

Table of Contents

Important information regarding the Programme Specification	2
Title and name of awards	3
Entrance requirements	6
Educational aims and learning outcomes of the programmes	7
Learning, teaching and assessment strategies	9
Assessment methods	9
Student support and guidance	10
Quality evaluation and enhancement.....	11
After graduation	12

Important information regarding the Programme Specification

About this document

Last revised 8 February 2017

The Programme Specification gives a broad outline of the structure and content of the programme, the entry level qualifications, as well as the learning outcomes students will achieve as they progress. Some of the information referred to in a programme specification is included in more detail on the University of London International Programmes (International Programmes) website. Where this is the case, links to the relevant webpage are included.

Where links to external organisations are provided, The University of London is not responsible for their content and does not recommend nor necessarily agree with opinions expressed and services provided at those sites.

If you have a query about any of the programme information provided, whether here or on the website, registered students should use the *ask a question* tab in the student portal <https://my.londoninternational.ac.uk>; otherwise the *Contact Us* button at the bottom left hand corner of every webpage should be used.

Terminology

The following language is specific to the Information Security programme:

Module: Individual units of the programme are called module. Each unit is a self - contained, formally structured learning experience with a coherent and explicit set of learning outcomes and assessment criteria

A [Glossary](#) provides an explanation of the other terms used in this document.

Changes made to the programme specification

Programme specifications are revised annually. The quality committee of the institution providing academic direction, as part of its annual review of standards, confirms the programme structure and the educational aims and learning outcomes, and advises on any development in student support. Where there are changes which may impact on continuing students, these are listed below. For all new students, the programme and general information provided in this document is correct and accurate and will be applicable for the current year.

Significant changes made to the programme specification 2017-18:

No significant changes have been made to the 2017-18 edition of the Information Security regulations.

Title and name of awards

Programme title

Information Security

Award titles

Master of Science (MSc)

Postgraduate Diploma (PGDip)

Exit awards

Postgraduate Diploma (PGDip)

Postgraduate Certificate (PGCert)

Exit awards are offered at the discretion of the Board of Examiners. Once a student has accepted an exit award they will not be permitted to continue their study of the same award with the International Programmes.

Individual modules

There is also the provision for individual modules of the programme to be studied and assessed on a stand-alone basis.

Level of the programmes

The Framework for Higher Education Qualifications in England, Wales and Northern Ireland (FHEQ) forms part of the UK Quality Code for Higher Education of the [Quality Assurance Agency for Higher Education](#) (QAA).

The awards are placed at the following Levels of the Framework for Higher Education Qualifications (FHEQ):

- MSc in Information Security Level 7
- PGDip in Information Security Level 7
- PGCert in Information Security (exit award) Level 7

Individual modules are offered at Level 7.

QAA subject benchmarks group(s)

See the [QAA website](#) for information about benchmarks.

The QAA has not produced a benchmark statement for Information Security at postgraduate level.

Awarding body

University of London

Registering body

University of London

Academic direction

Royal Holloway, University of London

Accreditation by professional or statutory body

The MSc in Information Security is certified by [GCHQ](#).

Language of study and assessment

English

Mode of study

Study is by distance and flexible learning.

For an adjusted fee students may be permitted to study a limited number of modules on campus at Royal Holloway, University of London through Mixed-mode study. Mixed-mode study enables students to study some modules by distance and flexible study and others on campus at Royal Holloway, University of London. Whilst on campus, students may study a module one day per week over a single term, or over a concentrated period of time (normally one week) in what is called block mode.

Programme structures

The MSc in Information Security

The MSc in Information Security consists of three elements:

- the Core element, comprising four compulsory core modules, plus
- the Options element, comprising two modules chosen from a list of options, plus
- the Project.

A full list of the available modules is provided in the Programme Regulations.

Postgraduate Diploma in Information Security

The Postgraduate Diploma in Information Security consists of two elements:

- the Core element, comprising four compulsory core modules, plus
- the Options element, comprising two modules chosen from a list of options.

The list of available modules is the same as for the MSc with the exception of the project.

Exit awards

Students cannot register for the Postgraduate Certificate in Information Security because this is granted as an exit award only. Students who for academic or personal reasons are unable to complete the 180 credits required for the masters award may exit with the successful completion of 60 or 120 credits and be awarded a Postgraduate Certificate or Postgraduate Diploma respectively. Exit awards are granted at the discretion of the University.

Individual modules

All modules except for the Project are available to be studied on an individual basis. The modules which can be studied individually are the same as for the MSc.

Full details of the Scheme of Award are included in the [Programme Regulations](#).

