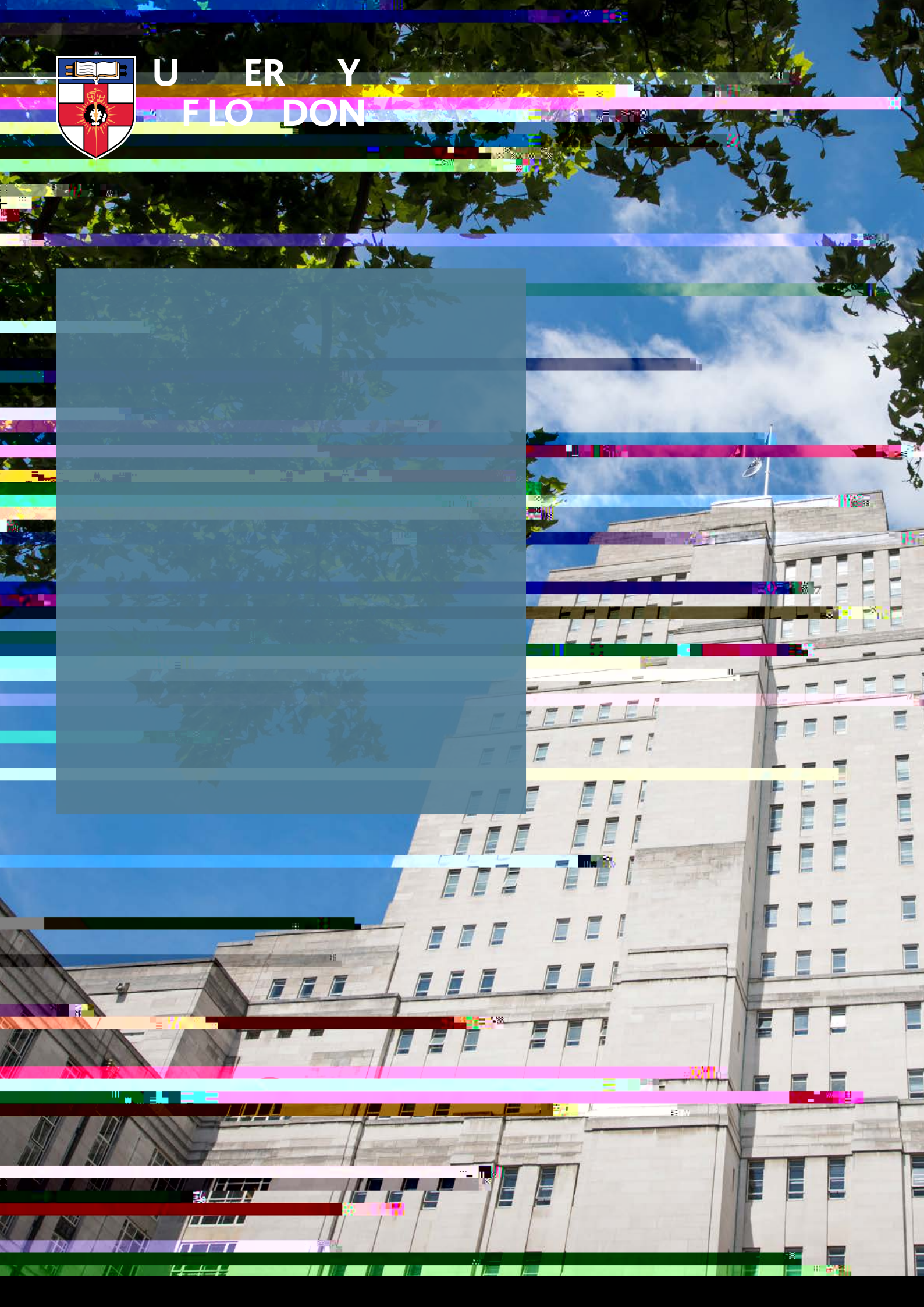
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Last revised 27 March 2024

The Programme Specification gives a broad outline of the structure and content of the hni

Postgraduate Degrees of the University of London may be classified. The award certificate will indicate the level of the academic performance achieved by classifying the

The Framework for Higher Education Qualifications of UK Degree-Awarding Bodies

University of London

The PGCert is a 60 UK credit degree programme. For the PGDip, you must complete one 15-credit core module and three 15-credit optional modules.

The minimum periods of registration, from a student's effective date of registration, are:

	Two years
	One and a half years
	Six months

See the General Regulations for the maximum periods of registration for these qualifications.

*The minimum period of registration applies to students who enter the programme via Direct Entry, is subject to module availability and in some cases it may not be possible to complete within the minimum period of registration. Modules have been launched on a rolling basis since October 2022.

