



Course Handbook
MSc / Postgraduate Diploma / Postgraduate Certificate
Cybercrime Investigation
2019/20
Course Leader: Bob Barnes
School of Forensic and Applied Sciences



Please read this Handbook in conjunction with the University's Student Handbook.

All course materials, including lecture notes and other additional materials related to your course and provided to you, whether electronically or in hard copy, as part of your study, are the property of (or licensed to) UCLan and **MUST** not be distributed, sold, published, made available to others or copied other than for your personal study use unless you have gained written permission to do so from the Dean of School. This applies to the materials in their entirety and to any part of the materials.

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1. Welcome to the course

The School of Forensic and Applied Sciences at the University of Central Lancashire provides undergraduate education in the areas of Forensic Science and Policing and Criminal Investigation. It offers six main areas of specialist education within these programmes: forensic investigation (crime scene investigation, laboratory analysis and evidence interpretation), forensic biology, forensic anthropology, forensic chemistry, geography and policing. It has invested significantly in staff and physical resources in these six areas since its establishment (initially as the Centre for Forensic Science) in September 2000. In the time since its inception, it has successfully established itself as the largest provider of higher education in this field in the UK and now hosts some 1,500 undergraduate students and over 90 academic members of staff. Its specialist facilities, laboratories and equipment resources are arguably the best of any UK University.

The School has expanded its educational provision to the taught postgraduate arena through the validation and delivery of one-year MSc programmes in areas of particular staff expertise. The areas currently offered include Counter Terrorism, Criminal Investigation, DNA Profiling, Document Analysis, Fire Investigation and Forensic Anthropology to name but a few. I am pleased to welcome you to the start of your studies on these courses and also to the School. We are proud of our staff, courses and our students and I hope that, as well as benefiting from your postgraduate education, you will enjoy your time with us in the School.

This booklet contains, in addition to academic information, details of formal routes by which you can make your views of your educational provision known to us, but we also welcome more informal feedback and communication from our students. Please be assured that I and the other staff of the School will do our best to be available to you and responsive to your needs. As you come to know us over the next few weeks and months, I hope you will find us and the School provide a friendly and supportive environment for you and your studies. Welcome.

Professor Michael Mulqueen

Head of School of Forensic and Applied Sciences

1.1 Rationale, aims and learning outcomes of the course

This MSc has been designed to provide an in-depth study of Cybercrime Investigation and develop critical and analytical skills involving the principles, practices and techniques of Cybercrime Investigation. The aims of the programme are to:

- To equip students with the knowledge and practical skills to understand psychological, investigative and technical aspects of cybercrime.
- To develop students analytical skills involving the principles, practices and techniques relevant to cybercrime.
- To develop competence in research methods and the presentation of information.
- To develop skills in solving complex problems both independently and as a team member.
- To provide an opportunity for the students to plan and evaluate a cybercrime related project.
- To develop the students' critical thinking skills, communication and self-management skills to a level appropriate to post-graduate students

Learning Outcomes of the Course

The programme provides an opportunity for learners to achieve the following outcomes:

Knowledge and Understanding

- Analyse a problem related to cybercrime drawing on abstract concepts to synthesise and test potential solutions
- Analyse the needs of specific target audiences for presenting complex information
- Apply data handling skills, effectively plan a project and use documentation skills in an appropriate manner.
- Design, plan and implement solutions to problems in criminal investigation and be capable of analysing the potential effectiveness of such solutions
- Develop and write a case study analysis and a dissertation within guidelines and be able to critically evaluate the success of such a project
- Apply the skills developed on the course to a relevant individual project
- Synthesise problem solutions either independently and/or as part of a team
- Critically evaluate technologies related to the handling of computer-based evidence
- Interpret relevant literature relating to cybercrime

Subject Specific Skills

- Implement detailed investigative solutions to challenging problems.
- Effectively communicate cybercrime Investigation solutions with both experts and non-experts.
- Research information from all relevant sources.
- Evaluate different potential solutions to complex problems.
- Identify gaps in current knowledge.
- Critically evaluate technologies used within a digital forensic investigation
- Discuss cybercrime topics from a multidisciplinary / multi-perspective point of view

Thinking Skills

- Critically evaluate complex and conflicting information that may arise in cybercrime investigation
- Plan and conduct an M-level research project.
- Confidently communicate complex findings with both experts and non-experts.
- Make informed decisions, and critically reflect on the implications of those decisions

Other skills relevant to employability and personal development

- Time management skills
- Work in and lead teams.
- Work independently.
- Generate original ideas.
- Confidence to make decisions.
- Presentation Skills



1.2 Course Team

The course team are responsible for the academic delivery of the programme. The members of the course team are:

Allison Jones	Executive Dean	aejones@uclan.ac.uk office: JBF206
<p>Allison completed a Master's degree in Forensic Science at Strathclyde University, undertaking her thesis in developing car paint analysis in Toronto. She followed this with a PhD at Durham into the analysis of sunscreens. Her interests lie in the fields of Photochemistry and Analytical Chemistry, especially spectroscopy and the applications of these techniques for the analysis of evidential materials. Allison has been in the School of Forensic and Applied Sciences since its inception in the summer of 2000. Ext. 2505</p>		
Bob Barnes	Course Leader	rbarnes@uclan.ac.uk Ext 4151
<p>Bob retired from the Serious and Organised Crime Agency in 2009 in the rank of Principal Officer he is also a former Police Officer having served in the Hertfordshire Constabulary for 27 years and then the National Crime Squad prior to the Serious and Organised Crime Agency. He has been a career detective specialising in covert policing having been seconded to the Regional Crime Squads Drugs Wing, South East Regional Crime Squad and the National Crime Squad. He has been the Manager for the Hi Tech Crime Unit whilst in the Force Intelligence Bureau. He was an accredited SPOC for Communications Data.</p> <p>In his latter years of service he was the Training Manager for the National Crime Squad and in SOCA responsible for the development of Intelligence and Investigative training including the identification and training of SOCA Powers. Bob has an MSc in Criminal Investigation having studied at the University of Teesside, he also has a Cert Ed in Adult Teaching.</p> <p>He is accredited to use Cellebrite UFED Physical Analyser for performing mobile phone investigations</p> <p>Bob has responsibility as Course Leader and Module tutor for the Policing of Cybercrime.</p>		

Joanne Bryce	Senior Lecturer	jbryce@uclan.ac.uk Ext 3437
<p>Jo Bryce has a PhD in Psychology from the University of Manchester. Her research interests relate to the psychological, social and forensic aspects of the Internet and related technologies. This has a specific focus on their use by young people, associated risk exposure and safety, as well as the use of ICT to facilitate sexual offending and other forms of cybercrime (e.g., filesharing and IP theft). These research interests have developed from her work as a former Coordinator of the UK National Awareness Node for Child Safety on the Internet (now known as Safer Internet Centres), and the project lead for the completed ISCA and INSAFE projects (both funded by the European Commission Safer Internet Plan). She was also coordinator of the EU FP7 funded COUNTER Project which informed evidenced-based policy making in relation to intellectual property infringement and filesharing. She has extensive experience of researching young peoples' online behaviours and experiences using qualitative and quantitative methodologies, and has undertaken reviews of associated online technologies and services for the European Commission and Council of Europe. Her work focuses on informing evidence-based approaches to the development and delivery of high quality and wide ranging awareness materials and training packages for education, enforcement and child protection, parents and young people which promote Internet safety and cybercrime</p>		
John Dempsey	Senior Lecturer	jdempsey@uclan.ac.uk Ext 3307
<p>John has been a lecturer at UCLan since 2000, has been the course leader for Forensic Computing since 2005 and is a Fellow of the Higher Education Academy. Before his University career he worked as a Software Engineer within the defence and pharmaceutical industries. His main duties involved developing software for electronic data interchange, smart databases and enterprise resource planning.</p> <p>John's main research interest lies in the reverse engineering of application/operating system evidence. John is currently undertaking a Master of Research in Child Computer Interaction. He is accredited to use Cellebrite UFED Physical Analyser for performing mobile phone investigations, and has completed Guidance Software's "Computer Forensics 1" and "Computer Forensics 2" training for EnCase.</p>		
Neil Smith	Visiting Speaker	info@uk-osint.com
<p>Neil served over 10 years as a police officer in a major UK police force and has spent time working as a counter-fraud specialist for a government department and as a fraud investigator for insurance companies. For the last 10years Neil has specialised as an investigative researcher, using the internet to obtain information for a mixture of clients, from insurance companies to law enforcement agencies and has delivered specialist training to investigators and journalists in the UK and Europe. Neil has presented at several International Conferences. Neil will deliver the module on Open Source Internet Investigation.</p>		

1.3 Expertise of staff

The course team are particularly qualified to teach this course. The course material is delivered by retired practitioners and academics who are experts in their respective fields. The full-time academic tutors are engaged in subject-relevant research.

1.4 Academic Advisor

You will be assigned an Academic Advisor who will provide additional academic support during the year. They will be the first point of call for many of the questions that you might have during the year. Your Academic Advisor will be able to help you with personal development, including developing skills in self-awareness, reflection and action planning.



1.5 Administration details

Course Administration Service provides academic administration support for students and staff and are located in the following hub which open from 8.45am until 5.15pm Monday to Thursday and until 4.00pm on Fridays. The Hub can provide general assistance and advice regarding specific processes such as extenuating circumstances, extensions and appeals.

Foster Building

Foster Hub

Forensic and Applied Sciences

telephone: 01772 891990/1

email contact: FosterHub@uclan.ac.uk

1.6 Communication



The University expects you to use your UCLan email address and check regularly for messages from staff. If you send us email messages from other addresses they risk being filtered out as potential spam and discarded unread.

UCLan staff and tutors will contact you by email, using your UCLan address in the first instance. Answers to your emails are typically sent within 24 hours, within the working week, Monday to Friday. Many notifications regarding the course are posted on the virtual learning system (VLS) called Blackboard. Once you are registered and enrolled on the course you will have access to all of the modules you need access to.

