Course Specification

Course Summary Information				
1	**Course Titles**		BSc (Hons) / MSci Digital Forensics	
2	**Course Codes**	**UCAS Codes**	US1218 BSc (Hons) UM0084 MSci	I120
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**
	Join us at Birmingham City University and study Digital Forensics in the UK. Our BSc (Hons) / MSci Digital Forensics course gives you access to study in our specialist Digital Forensics labs, all equipped to industry standards and run the latest software, meaning you can experience the most current technology and prepare yourself for the working world. With digital forensics playing a critical role in the world of modern criminal and corporate investigations, studying Digital Forensics with us will help you develop the practical and professional skills needed by employers in the digital forensics, cyber security, law enforcement and the wider corporate sectors. The course covers the acquisition, analysis and interpretation of data recovered from computers and digital devices to establish factual evidence. Our dedicated specialist Digital Forensics Laboratory hosts industry standard digital forensics software and tools. You will also develop the necessary legal, expert witness and professional skills required by employers. **What's covered in the course?** This 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. You'll be joining a well-established course, 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. 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. Motivated by a practice led, knowledge applied philosophy, our course emphasises 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. Studying computing with us puts you at the heart of an exciting, innovative community. Part of your first-year assessment will involve taking part in our annual Innovation Fest, where students get together to solve society's problems with creative technology. Previous projects have included medical assistance drones, accessible gaming controllers, and smart housing solutions. The event brings together students, academics and industry guests, so it's a great way to have fun, build experience and network, and win prizes! You can also opt for an industrial placement year, which gives you an invaluable opportunity to hone your expertise, try out a potential career path and get relevant workplace experience that is valued by employers.

7	**Course Awards**		
7a	**Possible Final Awards for the Digital Forensics Course**	**Level**	**Credits Awarded**
	For BSc (Hons):		
	Bachelor of Science with Honours Digital Forensics	6	360
	Bachelor of Science with Honours Digital Forensics with Professional Placement Year	6	480
	For MSci:		
	Integrated Master of Science Digital Forensics	7	480
	Integrated Master of Science Digital Forensics with Professional Placement Year	7	600
7b	**Possible Exit Awards and Credits Awarded for the Digital Forensics Course**		
	Certificate of Higher Education Digital Forensics	4	120
	Diploma of Higher Education Digital Forensics	5	240
	Bachelor of Science Digital Forensics	6	300

8	**Derogations from the University Regulations**
	1. A maximum volume of 30 credits per course in a Bachelor's or Integrated Master's degree can be compensated, except that any compensation of Level 3 modules is not included in that limit. 2. A maximum volume of 20 credits per course in a Master's degree (other than an integrated Master's degree) can be compensated. 3. No condonement of modules at Levels 4-7 is permitted. 4. Where appropriate, a stage mean of at least 50% is required for students to progress from Bachelor's level (Level 6) on to the final stage of an Integrated Master's degree (Level 7), or to transfer course from a relevant Bachelor's degree to an Integrated Master's degree.

9	Delivery Patterns		
Mode(s) of Study	**Location**	**Duration of Study**	**Code**
BSc (Hons) Full Time	City Centre	3 years	US1218
BSc (Hons) with Professional Placement Year	City Centre	4 years	US1220
MSci Full Time	City Centre	4 years	UM0084
MSci with Professional Placement Year	City Centre	5 years	UM0086

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 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
CMP4265	Applied Operating Systems	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
CMP5357	Cyber Security Operations	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 Digital Forensics with Professional Placement Year or Integrated Masters of Science Digital Forensics with 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
PPY5004	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

Level 7:
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
CMP7164	Advanced Techniques in Digital Forensics	20
CMP7176	Unix Systems Forensic Analysis	20
CMP7167	eDiscovery and Data Analytics	20
CMP7208	Group Master's Project	60

12b Structure Diagram

Level 7 – Year 5			
Semester 2	Group Project [60 Credits]		
Semester 1	Advanced Techniques in Digital Forensics [20 Credits]	Unix Systems Forensic Analysis [20 Credits]	eDiscovery and Data Analytics [20 Credits]
Level 6 – Year 4			
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 3 (optional) **Professional Placement Module (120 Credits)**			
Level 5 – Year 2			
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]
Level 4 – Year 1			
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]

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 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

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	84%
Exam	4%
In-Person	12%

Level 7

Workload

14% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	162
Directed Learning	288
Private Study	750
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	95%
Exam	0
In-Person	5%