Students entering via the Performance-Based Admission entry route will progress at a slower rate to those who enter via Direct Entry. Full details can be found in Section 6 of the Programme Regulations.

In making a decision as to how many modules to register for in a given session, it is important to take account of on-going work and/or personal commitments

Further information about the credit systems used by universities in the UK and Europe is provided by the Quality Assurance Agency and the European Credit Transfer and Accumulation System.

Where credits are assigned to modules of a programme, credit indicates the amount of learning carried out in terms of the notional number of study hours needed, and the specified Framework for Higher Education Qualifications in England (FHEQ) credit level indicates the depth, complexity and intellectual demand of learning involved. The details below indicate the UK credits and the European Credit Transfer and Accumulation System (ECTS) values.

The MSc Cyber Security comprises a total of 180 UK credits (90 ECTS credits) at FHEQ level 7.

Recognition of prior learning is a generic term for the process by which we recognise and, where appropriate, award credit for learning that has taken place elsewhere, before entry onto this programme of study.

Where the prior learning covered a similar syllabus to a module/course studied elsewhere, credit will be awarded as if you took the Cyber Security module.

See the General Regulations (Section 3) for more rules relating to prior learning.

For this programme the University of London may recognise your prior learning and award you credit towards your qualification.

The portable computer must have at least the following minimum specification:

- Windows: 10 and 11 on 64-bit platforms
- MacOS Big Sur (version 11) and higher
- CPUs newer than 2011 (Intel Sandy Bridge (Core i3, i5 and i7 or newer))
- OpenGL 2.0 graphics driver
- Web camera & microphone (internal or external)
- A broadband internet connection capable of streaming video and a minimum of 0.15Mbps upload speed.

Minimum device requirements are subject to change and older operating systems may become obsolete over time.

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- Manage learning and development, including time management and organisational skills;
- Apply knowledge and skills about cyber/information security to a particular problem,

information on the specific learning outcomes, content and the learning, teaching and assessment methods of each module can be found in the module syllabuses.

The core principles of the learning, teaching and assessment strategy for this programme are outlined below.

An online induction will ensure that they are prepared for study and are familiar with the learning environment and sources of support during their student journey.

All students will have access to an online virtual learning environment (VLE) with learning support and tools enabling them to monitor their progress, assessing fulfilment of learning outcomes and development of skills-based outcomes throughout the curriculum. The VLE will provide a framework for the level of support selected by students.

The learning content will be designed to provide students with opportunities to engage, and encourage reflective and deep learning, with accessibility a key feature to enable students to study across a range of mobile and media channels.

All students will have access to the Virtual Learning Environment, learning content, UoL Online library, tools and activities related to their chosen programme of study. Students will be supported by online tutors.

To facilitate the requirements of a diverse global community of learners, a core feature of this programme is flexibility in the design of the curriculum, providing for modules to be studied as on a modular basis facilitating student progress at a pace suitable to their circumstance.

A core feature of this programme will be a varied range of learning activities embedded within the learning content for each module, designed to provide feedback to students on their progress towards learning outcomes. Summative assessment methods will be designed to promote retention of knowledge, providing encouragement through tutor feedback, with as wide a range of methods as possible to most effectively assess learning outcomes, within the context of the need for secure and reliable techniques appropriate to flexible learning.

The design, development and delivery of this programme will be supported with training for:

-

All assessments are submitted online via a University of London platform. Students must ensure that their device is kept up to date and complies with University Computer Requirements. Online examinations are proctored remotely except for students who study at a Recognised Teaching Centres for which examinations are normally held at established examination centres worldwide.

Each module is run over a 10 week block, with the exception of the Project which is run over two 10-week blocks.

All 15-credit modules are assessed by one element of assessment (100%), either coursework or an online examination.

The Project module (30 credits) is assessed by one element of assessment, a project report (100%).

Resits may be taken once the module results have been confirmed by the Board of Examiners.

Coursework is submitted in the VLE by prescribed deadlines.

An examination is defined as an element of assessment that takes place in a controlled environment. Students will be given details of how the modules on their programme are assessed, the specific environment or location that is permitted and the time allowed for the assessment.

- A University of London email account and web area for personal information management.

The University of London delivers the majority of its online and distance learning programmes through a collaboration between the University of London Worldwide and University of London federation members. However, some of the online and distance learning programmes draw solely on academic input from the University of London and are delivered without academic lead by a federation member. The policies, partnerships (where applicable) and quality assurance mechanisms applicable for the programmes are defined in the following key documents: The Quality Assurance Schedules, Guidelines for Examinations, General Regulations and, for each programme, programme specific regulations.