Office hours for staff are typically 8.30am to 4pm Monday to Friday, but some days teaching continues until 7pm, so these hours may vary. If you need to see a course tutor email the person to arrange a meeting convenient for both.

1.7 External Examiner

The University has appointed two External Examiners to your course who help to ensure that the standards of your course are comparable to those provided at other higher education institutions in the UK.

Mick Jamieson formerly of the National Crime Agency and Dr David Lowe, Faculty of Arts, Professional and Social Studies, Liverpool John Moores University Law School.

The External Examiner produces a report annually which will be posted on Blackboard for your information.



2. Structure of the course

2.1 Overall structure

The course can be taken full or part time and also as an attended or online option. The full-time attended option has face-to-face teaching of six hours each week at Preston. However you can also complete the course part-time, over two years. There is also a full-time and part-time option of completing the degree online which means you do not need to attend classes at Preston, but meet other students and tutors in an online environment.

The full-time Masters course is a three-semester programme which lasts for 36 weeks. The first two semesters are 12 teaching weeks long and correspond to the two University semesters while the third semester of 12 weeks is over the summer period [see Fig.1].

There are two intermediate exit points designed into the course. A student who successfully completes the three modules in Semester 1 may be eligible for a Postgraduate Certificate (PgCert). A student who successfully completes the six modules in both Semesters 1 and 2 is eligible for a Postgraduate Diploma (PgDip).

Fig 1

Semester 1 (12 weeks)	Semester 2 (12 weeks)	Semester 3 (12 weeks)
PS4401 Behavioural Dynamics of cybercrime	FZ4720 Open Source Internet Investigation	FZ4707 MSc Dissertation
FZ4701 Research Methods	CO4514 Digital Forensic Technology Or CO4516 Mobile Device Evidence & Investigation Or (Computer Students) CO 4512 Information Security Management	
CO4515 Trends in Cybercrime	FZ4721 Policing Cybercrime	

The part-time course is delivered over two years, you may elect 1 or 2 modules in each of Semester 1 and 2 of year One and the remaining modules in Semester 2 and 3 for year Two. The dissertation runs across Semester 3 year Two

Semester 1 Choice

Module Code PS4401 –Behavioral Dynamics of Cybercrime

Module Code FZ4701 - Research Methods (advice, take this module in year 1)

Module Code CO4515 –Trends in Cybercrime

Semester 2 Choice

Module Code FZ4720 – Open Source Internet Investigation

Module Code FZ4721 – Policing cybercrime

Module Code CO4514 – Digital Forensic Technology

OR (Computer Graduates) CO4512 Information Security Management

Semester 3 In Year 2

Module Code FZ4707 – MSc Dissertation

2.2 Modules available

Each module is a self-contained block of learning with defined aims, learning outcomes and assessment. A standard module is worth 20 credits. It equates to the learning activity expected from one sixth of a full-time undergraduate year. Modules may be developed as half or double modules with credit allocated up to a maximum of 120 credits per module.

The modules that are included in the MSc Cybercrime Investigation programme are described briefly below:

FZ4701 (L7) Research Methods for Crime and Criminal Justice

Investigators are required to have a wide range of skills beyond expertise in their specialist subject. This module provides the necessary skills in research techniques appropriate to the discipline, project management, data analysis and retrieval etc. and equips the student to undertake primary research by acceptable and valid methodologies, some of which will be used in the dissertation module.

CO4512 (L7) Information Security Management

This module is only available to those students with a background in Forensic Computing, and who are not able to take the CO4514 Digital Forensic Technology module. The purpose of this module is to introduce information security and risk management standards that you may encounter as a security professional. It will enable you to critically analyse alternative approaches to the management and risk assessment practices used for information security. It will enable you to evaluate the benefits and pitfalls of compliance-based security.

CO4514 (L7) Digital Forensic Technology

This module will equip students with an understanding of the technical issues involved in the handling of electronic evidence. While electronic evidence is the focus of the module, it discusses the wider issues including mobile devices, network-based evidence, interpretation of evidence, and acquisition of digital evidence. Some students may already have a relevant technical background and can take an alternative module.

CO4515 (L7) Trends in Cybercrime

The purpose of this module is to expose students to a range of trends in cybercrime and to develop their ability to find and evaluate their value for cybercriminals. Students will gain knowledge about methods, techniques and emerging technologies cybercriminals use, how they operate, and how they engage with victims in the cyberspace with the goal of becoming better equipped to prevent, detect and react to cybercrime.

PS4401 (L7) Behavioural Dynamics of cybercrime

This module will provide students with an understanding of current and emerging internet and related technologies which are used to commit criminal offences in a number of different categories of cybercrime (e.g., ID theft, sexual exploitation). It will address current understanding of offender and victim characteristics, motivations, offence processes, and associated investigative issues in relation to different types of cybercrime. Students will be required to apply the knowledge they develop during the module to their own current or future professional practice.

FZ4721 (L7) Policing cybercrime

This module is intended to equip the student to conduct cybercrime Investigations. Students will study the legislation and processes appropriate to the pro-active and reactive investigation of cybercrimes at a local and national level and the issues in respect of working with investigative partners, as well as alternative strategies to prosecution such as prevention, intervention and disruption.

