

### **Course Specification**

Cou	Course Summary Information				
1	Course Title		BSc (Hons) Digital Forensics with Foundation Year		
2	BCU Course	UCAS Code	US1218	I12C	
	Code				
3	Awarding Institution		Birmingham City University		
4	Teaching Institution(s)				
	(if different from point 3)				
5	Professional Statutory or				
	Regulatory Body (PSRB)				
	accreditation (if a	pplicable)			

6	Course Description	
	With digital forensics playing a critical role in the world of modern criminal investigations, our BSc Digital Forensics with Foundation Year course will help you develop the practical and professional skills needed by employers in the digital forensics, cyber security and law enforcement sectors.	
	You'll have access to our specialist Digital Forensics labs. Plus, laboratories are equipped to industry standards and run the latest software so that you can experience the most current technology and prepare yourself for the working world.	
	The Foundation Year course option enables you to study for our BSc (Hons) degree over an extended full-time duration of four years by including a Foundation Certificate (year one of four The Foundation Certificate provides a broad study course that underpins the follow-on degree. In order to progress to the next year of your degree, it is necessary to achieve a pass in all of the modules of the Foundation Certificate.	
	What's covered in the course?	
	This digital forensics course is for you if you want to combine a highly rigorous academic qualification with real life practical work experience that will prepare you to apply your knowledge as a digital forensics expert or forensic investigator.	
	The multidisciplinary nature of our course will foster the essential skills you require in computer networking, ethical hacking, computer programming, data investigation, incident response, mobile device forensics and legal and expert witness roles complementary to digital forensic investigations. These attributes are not only essential to employers in law enforcement and the digital forensics industry but also serve as broader employability skills. On graduation, you will be capable of managing a digital forensic case and conducting technical examination and interpretation of digital-based evidence. You will develop as a confident, highly skilled and professional graduate with a meticulous and methodological approach to problem solving, whether working individually or as part of a professional team.	
	Our course is well established, with a proven track record of producing skilled and confident graduates who are ready to meet the demands of the digital forensics industry. To ensure the	

1



course meets the knowledge and skill requirements for conducting professional digital forensic investigations, the course curriculum has been designed in close consultation with digital forensics experts from the private sector as well as from a number of UK police constabularies.

Motivated by a practice led, knowledge applied philosophy, you'll take a hands-on, practical approach to learning digital forensic investigation, computer networking and other essential computing techniques using commercial and open-source forensic tools. We incorporate additional activities such as industrial workshops, practitioner boot-camps, guest lectures and vendor qualification assessments to strengthen the employability driven nature of our course.

7	Course Awards		
7a	7a Name of Final Award		Credits Awarded
	Bachelor of Science with Honours Digital Forensics		480
	Bachelor of Science with Honours Digital Forensics with		600
	Professional Placement Year		
7b	Exit Awards and Credits Awarded		
	Foundation Certificate Computing	3	120
	Certificate of Higher Education Digital Forensics		240
	Diploma of Higher Education Digital Forensics		360
	Bachelor of Science Digital Forensics	6	420

8	Derogation from the University Regulations		
	Not applicable		

9 Delivery Pattern	Delivery Patterns			
Mode(s) of Study	Location	Duration of Study	Code	
Full Time	City Centre	4 years	US1218F	
With Professional Placement Year	City Centre	5 years	US1220	

#### 10 Entry Requirements

The admission requirements for this course are stated on the course page of the BCU website at <a href="https://www.bcu.ac.uk/">https://www.bcu.ac.uk/</a> or may be found by searching for the course entry profile located on the UCAS website.



11	Course Learning Outcomes	
	Knowledge & Understanding	
1	Demonstrate knowledge and understanding of digital data preservation, recovery, analysis and	
	evidence documentation procedures for digital forensic investigations, legal and commercial	
•	USE.	
2	Demonstrate knowledge of principles and underlying technologies of computer and mobile	
3	digital device operating systems, and their underpinning protocols and data structures. Demonstrate knowledge and understanding of appropriate tools, techniques and standards used	
ა	in analysing and assessing digital and computer networked systems.	
4	Describe the regulatory systems and principal legal issues, offences and liabilities that arise in	
-	the context of computer use and misuse.	
	Cognitive & Intellectual Skills	
5	Use proficiently information and materials from a variety of sources for independent enquiry and	
	learning.	
6	Demonstrate a creative and innovative ability in the synthesis of solutions and in formulating	
	designs in secure digital and computer networked systems.	
7	Draw independent conclusions based on a rigorous, analytical and critical assessment of	
	argument, opinion, law and data.	
8	Critically analyse and evaluate evidence gathering and analysis techniques in order to	
	determine the credibility of factual evidence obtained.	
	Practical & Professional Skills	
9	Dian design and employ techniques and technologies used by forensis investigators for	
9	Plan, design and employ techniques and technologies used by forensic investigators for computer/digital device hardware and software system analysis.	
10	Demonstrate practical skills acquired through work carried out in laboratories and workshops in	
10	individual and/or group project work in accordance with ethical standards, professional codes of	
	conduct and set guidelines.	
11	Implement applications using appropriate methodologies, tools and techniques.	
12	Work independently or within a group, with limited need for supervision, in a professional and	
	industrial context.	
	Key Transferable Skills	
13	Monitor, record, analyse and interpret data to effectively communicate to diverse audiences.	
14	Manage time, prioritise activities and work to timescales.	
15	Demonstrate effective information retrieval skills from a range of sources and be able to	
	accurately cite and reference such sources.	
16	Reflect on progress and plan for personal and career development.	



