Course Specification

Course Summary Information				
1	**Course Title**		BSc (Hons) Computer Forensics with Foundation Year	
2	**BCU Course Code**	**UCAS Code**	US0677F	I12C
3	**Awarding Institution**		Birmingham City University	
4	**Teaching Institution(s)** (if different from point 3)			
5	**Professional Statutory or Regulatory Body (PSRB) accreditation** (if applicable)			

6	**Course Description**
	With digital forensics playing a critical role in the world of modern criminal investigations, our BSc Computer 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 computer 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 computer forensics expert or forensic investigator. The multidisciplinary nature of the course will foster the essential skills you require in computer networking, ethical hacking, computer programming, 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 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	**Name of Final Award**	**Level**	**Credits Awarded**
	Bachelor of Science with Honours Computer Forensics Bachelor of Science with Honours Computer Forensics with Professional Placement Year	6 6	480 600
7b	**Exit Awards and Credits Awarded**		
	Foundation Certificate Computing Certificate of Higher Education Computer Forensics Diploma of Higher Education Computer Forensics Bachelor of Science Computer Forensics	3 4 5 6	120 240 360 420

8	**Derogation from the University Regulations**
	Not applicable

9	**Delivery Patterns**		
Mode(s) of Study	**Location**	**Duration of Study**	**Code**
Full Time	City Centre	4 years	US0677F
With Professional Placement Year	City Centre	5 years	US1082

10	**Entry Requirements**
	The admission requirements for this course are stated on the course page of the BCU website at https://www.bcu.ac.uk/ 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 digital device operating systems, and their underpinning protocols and data structures.
3	Demonstrate knowledge and understanding of appropriate tools, techniques and standards used 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	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 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:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP3010	Fundamental Mathematics	20
BNV3001	Academic and Personal Study Skills	20
CMP3012	Web Application Design	20
CMP3013	Audio / Video Fundamentals	20
BNV3002	Independent Practice	20
CMP3009	Foundations of Programming	20

Level 4:

In order to complete this course a student 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
CMP4279	File System Analysis	20

Level 5:

In order to complete this course a student 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
CMP5330	Data Storage and Recovery	20
CMP5328	Computer Forensics Tools and Techniques	20
CMP5320	Networking Technologies	20

Professional Placement Year (optional)

In order to qualify for the award of Bachelor of Science with Honours Computer Forensics with Foundation Year and Professional Placement Year, a student must successfully complete all of the modules listed as well as the following Level 5 module:

Module Code	Module Name	Credit Value
TBC	Professional Placement	120

Level 6:

In order to complete this course a student 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

<table>
<tr><th colspan="4">Year 5 - Level 6</th></tr>
<tr><td>Semester 2</td><td rowspan="2">Individual Honours Project
[40 credits]</td><td>Ethical Hacking
[20 Credits]</td><td>Network and Internet Forensics
[20 Credits]</td></tr>
<tr><td>Semester 1</td><td>Incident Response and Investigation Practice
[20 Credits]</td><td>Mobile Device Forensics
[20 Credits]</td></tr>
<tr><td colspan="4">Professional Placement Year 4 (Optional, 120 credits)</td></tr>
<tr><th colspan="4">Year 3 - Level 5</th></tr>
<tr><td>Semester 2</td><td>Data Storage and Recovery
[20 Credits]</td><td>Computer Forensics Tools and Techniques
[20 Credits]</td><td>Networking Technologies
[20 Credits]</td></tr>
<tr><td>Semester 1</td><td>The English Legal System and IT Law
[20 Credits]</td><td>Advanced Programming for Digital Forensics
[20 Credits]</td><td>System Security Attacks and Defences
[20 Credits]</td></tr>
<tr><th colspan="4">Year 2 - Level 4</th></tr>
<tr><td>Semester 2</td><td>File System Analysis
[20 Credits]</td><td>Computer Forensics Fundamentals
[20 Credits]</td><td>Network Fundamentals
[20 Credits]</td></tr>
<tr><td>Semester 1</td><td>Computer Programming
[20 Credits]</td><td>Maths for Computing
[20 Credits]</td><td>Computer Systems
[20 Credits]</td></tr>
<tr><th colspan="4">Year 1 - Level 3</th></tr>
<tr><td>Semester 2</td><td>Audio / Video Fundamentals
[20 Credits]</td><td>Independent Practice
[20 Credits]</td><td>Foundations of Programming
[20 Credits]</td></tr>
<tr><td>Semester 1</td><td>Fundamental Mathematics
[20 Credits]</td><td>Academic and Personal Study Skills
[20 Credits]</td><td>Web Application Design
[20 Credits]</td></tr>
</table>

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	95%
Exam	0
In-Person	5%

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	67%
Exam	25%
In-Person	8%

Level 6

Workload

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	88%
Exam	0
In-Person	12%