FZ4720 (L7) Open Source Internet Investigation

This module is intended to provide students with an understanding of information that is freely available on the internet that is referred to as Open Source Intelligence. To introduce research skills and techniques to produce efficient and effective searches in databases and social networking sites, developing an understanding of computer security and leaving footprints whilst making online enquiries, the identification of email addresses whilst ensuring such investigations are lawful, necessary and proportionate.

FZ4707 (L7) MSc Dissertation

You will spend 12 weeks undertaking a project which uses and enhances many of the skills learnt on the course, including undertaking primary research. Following the conclusion of the work, you will complete a 10,000 word dissertation; you will be expected to justify your choice of research.



2.3 Course requirements

The modules that you will study in Semesters 1 and 2 will be delivered using seminars which require students to prepare beforehand and engage within the classroom session.

Students that are online will have available to them Adobe Connect software. The tutor will deliver seminars, engage in discussion and the software is also used for group work and presentations. Online sessions are recorded and made available to all students.

2.3 Module Registration Options

Discussions about your progression through the course normally take place in February each year. It is an opportunity for you to make plans for your study over the next academic year. The course team will tell you about the various modules / combinations available and you will both agree on the most appropriate (and legal) course of study for you.

2.4 Study Time

2.4.1 Weekly timetable

A timetable will be available once you have enrolled on the programme, through the student portal.

2.4.2 Expected hours of study

20 credits is a standard module size and equals 200 notional learning hours.

The normal amount of work involved in achieving a successful outcome to your studies is to study for 10 hours per each credit you need to achieve – this includes attendance at UCLan and time spent in private study. Each single module is equivalent to 20 credits, therefore the expectation is each single module will require a total of 200 hours study.

Over the course of a semester this equates to just over 12 hours study per week per module which may be broken down into seminars, tutorials and independent study (in the library or at home). This amounts to a minimum of 36 hours per week. **Any lesser commitment than this is unlikely to produce a good degree.** You should bear this in mind if you are going to undertake employment. Your first commitment must be to the course: if you are a **full-time** student it means just that.

Semester 3 of the course is the MSc Cybercrime Research Report and you will be expected to spend approximately 12 weeks undertaking a project. Whilst conducting your research you will be expected to work on your project for at least 36 hours per week.

The amount of time spent in private study will vary from student to student and will depend on your academic ability. The recommended time should therefore in practice be taken as a minimum value.



2.4.3 Attendance Requirements

You are required to attend all timetabled learning activities for each module. Notification of illness or exceptional requests for leave of absence must be made to: FosterHubAttendance@uclan.ac.uk or by telephoning the hub on 01772 891990 or 01772 891991.

3. Approaches to teaching and learning

3.1 Expertise of staff

See Section 1.3 above

3.2 Learning and teaching methods

The programme is designed to produce Masters Graduates with both general and specific skills pertinent to the area studied. The courses are assessed by formative and summative coursework to ensure that your knowledge and abilities are fully evaluated.

The course will be delivered by lectures and seminars often involving practically focused debating sessions. The computer based modules will involve practical computer sessions.

Cybercrime is a multi-disciplinary subject covering elements of a range of theoretical principles and practical applications. Consequently the subject matter covered is diverse and the school therefore uses a diverse portfolio of teaching and assessment methods to reflect the nature of this subject. There are formal lectures followed up by small group tutorials in which the subject of the lecture is explored in detail. Skills are developed through practical sessions which may incorporate stand-alone practical exercises or individual or group projects. You are also encouraged to engage in considerable independent study and indeed this is essential to pass the course.

Much of the course is delivered by university staff but, where appropriate, experts in their own field are brought in to speak with authority from their own experience and expertise.

As with all university education you are responsible for your own learning; the seminars are merely the starting point and you will have to undertake a substantial amount of study in order to succeed.

The aim of the School is to promote deep and active learning and for you to achieve an appropriate balance between (a) the accumulation of subject specific knowledge (b) the understanding of subject-specific concepts (c) the application of these and (d) the development of general investigative and presentational skills.

3.3 Study skills

Teaching staff recognise that students, particularly those returning to study after a gap or without an undergraduate degree, may find the skills of studying and academic essay writing initially difficult to acquire or re-acquire. To that end staff will provide generic or where necessary 1:1 support.

All of the courses within the school have a study skills module to assist with the development of your academic and employability skills. There are a variety of other services that support schools and these include: WISER <http://www.uclan.ac.uk/students/study/wiser/index.php>



3.4 Learning resources

3.4.1 Learning Information Services (LIS) Extensive [resources](#) are available to support your studies provided by LIS – library and IT staff. Take advantage of the free training sessions designed to enable you to gain all the skills you need for your research and study.

LIS provide access to a huge range of electronic resources – e-journals and databases, e-books, images and texts.

Course and module materials are **not** provided in ‘hard copy’ format, however, wherever practicable, lecture notes and/or presentations, seminar materials, assignment briefs and materials and other relevant information and resources are made available in electronic form via **BlackBoard**. This is the brand name for the on-line Virtual Learning Environment (VLE) that the University uses to support and enhance teaching and learning.