Maximum and minimum periods of registration

The maximum and minimum period of registration, from a student's effective date of registration, are:

	Minimum	Maximum
MSc degree in Information Security	Two years	Five years
Postgraduate Diploma in Information Security	One year	Five years
Credit bearing individual modules	One year	Two years

The period of registration includes any interruption of studies taken by the student. Registration may be extended, subject to approval and payment of applicable fees.

Study materials are made available after registration and on payment of the applicable fee.

Credit value of modules

Further information about the credit systems used by universities in the UK and Europe is available in:

The Higher Education Credit Framework for England,
www.qaa.ac.uk/en/Publications/Documents/Academic-Credit-Framework.pdf

The Framework for Higher Education Qualifications in England,
www.qaa.ac.uk/en/Publications/Documents/Framework-Higher-Education-Qualifications-08.pdf

The European Credit Transfer and Accumulation System,
http://ec.europa.eu/education/tools/ects_en.htm

Where credits are assigned to each module of a programme, credit indicates the amount of learning carried out in terms of the notional number of study hours needed, and a specified 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.

For the PGDip and MSc in Information Security programme, credits are assigned to the modules as follows:

- Core and Options elements: 20 credits per module

- Project element (MSc only): 60 credits.

One UK credit equates to a notional ten hours of study.

Two UK credits equate to one ECTS credit.

Accreditation of prior learning

The programme does not accredit prior learning.

Entrance requirements

The entrance requirements are given on our [website](#). Applicants must submit an application in line with the procedures and deadlines set out there.

Entrance requirements for a postgraduate award, or individual module, vary and applicants should confirm entrance requirements through the [Requirements tab](#) of the programme before submitting an application.

English language requirements

All applicants must satisfy the English language requirements for the programme. These are set out in detail on the website.

Additional information on English language proficiency tests are given on the [website](#).

Where an applicant does not meet the prescribed English language proficiency requirements but believes that they can demonstrate the requisite proficiency for admission the University may, at its discretion, consider the application.

English language requirements are given on the programme page, under the Requirements tab: <http://www.londoninternational.ac.uk/infosec>

Additional information on [English language proficiency tests](#) are given on the website.

Internet access and computer specification

Students will require regular access to a computer (or mobile device*) with an internet connection to use the International Programmes website and the Student Portal. These are where many of the programme's study resources are located.

The computer should have at least the following minimum specification:

- a web browser (the latest version of Firefox, Chrome or Internet Explorer). This must accept cookies and have JavaScript enabled;
- screen resolution of 1024 x 768 or greater;
- sufficient bandwidth to download documents of at least 10 MB;
- a speaker or headphones.

And the following applications installed:

- a recent version of Microsoft Office or any compatible product such as Open Office
- Flash Plug-in: Adobe Flash Player
- RealOne Player (Basic)

- Adobe, or other pdf reader
- software for playing mp3 and mp4 files.

* Full mobile access to VLE resources is not available for all programmes.

Students with specific access requirements

International Programmes welcomes applications from disabled students and/or those who have specific access requirements. The University will make every effort to provide reasonable adjustments to enable those with specific access requirements to have the same chance as all other students to successfully complete their studies.

The University is committed to managing the application procedure and the programme itself to offer all students the opportunity to participate fully. Students with a disability or others who may need special arrangements to assist in taking examinations (such as a separate room or special aids) should complete the relevant section of the application form, or contact the Inclusive Practice Manager. Requests will be considered by a University panel, whose purpose is to ensure that students with disabilities and/or specific access requirements are neither advantaged nor disadvantaged by such arrangements when compared with other students. These considerations are separate from the academic selection processes.

For further information, see [Inclusive Practice Policy](#)

Sources of funding and scholarships

Information about potential sources of funding and scholarships is updated annually and where available is included in the prospectus web pages.

For further information see www.londoninternational.ac.uk/infosec and www.londoninternational.ac.uk/distance-and-flexible-learning/funding-your-study.

Educational aims and learning outcomes of the programmes

The aims and learning outcomes for each module are given on the Student Portal and on the structure page of the website: www.londoninternational.ac.uk/infosec#structure.

The aims and learning outcomes for the programme are given below.

Educational aims

The main educational aim of this programme is to offer a challenging, flexible scheme of study invigorated by research and contact with industry, which advances students' ability to develop academic and practical insights into the subject of Information Security. It is intended that students will be encouraged to develop a broad range of transferable and technical expertise using their initiative and by thinking out problems themselves.

