х
6	FSC6004- 20	Forensic Science Work Placement	0								х	х	Х			х	х	х	
6	CCO6002 -20	Cyber Security	0			х		х	х		х		Х		х	х	х	х	х
6	CYS6000- 20	Cyber Crime, Law and Ethics	0					х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х

# Map of summative assessment tasks by module BSc (Hons) Forensic Science



Level	Module Code	Module Title	Status (C,R,R*,O)					A	Assessme	nt Metho	od			
			5		С	oursewo	ork			Prac	tical		Wri	tten
											Examination			
				Es sa y	Po ste r	Po rtf oli o	Re po rt	Propo sal	Pape r	Practical Project	Practi cal skills	Pres entati on	Writte n Exam inatio n (Uns een)	Writte n Exami nation (Open Book)
4	FSC4000- 20	Forensic Science Techniques	С						x1				x1	
4	BIO4101- 20	Introduction to Biochemistry	С								x1			x1
4	CRI4000- 20	Crime and Disorder in Everyday Life	С	x1		x1								
4	LAW4001 -20	Criminal Law; case and matter analysis	С	x1			x1							
4	BIO42032 0	Cell Biology and Genetics	С	x1								x1		

<sup>&</sup>lt;sup>5</sup> C = Core; R = Required; R\* = Required\*; O = Optional

4	CYS4001 -20	Digital Forensics	С			x1					
5	FSC5000- 20	Research Skills for Forensic Science	С		x1						
5	CRI5000- 20	Policing; crime control & prevention	С	x1		x1					
5	BIO5202- 20	Pharmacology and Toxicology	С						x1		x1
5	FSC5001- 20	Forensic Casework and Analysis	С			x1					
5	FPS5001- 20	The Psychology of Criminal Investigations	0	x1		x1					
5	CRI5001- 20	Criminal Justice: Theory, Policy and Practice	0	x1		x1					
5	CRI5100- 20	Crime, Law and Society	0	x1							x1
5	BIO5004- 20	Applied Microbiology	0			x1		x1			
5	PPY5100- 120	Professional Placement Year	0			x1	x1				
6	FSC6000- 20	Dissertation Planning for Forensic Science	С			x1	x1				
6	FSC6001- 20	Dissertation Publication for Forensic Science	С					x1			

## Template V1.2 February 2018

6	FSC6002- 20	Contemporary Topics in Forensic Science	С	x1						x1	
6	BIO6703- 20	Mechanisms of Disease	0		x1		x1				
6	FSC6003- 20	Advanced Criminal and Forensic Psychology	0					x1	x1		
6	BIO6702- 20	Clinical Biochemistry	0		x1					x1	
6	FSC6004- 20	Forensic Science Work Placement	0		x1	x1					
6	CCO6002 -20	Cybersecurity	0		x2						
6	CYS6000 -20	Cyber Crime, Law and Ethics	0	x1				x1			