All students can access the BlackBoard spaces for the course and modules that they are registered for. Once logged into your BlackBoard area you can access material from the course and all of the modules you are studying without having to log in to each module separately.

3.4.2 Electronic Resources

LIS provide access to a huge range of electronic resources – e-journals and databases, e-books, images and texts. Additional material will be provided to students via BlackBoard.

3.5 Personal development planning

While you are studying for your MSc, you will learn many new concepts, analyse them, evaluate them and apply them. You already expect to learn lots of facts and techniques to do with your subject specialism, but you will also learn other things of which you might not be aware. You will learn how to study more independently than you may have done previously, how to work with other people, how to manage your time to meet deadlines, and so on. If you are to be an employable individual it is vital that you can list the skills employers’ value in your CV.

Employers are looking for skills like:

- self-organisation
- team work
- good written communication
- good oral communication
- problem solving

In order to help you in this area, the school has introduced a system that aims to:

- help you to identify the **skills** you should be developing,
- help you to **identify** the ones you are weak in, and
- take **action** to improve those skills.

This approach can broadly be described as **Personal Development Planning**, and can be defined as:

A structured and supported process undertaken by an individual to reflect upon their own learning, performance and/or achievement and to plan for their personal, educational and career development.

The University puts a high priority on your personal development, and so keeping a record of your achievements is encouraged and will help when you are applying for jobs. When you ask staff for a reference, they could use this information to help them provide more rounded detail

You have chosen to study one of the MSc courses, presumably with a view to pursuing a career in that field area in the future. All our courses have been designed to ensure that you have the relevant knowledge and skills base to be well placed to secure employment and pursue a career in your chosen field. However, your University experience is not only about achieving your chosen award, it is also about developing as a person and realising your potential. We want you to gain the skills and attitudes that will help you to achieve your goals and aspirations.

Your future is important to us, so to make sure that you achieve your full potential whilst at university and beyond, your course has been designed with employability learning integrated into it. This is not extra to your degree, but an important part of it which will help you to show future employers just how valuable your degree is. These “Employability Essentials” take you on a journey of development that will help you to write your own personal story of your time at university.

UCLan Careers team offers a range of support for you including:

- career and employability advice and guidance appointments
- support to find work placements, internships, voluntary opportunities, part-time employment and live projects
- workshops, seminars, modules, certificates and events to develop your skills

Daily drop in service available from 09:00-17:00 for CV checks and initial careers information. For more information arrange to visit the team or access careers and employability resources via the Student Portal.



3.6 Preparing for your career

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4. Student Support

The <i> is a central Student Information Centre and your first point of contact located on the ground floor of the UCLan Library. You can obtain information on a wide range of topics including Council Tax Exemption Certificates, Bank and Confirmation of Study Letters, Portable Financial Credits, Printing and Printer Credit, UCLan Cards and the 'i' shop.



4.1 Academic Advisors

The overall aim of Academic Advisor support is to enhance your experience at UCLan. Your Academic Advisor:

- Should be the first point of contact in any issues you are facing. Your academic Advisor may not be able to deal with your concern, but will be able to signpost you to relevant services;
- Will be a member of staff associated with your course ;
- Will be allocated to you during the induction period and will normally remain your Academic Advisor for the duration of your course.

4.2 Students with disabilities

If you have a disability that may affect your studies, please either contact the Disability Advisory Service - disability@uclan.ac.uk - or let one of the course team know as soon as possible. With your agreement information will be passed on to the Disability Advisory Service. The University will make reasonable adjustments to accommodate your needs and to provide appropriate support for you to complete your study successfully. Where necessary, you will be asked for evidence to help identify appropriate adjustments.

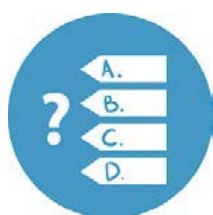
The School has a named lead for students with disabilities Mark Toogood. Mark can be Contacted directly on MTtoogood@uclan.ac.uk tel 01772 893528.

4.3 Students' Union

The Students' Union offers thousands of volunteering opportunities ranging from representative to other leadership roles. We also advertise paid work and employ student staff on a variety of roles. You can find out more information on our website:

<http://www.uclansu.co.uk/>

5. Assessment



5.1 Assessment Strategy

The modules are assessed mainly by coursework. To ensure that you do not have an excessive amount of assessment at any one time, the coursework assessment will take place throughout the course.

Semester 1 of the course is designed to ensure that you have the basic skills needed to obtain an MSc. It is important that you develop a range of skills that will be of benefit when you gain employment after the course. The main skills that you are developing will be in the areas of presentations, reflective writing and problem solving.

You will prepare essays, reports and presentations and peer group assessment may be used and you will be encouraged to discuss your strengths and weaknesses with each other.

Report writing will take several different forms to ensure that you develop different techniques according to the nature of the task being undertaken. These consist of the conventional report, articles of prescribed length etc. In addition there will be problem-solving tasks that will involve literature searches, use of the Internet and case studies.