#### 12 **Course Requirements**

#### 12a Level 3:

# To complete this course, you must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP3010	Fundamental Mathematics	20
CMP3014	Fundamentals of Digital Technology	20
CMP3012	Web Application Design	20
CMP3013	Audio / Video Fundamentals	20
BNV3002	Independent Practice	20
CMP3009	Foundations of Programming	20

#### Level 4:

# To complete this course, you must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP4275	Computer Forensics Fundamentals	20
CMP4267	Computer Systems	20
CMP4268	Mathematics for Computing	20
CMP4269	Network Fundamentals	20
CMP4266	Computer Programming	20
CMP4265	Applied Operating Systems	20

#### Level 5:

# To complete this course, you must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP5336	The English Legal System and IT Law	20
CMP5326	Advanced Programming for Digital Forensics	20
CMP5319	System Security Attacks and Defences	20
CMP5357	Cyber Security Operations	20
CMP5328	Computer Forensics Tools and Techniques	20
CMP5320	Networking Technologies	20



#### **Professional Placement Year (optional)**

To qualify for the award of Bachelor of Science with Honours Digital Forensics with Foundation Year and Professional Placement Year, you must successfully complete all the modules listed as well as the following Level 5 module:

Module Code	Module Name	Credit Value
PPY5004	Professional Placement	120

Level 6:

To complete this course, you must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value	
CMP6184	Incident Response and Investigation Practice	20	
CMP6176	Ethical Hacking	20	
CMP6186	Mobile Device Forensics	20	
CMP6189	Network and Internet Forensics	20	
CMP6200	Individual Honours Project	40	



### 12b Structure Diagram

	Year 5 - Level 6						
Semester 2	Individual Honours Project [40 credits]	Ethical Hacking [20 Credits]	Network and Internet Forensics [20 Credits]				
Semester 1		Incident Response and Investigation Practice [20 Credits]	Mobile Device Forensics [20 Credits]				
	Professional Placement Year 4 (Optional, 120 credits)						
	Year	3 - Level 5					
Semester 2	Cyber Security Operations [20 Credits]	Computer Forensics Tools and Techniques [20 Credits]	Networking Technologies [20 Credits]				
Semester 1	The English Legal System and IT Law [20 Credits]	Advanced Programming for Digital Forensics [20 Credits]	System Security Attacks and Defences [20 Credits]				
	Year	2 - Level 4					
Semester 2	Applied Operating Systems [20 Credits]	Computer Forensics Fundamentals [20 Credits]	Network Fundamentals [20 Credits]				
Semester 1	Computer Programming [20 Credits]	Maths for Computing [20 Credits]	Computer Systems [20 Credits]				
	Year 1 - Level 3						
Semester 2	Audio / Video Fundamentals [20 Credits]	Independent Practice [20 Credits]	Foundations of Programming [20 Credits]				
Semester 1	Fundamental Mathematics [20 Credits]	Fundamentals of Digital Technology [20 Credits]	Web Application Design [20 Credits]				



#### 13 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

- Scheduled Learning includes lectures, practical classes and workshops, contact time specified in timetable
- *Directed Learning* includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning
- *Private Study* includes preparation for exams

The *balance of assessment* by mode of assessment (e.g. coursework, exam and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

#### Level 3

#### **Workload**

#### 32% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	384
Directed Learning	416
Private Study	400
Total Hours	1200

#### **Balance of Assessment**

Assessment Mode	Percentage
Coursework	83%
Exam	0
In-Person	17%

#### Level 4

#### **Workload**

#### 24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288
Directed Learning	444
Private Study	468
Total Hours	1200

#### **Balance of Assessment**

Assessment Mode	Percentage
Coursework	83%



Exam	17%
In-Person	0

#### Level 5

#### **Workload**

#### 24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288
Directed Learning	376
Private Study	536
Total Hours	1200

### Balance of Assessment

Assessment Mode	Percentage
Coursework	70%
Exam	22%
In-Person	8%

#### Level 6

#### <u>Workload</u>

#### 17% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	202
Directed Learning	260
Private Study	738
Total Hours	1200

#### **Balance of Assessment**

Assessment Mode	Percentage
Coursework	84%
Exam	4%
In-Person	12%