A student who passes the Core modules will have the essential introduction to a variety of methods, approaches and concepts in Information Security. Students will know how various organisations solve problems of security management and how computer systems and networks are made secure. The Options modules build on these foundations providing deeper knowledge and skills in particular contexts. Students will be introduced to a wide range of security techniques and they will be able to analyse the suitability of these

techniques for particular roles. MSc students will be able to apply the skills they have learnt to a particular problem and produce a persuasive dissertation.

The programmes aim to:

- encourage independent critical and evaluative skills, and intellectual curiosity for life-long learning;
- cultivate a capacity to think critically about how organisations manage security;
- expand knowledge and understanding of the main security issues, for example, in the development of electronic commerce activities and protection of critical infrastructure;
- promote analytical engagement with the technical, legal and commercial issues in Information Security;
- encourage students to relate the academic study of security to practical issues of public, commercial and national concern;
- facilitate self-development of students into professionally organised and interactive individuals by practising skills of selection, assimilation and communication;
- enable students to understand and apply the concepts, approaches and methods in Information Security to a particular problem and produce a well-structured, informative and insightful report (MSc students only).

Learning outcomes of the programmes

A student will be able to:

- demonstrate an understanding of the issues that need to be addressed when assessing the information security needs of an organisation;
- identify potential sources of vulnerability within an information system and the possible implications of failing to counter them with adequate security controls;
- choose appropriate countermeasures to information security threats and understand the likely implication of their adoption;
- assess the relevance and impact of new developments in information security threats, technologies and controls;
- recognise the many trade-offs and subjective issues that need to be addressed when implementing information security within an organisation;
- carry out a Project and produce a well-structured and well-written dissertation (MSc students only).

Intellectual and transferable skills

A student will be able to:

- use problem solving skills in a range of situations;
- use fluent and effective communication and discussion skills in a written context;
- have a capacity to handle ideas in rational, critical and evaluative ways;

- manage their own learning, including working effectively to deadlines;
- research a topic and assemble the principal ideas and arguments into a well-structured report (MSc students only).

These learning outcomes indicate what a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities provided. More detailed information on the specific learning outcomes, content and the learning and teaching and assessment methods of each module can be found on the [course web pages](#).

Learning, teaching and assessment strategies

The programme is primarily taught using the Virtual Learning Environment (VLE). Subject guides are available online and can also be distributed on portable storage media on request. These introduce each topic in the form of lessons, activities and assignments. The subject guides include tools to assist students in the development of the skills of information search, comprehension and analysis and the generation of original and thoughtful assignments. Subject guides are supported by core textbooks with which students are supplied.

The VLE allows students to complete automated self-test exercises and submit assignments to be marked by tutors who will also provide feedback.

Students manage their own learning. Advice and practical information such as study techniques, planning, and preparation for assessment is available in the Programme handbook.

Students may also communicate with each other via the VLE. Here they will be able to engage in dialogue, and develop and negotiate conclusions with others. This contributes to the acquisition of knowledge, understanding and transferable skills.

For each module students will be assessed by unseen written examination and, in some cases, also by coursework. Questions are structured to allow students to demonstrate that they have acquired appropriate knowledge and understanding. The way that students manage data, solve problems, evaluate ideas and the organisational skills they use to structure their written answers allows the standard of intellectual and transferable skills to be assessed.

MSc students will also submit a dissertation which will not only assess their knowledge but also their ability to plan, gather data, reason and analyse different viewpoints, and produce a well-structured report.

Assessment criteria for the programme take into account the level at which these skills have been achieved.

Assessment methods

Each module, with the exception of Introduction to Cryptography and Security Mechanisms, and the Project, is assessed by one two-hour unseen written examination. Introduction to Cryptography and Security Mechanisms is assessed by one two-hour unseen written examination (75%) and by submission of coursework (25%). The Project is assessed by one two-hour unseen written examination (20%) and by submission of a dissertation (80%).

Examinations take place on one occasion each year, normally in May. These are held at established centres worldwide.

Individual modules

A student may choose whether or not to be formally assessed in the credit bearing individual modules for which they are registered. Students who choose to be formally assessed will be examined in the same way as for the MSc.

Full details of the dates of all examinations are available on the [website](#).