Most modules will be assessed by coursework assignments. Each assignment will be substantial and will be based upon work undertaken in seminars and lectures. Modules assessed by coursework only may have additional assignments that can take the form of a mini project. A schedule of assignments will be drawn up ensuring that there is no more than one assignment in a particular week. The deadline for handing in of assignments will be rigorously adhered to as would be expected in a working environment.

Reassessment

Candidates who fail any of the modules are normally entitled to one reassessment. The conditions for passing a module are explained in the Assessment Strategy of each of the modules.

The grade allocated to a passed reassessed piece of assessment will not exceed a mark of 50%.

The timing of the reassessment will be determined by the Progress Review or Examination Boards.

The University publishes the principles underpinning the way in which awards and results are decided in Academic Regulations. Decisions about the overall classification of awards are made by Assessment Boards through the application of the academic and relevant course regulations.

5.2 Notification of assignments and examination arrangements

Normally assessed work should be submitted through BlackBoard and Turnitin. Information about the requirements for individual assessments and their respective deadlines for submission/examination arrangements will be provided in the assignment brief or in the module booklet that will be posted on BlackBoard.

5.3 Referencing

Students MUST use Harvard referencing to refer to sources in assignments. The Harvard system has many different styles, but this school uses the Lancashire Business School (LBS) Harvard style. There is a handbook of how to use LBS Harvard on Blackboard and examples are available using this link:

https://www.uclan.ac.uk/students/study/wiser/referencing_guides.php

5.4 Confidential material

You are not required to access confidential information during the course e.g. offender details as part which might inform an assessment. However, you may have access to data which is subject to the Data Protection Act 1998 of your job. Students are reminded of the ethical and legal responsibilities to respect confidentiality and maintain the anonymity of individuals and organisations within their assignments.

5.5 Cheating, plagiarism, collusion or re-presentation

Please refer to the information included in section 6.6 of the University Student Handbook for full definitions. The University uses an online Assessment Tool called Turnitin. A pseudo-Turnitin assignment will be set up using the School space on Blackboard to allow students to check as many drafts as the system allows before their final submission to the 'official' Turnitin assignment. Students are required to self-submit their own assignment on Turnitin and will be given access to the Originality Reports arising from each submission. In operating Turnitin, Schools must take steps to ensure that the University's requirement for all summative assessment to be marked anonymously is not undermined and therefore Turnitin reports should either be anonymised or considered separately from marking. Turnitin may also be used to assist with plagiarism detection and collusion, where there is suspicion about individual piece(s) of work.

Plagiarism is also covered in the Student Handbook. The Regulations for the Conduct of Students define Plagiarism as "Any use of unfair means in an attempt to enhance performance". It is, more simply, 'cheating'.

Plagiarism is passing the work of other people as your own. It does not matter if that someone is a well-known published author, a web page or another student, it still counts as plagiarism. All quotes, ideas, images and music have to be properly acknowledged and referenced. Even if someone agrees that you may use their ideas or material, inappropriate referencing will still be considered plagiarism.

Plagiarism can be detected by the university through an electronic plagiarism detection device that looks through the web and extensive databases of reference material to detect duplication.

Plagiarism is a very serious academic offence and can be punishable. This is true even when the student is unaware that they are plagiarising. The first time someone is found to have committed plagiarism, they will normally be required to resubmit their work and the MODULE mark will have a maximum of 50% (bare pass). The second time someone commits plagiarism, no re-submission is offered and the MODULE will have a maximum mark of 0%.

More information is available at: <http://www.uclansu.co.uk/academicmatters/unfairmeans>

6. Classification of Awards

The University publishes the principles underpinning the way in which awards and results are decided in [Academic Regulations](#). Decisions about the overall classification of awards are made by Assessment Boards through the application of the academic and relevant course regulations.



7. Student Feedback

You can play an important part in the process of improving the quality of this course through the feedback you give.

7.1 Student Staff Liaison Committee meetings (SSLCs)

Details of the Protocol for the operation of SSLCs is included in section 8.2 of the University Student Handbook.

The purpose of a SSLC meeting is to improve courses, to have an open discussion and respect each other's views, to share good practice where identified, to provide opportunity for students to feedback to staff about their course and student experience, to regularly review the course to improve its development, and to jointly work together to action plan against issues raised.

There will normally be one meeting per semester which will last no more than 2 hours. Your School President will Chair the meetings with an academic co-Chair, using guidelines and will provide a record of the meeting with any decisions and / or responses made and/or actions taken as a result of the discussions held. A standard agenda and action grid template will be used. Course representatives will gather feedback from students and communicate this to the School President in advance of the meetings.

8. Appendices

UNIVERSITY OF CENTRAL LANCASHIRE

Programme Specification

This Programme Specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided.