All University of London qualifications must comply with the Office for Students' (OfS) Conditions of Registration relating to quality and standards, which includes condition B5 (sector-recognised standards). This is to ensure appropriate standards for each qualification. In addition, every online and distance learning programme that is developed by a federation member of the University of London (or a consortium with representation by more than one federation member) will be developed to the same standard as would be applied within the institution concerned. Proportionate and robust approval procedures, including external scrutiny and student engagement, are in place for all programmes. Learning materials are written and all assessments are set and marked by academic staff who are required to apply the University's academic standards.

Some of the key mechanisms in place to assure the standards of all University of London qualifications and the quality of the student experience, include:

- Annual programme reports: produced for all programmes in order to review and enhance the provision and to plan ahead;
- Independent external examiners: submit reports every year to confirm that a programme has been assessed properly and meets the appropriate academic standards;
- Annual student performance, progression and completion statistics
- Periodic programme reviews: carried out every 4-6 years to review how a programme has developed over time and to make sure that it remains current and continues to provide a good student experience.

Enhancements are made as necessary to ensure that systems remain effective and rigorous.

The principal channel for collecting feedback from students is the Student Experience Survey. Carried out every year, this collects feedback from the student body on a range of topics relating to the student lifecycle. The results are analysed externally and then considered in a number of different ways, including by the programme team, principal

committees and the senior leadership team. Details of any resulting actions taken are published on the Virtual Learning Environment and the Student Portal.

Additionally, on completion of their programme of study students will be invited to take a survey that seeks to measure what they have gained from their studies.

A detailed outline of the module syllabus is provided on the Programme page, under structure

For the qualification of MSc Cyber Security you must pass

- The following core modules (each worth 15 credits):
  - CYM010 Cyber security foundations
  - CYM020 Security management and governance

This preliminary module, which must be taken before any of the other modules in the GHJUHH×SURJUDPPH LQWURGXFHV WKH EURDG UDQJH RI FRQF WKDW XQGHUSLQ WKH SURYLVLRQ RI F\EHU VHFXULW\ ×6WXGH cyber security is, why it is important, and of the principal techniques and technologies that DUH XVHG WR DFKLHYH F\EHU VHFXULW\ ×

Gaining an understanding of certain key elements of cyber security is necessary to be able to properly appreciate individual aspects of the subject in greater detail. This module is LQWHQGHG WR JLYH VWXGHQWV WKLV EURDG XQGHUVWDQGLQJ GHYHORSHG×LQ RWKHU×PRGXOHV LQWR D×EURDGHU×FRQWH[W

: One online examination (100%)

7KLV PRGXOH×DLPV WR JHQHUDWH XQGHUVWDQGLQJ DQG DSSU VHFXULW\ PDQDJHPHQW DQG×WKH PDLQ FXUUHQWO\ XVHG DSS including key standardised approaches and the fundamental importance of a risk-based approach. After completing the module, students will also understand key components of practical cyber security management, including the impact of law and regulation, WKH×LPSRUWDQFH×RI DXGLWLQJ DQG WKH NH\ UHQH RI SHRSO students understand the importance of effective security management, case studies of IDLOXUHV ZLOO EH FRQVLGHUHG ×

This module plays a fundamental role in binding together all the other modules of the degree programme; it will address the issue of how to integrate the wide range of possible technologies and techniques for information security into a real-world Information Security 0DQDJHPHQW 6\VWHP IRU DQ RUJDQL VDWLRQ ×

One online examination (100%)

Cybercrime is a complex topic which affects individuals, societies and nations. There is an increasing manifestation of various types of cybercrime, which are either new or evolving. In order to understand the cybercrime environment, this module synthesises its dynamically changing economic, technical, political and psychological components. We explore the types of cybercrime, their manifestations, and their underlying mechanisms. Legal measures and challenges are explored, in view of the global nature of cybercrime. The evolution and the trends of cybercrime are analysed along various models adopted by criminals. Students will gain an understanding of the tools and approaches used in digital forensics and analyse real-world cases of cybercrime.

: One online examination (100%)

&U\SWRJUDSK\ SURYLGHV WKH FRUH WRRONLW WKDW XQGHUSL understanding of what cryptography does, and its limitations, is critical to developing a wider appreciation of the security of everyday digital applications. Since cryptography provides tools for atomic security services such as confidentiality and data integrity, an appreciation of cryptography alspn apprpn apprputal forpsa.1 (tur)0.7 ([c4004F>1 0 0 1 0 0 0 3 0 0 5 6 t 6 o a n a C) 0 . 7 (v) - 1 . 7 (9 (a n d)] T t h

University of London

in cyberspace. Note that this module adopts a non-mathematical approach to cryptography, very much considering it from the perspective of what any good cyber security professional Q H H G V W R × N Q R Z D Q G × D Y R L G L Q J × X Q Q H F H V V D U \ W H F K Q L F D O G

In this module students will explore the role of cryptography in supporting digital security for everyday applications such as the internet, mobile phones, wireless networks and cryptocurrency. Students will develop an understanding of the functionality and purpose of the main cryptographic tools we use today. Students will learn how to make decisions about which cryptographic tools are most appropriate to deploy in specific settings. Students will also explore the wider infrastructure surrounding cryptography and how this impacts the overall security of systems deploying cryptography.