Student support and guidance

The following summarises the support and guidance available to students:

- Materials (including lessons, activities and assignments) for each module studied are delivered via the VLE.
- Tutor-led online seminars where students can share ideas with tutors and each other.
- Core textbooks and (on request) USB memory sticks are supplied for offline working.
- A Programme handbook that includes information about the learning resources, the procedures for assessment and examinations and advice on study skills.
- A [Student Guide](#) that provides information which is common to all students and gives information about matters of importance from the start of a student's relationship with the International Programmes through to their graduation.
- Careers and Employability liaison officer available for consultation at Royal Holloway.
- Access to support services via remote access to Royal Holloway facilities such as the Disability and Dyslexia Services (previously ESO) for students with additional learning needs to provide further advice where required.
- [Programme Regulations](#).
- Past examination papers and Examiners' commentaries which provide generic feedback from assessment.
- Access to an Online Library which provides a range of full-text, multidisciplinary databases. Journal articles, book reviews and reports can be found on the databases to which the Library subscribes on your behalf.
- University of London library: Registered students may use the resources located within the Senate House library (for a small additional fee).
- Employability skills module – guidance on how to manage your career in the future, available through the VLE.
- A University of London email account and web area for personal information management.
- The [Student Charter](#) which states key mutual obligations between the University of London International Programmes and its International Programmes students.

There is further information on support and guidance in the [Programme handbook and Student guide](#).

Quality evaluation and enhancement

The independent academic institutions of the University of London and the University of London International Academy collaborate to deliver the University of London International Programmes. The policies, partnerships and systems are defined within the key documents: The Quality Framework, the [Quality Assurance Schedules](#), [Guidelines for Examinations](#), [General Regulations](#) and, for each programme, [Programme Regulations](#).

Parity of award standards

Every programme of study is developed and approved by an academic institution of the University of London, or a consortium with representation by more than one academic institution to the same standards and requirements as would be applied in the institution/s concerned.

Learning materials are written and examinations are set and marked by academic staff who are required to apply the University's academic standards.

Review and evaluation mechanisms

Procedures are in place to assure the standards of the award and the quality of the student experience, which include programme development, delivery, management, systematic monitoring and ongoing review and enhancement of all International Programmes. Improvements are made as necessary to ensure that systems remain effective and rigorous.

- Annual programme reports are produced for all programmes in order to review and enhance the provision and to plan ahead;
- Every year independent external examiners submit reports to confirm that a programme has been assessed properly and meets the appropriate academic standards;
- Annual student information statistics are produced and are referenced in all systematic reporting within the University of London International Academy;
- Periodic programme reviews are carried out every 4-6 years to review how a programme has developed over time and to make sure that it remains current and up-to-date.

Student feedback mechanisms

The Student Experience Survey, carried out every two years, collects feedback from the International Programmes student body on a range of topics relating to the student lifecycle. The results are considered in a number of different ways, including by the Pro-Vice Chancellor, the programme team, principal committees and departments at the International Programmes responsible for the different aspects of the student experience. Once the findings have been considered in detail, responses are published from both the International Programmes and from the individual Programme Directors.

Additional survey activity may also be conducted from time to time through the student portal, by email or from the programme team. VLEs also provide the opportunity for informal feedback and discussion.

An undergraduate and postgraduate student member is appointed by the University to the majority of committees through an annual appointment round. Some programmes also recruit student members at the programme level. Students are frequently invited to take part in quality review processes such as Periodic Programme Reviews, Programme approval, Thematic Reviews, MOOC review panels and ad hoc focus groups. Opportunities such as these are advertised through social media and on the website. More information can be found at www.londoninternational.ac.uk/youengage.

After graduation

Further study

Successful completion of the programme can allow students to progress to a higher level award in the subject area.

Graduate employment routes

The programmes are designed to introduce the technical, legal and commercial aspects of Information Security. Graduates of these programmes will have a sound basis for a professional career as experts in information security, in both industry and commerce. Successful completion of the MSc may allow students to progress to postgraduate research in the degree field.

Careers advice and resources

The University of London's Careers Service can provide confidential advice and guidance appropriate to the diverse needs of students and graduates, at any stage of their career. Advisers can assist on an individual basis (including help with career planning, CV writing and interview technique), through face-to-face, Skype or phone appointments, or through a 30 minute e-Advice service. Students may also make use of the dedicated careers library.

For further information, please see www.thecareersgroup.co.uk/develop-talent

The Alumni Network

Upon graduation, International Programmes' students automatically become members of its Alumni Network, a diverse community of over 100,000 alumni in more than 180 countries. The Alumni Network can provide past students with lifelong links to the University of London and each other. Benefits include social and networking events, access to local groups, a bi-annual magazine, social networking groups, and the opportunity to become an Alumni Ambassador for the University of London.

For further information, please see www.londoninternational.ac.uk/alumni, www.facebook.com/londonualumni, www.instagram.com/londonu and <http://linkd.in/alumniassociation>