Sources of information on the programme can be found in Section 17

1. Awarding Institution / Body	University of Central Lancashire
2. Teaching Institution and Location of Delivery	University of Central Lancashire Preston Campus
3. University Department/Centre	Forensic and Applied Sciences
4. External Accreditation	
5. Title of Final Award	MSc Cybercrime Investigation Postgraduate Diploma Cybercrime Investigation Postgraduate Certificate Cybercrime Investigation
6. Modes of Attendance offered	Full-time/part-time and Distance Learning
7a) UCAS Code	
7b) JACS Code	F410
7c) HECOS Code	100486
8. Relevant Subject Benchmarking Group(s)	QAA Masters Degree Characteristics
9. Other external influences	
10. Date of production/revision of this form	April 2018
11. Aims of the Programme	
<ul style="list-style-type: none"> • To equip students with the knowledge and practical skills to understand psychological, investigative and technical aspects of Cybercrime investigation. • To develop analytical skills involving the principles, practices and techniques relevant to cybercrime • To develop competence in research methods and the presentation of information • To develop skills in solving complex problems both independently and as a team member • To provide an opportunity for the students to plan and evaluate an cybercrime related project • To develop the students' critical thinking skills, communication and self-management skills to a level appropriate to post-graduate students 	

12. Learning Outcomes, Teaching, Learning and Assessment Methods
A. Knowledge and Understanding
<p>A1. Analyse a problem related to cybercrime drawing on abstract concepts to synthesise and test potential solutions</p> <p>A2. Analyse the needs of specific target audiences for presenting complex information</p> <p>A3. Apply data handling skills, effectively plan a project and use documentation skills in an appropriate manner.</p> <p>A4. Design, plan and implement solutions to problems in criminal investigation and be capable of analysing the potential effectiveness of such solutions</p> <p>A5. Develop and write a case study analysis and a dissertation within guidelines and be able to critically evaluate the success of such a project</p> <p>A6. Apply the skills developed on the course to a relevant individual project</p> <p>A7. Synthesise problem solutions either independently and/or as part of a team</p> <p>A8. Critically evaluate technologies related to the handling of computer-based evidence</p> <p>A9. Interpret relevant literature relating to cybercrime</p>
Teaching and Learning Methods
Lectures, seminars, practical, directed reading, presentations and case studies
Assessment methods
Coursework including essays, a dissertation and presentations
B. Subject-specific skills
<p>B1. Implement detailed investigative solutions to challenging problems.</p> <p>B2. Effectively communicate cybercrime Investigation solutions with both experts and non-experts.</p> <p>B3. Research information from all relevant sources.</p> <p>B4. Evaluate different potential solutions to complex problems.</p> <p>B5. Identify gaps in current knowledge.</p> <p>B6. Critically evaluate technologies used within a digital forensic investigation</p> <p>B7. Discuss cybercrime topics from a multidisciplinary / multi-perspective point of view</p>
Teaching and Learning Methods
Lectures, seminars, directed reading, group and individual projects and presentations.
Assessment methods
Coursework including essays, presentations and on-line moderated professional discussions.
C. Thinking Skills
<p>C1. Critically evaluate complex and conflicting information that may arise in cybercrime investigation</p> <p>C2. Plan and conduct a level 7 research project.</p> <p>C3. Confidently communicate complex findings with both experts and non-experts.</p> <p>C4. Make informed decisions, and critically reflect on the implications of those decisions</p>
Teaching and Learning Methods
Skills, knowledge and understanding are developed through lectures, data interpretation, case studies, research projects, presentations and problem-solving exercises.
Assessment methods
Preparation of essays, reports, group and individual presentations and M-level dissertation.
D. Other skills relevant to employability and personal development
<p>D1. Time management skills</p> <p>D2. Work in, and lead, teams.</p> <p>D3. Work independently.</p> <p>D4. Generate original ideas.</p> <p>D5. Confidence to make decisions.</p> <p>D6. Presentation Skills</p>

Teaching and Learning Methods				14. Awards and Credits*
Skills developed through lectures, tutorials, directed reading, case studies, research projects, presentations, problem solving.				
Assessment methods				
Preparation of essays, reports group and individual presentations.				
13. Programme Structures*			Credit rating	
Level	Module Code	Module Title		
Level 7	FZ4701	Research Methods	20 (C)	Master's Degree in Cybercrime Investigation Requires 180 credits at Level 7 Postgraduate Diploma in Cybercrime Investigation Requires 120 credits at Level 7 Any combination of modules may be studied Postgraduate Certificate in Cybercrime Investigation Requires 60 credits at Level 7 Any combination of modules may be studied
	FZ4707	MSc Dissertation	60 (C)	
	FZ4721	Policing Cybercrime	20 (C)	
	FZ4720	Open Source Internet Investigation	20 (C)	
	PS4401	Behavioural Dynamics of Cybercrime	20 (C)	
	CO4514	Digital Forensic Technology	20 (O)	
	CO4515	Trends in Cybercrime	20 (C)	
	CO4512	Information Security Management	20 (O)	
	CO4516	Mobile Device Evidence and Investigation	20 (O)	
			*Students with significant prior experience of digital forensic technology may enrol on the Information Security Management module	
15. Personal Development Planning				
<p>This is a supported process undertaken by an individual to reflect upon their own learning, performance and / or achievement and to plan for their personal, educational and career development. PDP is delivered and monitored through project modules and the academic advisor system. Students are provided with a PDP handbook and an introductory lecture on it during induction week.</p>				
16. Admissions criteria *				
<p>(including agreed tariffs for entry with advanced standing) <i>*Correct as at date of approval. For latest information, please consult the University's website.</i></p>				
<p>Applicants will normally be required to have:</p> <p>2:2 Hons Degree or equivalent qualifications and experience</p> <p>Applicants will be required to have a minimum level of proficiency in English Language equivalent to IELTS grade 6.5 with no subscore lower than 5.5.</p> <p>Please consult the website or UCLAN admissions department for the most up to date requirements.</p>				
17. Key sources of information about the programme				
<ul style="list-style-type: none"> • University web site www.uclan.ac.uk • School website www.uclan.ac.uk/forensic • Course Leaders • Admissions tutor 				