: One online examination (100%)

Computer networking technologies and cyber- S K \ V L F D O V \ V W H P V × I R U P W K H × L Q I U D V W U X F W X U H × R I × R U J D Q L V D W L R Q V × D Q G E X V L Q H V V H V H F R V \ V W H P × D V Z H O O D V F U L W L F D O Q D W L R Q D O L Q I U D V W U X F W X I R XU V × W R X Q G H U V W D Q G × W K H × G H V L J Q × D Q G V H F X U L W \ R I × D Q × R U W H F K Q R O R J L H V × W K H L Q W H U Q H W × D Q G × F U L W L F D O L Q I U D V W U X F foundational connectivity services that are used for the world wide web, distributed F R P S X W H U × D S S O L F D W L R Q V D Q G × V H U Y L F H V R S H U D W L R Q V D Q G L Q I U D V W U X F W X U H ×

7 K L V P R G X O H G L V F X V V H V × Y X O Q H U D E L O L W L H V D Q G W K H H [S O R V \ V W H P V × W K H L Q W H U Q H W × L Q I U D V W U X F W X U H D Q G × S U R Y L G H V W H V W L Q J × Q H W Z R U N V × D Q G V \ V W H P V × . H \ D V S H F W V D U H H [S O R V W X G L H V × D Q G × Z H × F R P S O H P H Q W W K H & R P S X W H U V \ V W H P V V H F V H F X U L W \ × P R G X O H V

DQG FORXG×DQG WKLV PRGXOH FRPSOHPHQWV×WKH×&RPSXWHU
LQIUDVWUXFWXUH×VHFXULW\ PRGXOHV ×

: One online examination (100%)

Security is heavily dependent on humans and their actions. These actions can either strengthen or diminish security levels. In this module students are introduced to the relationships between security and human behaviour, in multiple settings. We consider perceptions and practical implementations of security, on both individual and group/societal level. We utilise concepts from behavioural economics, decision-making and psychology, along with mechanisms to design and encourage changes in security behaviours. Finally, we examine the construct of a security culture and its relationships with norms, habits and awareness training.

: One online examination (100%)

7KLV PRGXOH×ZLOO LQWURGXFH VWXGHQWV WR×WKH FKDOOHQ
GDWD SULYDF\ ×6WXGHQWV ZLOO JDLQ DQ XQGHUVWDQGLQJ RI
GDWD×SULYDF\ ×DQG×ZLOO×H[DPLQH×WKH VHULRXV OHJDO FRC
make d DWD SULYDF\ D NH\ LVVXH IRU F\EHU VHFXULW\ ULVN PDQD
key governance matters, including privacy impact assessments, and the role of technology in supporting privacy will also be considered, including de-identification techniques for datasets, homomorphic encryption, and other privacy enhancing technologies. Finally, a privacy case study, such as e- YRWLQJ ZLOO EH GHVFULEHG ×

: One online examination (100%)

This module provides students with an introduction to research methods in cyber security
VXFK WKDW WKH\×FDQ×FKRRVH DQG LQYHVWLJDWH D×UHVHDUF
7KH×SURMHFW×WRSLF×FDQ EH IURP DFURVV WKH wonal ×&\%2.×.QRZO
IUDPHZRUNV VXFK DV×WKH×&,,VHF×.QRZOHGJH DQG 6NLOOV IU
module is a report that describes the project, provides an initial literature review and a project plan.

: Project description and plan (100%)

This module provides the student an opportunity to undertake an individual dissertation
SURMHFW LQ WKH×GLVFLSOLQH×RI F\EHU VHFXULW\ ×$ SURMHF
be of academic or professional nature and aimed at acquiring and demonstrating understanding and the ability to reason about some specific area of cyber/information
VHFXULW\ ×7KH SURMHFW PD\ EH DFDGHPLF LQ QDWXUH RU GR
LQGLYLGXDOV WR GHDO ZLWK D SUDFWLFDO DVSHFW RI×F\EHU
Writy. The project represents the key difference between the Postgraduate Diploma, which is a taught qualification, and the award of an MSc which incorporates this substantial piece of individual
ZRUN ×

: One research project (100%)