18. Curriculum Skills Map

Please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

Level	Module Code	Module Title	Core (C), Compulsory (COMP) or Option (O)	Programme Learning Outcomes																							
				Knowledge and understanding									Subject-specific Skills							Thinking Skills				Other skills relevant to employability and personal development			

				A1	A2	A3	A4	A5	A6	A7	A8	A9	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D1	D2	D3	D4	D5	D6
LEVEL 7	FZ4701	Research Methods	COMP		✓	✓	✓			✓			✓	✓	✓	✓	✓			✓		✓		✓	✓	✓			✓
	FZ4707	MSc Dissertation	COMP	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	FZ4721	Policing cybercrime	COMP	✓	✓		✓		✓	✓		✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	FZ4720	Open Source Internet Investigation	COMP	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	PS4401	Behavioural Dynamics of Cybercrime	COMP	✓	✓		✓						✓	✓	✓	✓	✓			✓		✓	✓	✓			✓	✓	
	CO4514	Digital Forensic Technology	COMP		✓		✓				✓	✓		✓	✓	✓	✓	✓	✓				✓	✓			✓		✓
	CO4515	Trends in Cybercrime	COMP	✓	✓		✓		✓	✓		✓		✓	✓		✓		✓	✓	✓		✓	✓			✓	✓	✓
	CO4512	Information Security Management	O	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓			✓			✓			✓	✓	✓
	CO4516	Mobile Device Evidence and Investigation	O	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓

Note: Mapping to other external frameworks, e.g. professional/statutory bodies, will be included within Student Course Handbooks

19. LEARNING OUTCOMES FOR EXIT AWARDS:

Learning outcomes for the award of: Post Graduate Certificate in Cybercrime

- A1. Analyse a problem related to cybercrime drawing on abstract concepts to synthesise and test potential solutions
- A2. Analyse the needs of specific target audiences for presenting complex information
- A7. Synthesise problem solutions either independently and/or as part of a team
- A8. Critically evaluate technologies related to the handling of computer-based evidence
- A9. Interpret relevant literature relating to cybercrime

- B1. Implement detailed investigative solutions to challenging problems.
- B2. Effectively communicate cybercrime Investigation solutions with both experts and non-experts.
- B3. Research information from all relevant sources.
- B5. Identify gaps in current knowledge.
- B6. Critically evaluate technologies used within a digital forensic investigation
- B7. Discuss cybercrime topics from a multidisciplinary / multi-perspective point of view

- C3. Confidently communicate complex findings with both experts and non-experts.
- C4. Make informed decisions, and critically reflect on the implications of those decisions

- D1. Time management skills
- D2. Work in, and lead, teams.
- D3. Work independently.
- D4. Generate original ideas.
- D5. Confidence to make decisions.
- D6. Presentation Skills

Learning outcomes for the award of: Post Graduate Diploma in Cybercrime

- A1. Analyse a problem related to cybercrime drawing on abstract concepts to synthesise and test potential solutions
- A2. Analyse the needs of specific target audiences for presenting complex information
- A3. Apply data handling skills, effectively plan a project and use documentation skills in an appropriate manner.
- A4. Design, plan and implement solutions to problems in criminal investigation and be capable of analysing the potential effectiveness of such solutions
- A7. Synthesise problem solutions either independently and/or as part of a team
- A8. Critically evaluate technologies related to the handling of computer-based evidence
- A9. Interpret relevant literature relating to cybercrime

- B1. Implement detailed investigative solutions to challenging problems.
- B2. Effectively communicate cybercrime Investigation solutions with both experts and non-experts.
- B3. Research information from all relevant sources.
- B4. Evaluate different potential solutions to complex problems.
- B5. Identify gaps in current knowledge.
- B6. Critically evaluate technologies used within a digital forensic investigation
- B7. Discuss cybercrime topics from a multidisciplinary / multi-perspective point of view

- C1. Critically evaluate complex and conflicting information that may arise in cybercrime investigation
- C3. Confidently communicate complex findings with both experts and non-experts.
- C4. Make informed decisions, and critically reflect on the implications of those decisions

- D1. Time management skills
- D2. Work in, and lead, teams.
- D3. Work independently.
- D4. Generate original ideas.

- D5. Confidence to make decisions.
- D6. Presentation Skills