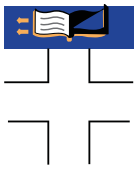

Programme Regulations 2023–2024 Information Security (MSc/PGDip/Individual modules)

Important information regarding the Programme Regulations

About this document

Last revised 15/05/2023As a student registered with the University of London you are governed by the current General Regulations and Programme Regulations associated with your programme of study.

The Programme Regulations are designed and developed by Royal Holloway, University of London which is responsible for the academic direction of the programme. The regulations take account of any associated arrangements at Royal Holloway. Programme Regulations, together with the Programme Handbook, will provide the detailed rules and guidance for your programme of study.

In addition to Programme Regulations, you will have to abide by the General Regulations. These regulations apply to all students registered for a programme of study with the University of London and provide the rules governing registration and assessment on all programmes; they also indicate what you may expect on completion of your programme of study and how you may pursue a complaint, should that be necessary. Programme Regulations should be read in conjunction with the General Regulations.

The relevant General Regulations and the Programme Regulations relating to your registration with us are for the current year and not the regulations for the year in which you initially registered, nor regulations in the intervening years.

On all matters where the regulations are to be interpreted, or are silent, our decision will be final.

Further information about your programme of study is outlined in the Programme Specification which is available on the relevant Course page of the website. The Programme Specification gives a broad overview of the structure and content of the programme as well as the learning outcomes students will achieve as they progress.

Terminology

The following terminology is specific to the Information Security programme:

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

Mandatory modules: Modules which you are required to study.

Throughout the regulations, ‘we’ ‘us’ and ‘our’ mean the University of London; ‘you’ and ‘your’ mean the student, or where applicable, all students.

Final intake to Information Security

Due to the launch of a new MSc Cyber Security programme in October 2022 , there will not be an intake of new students to Information Security and notice of closure has been given. The final assessments will take place in 2027; after this point it will no longer be possible to take or retake an assessment for Information Security.

Changes to Information Security Programme Regulations 2023–2024

1. Mixed mode study is no longer available from 2023-24.
2. Notice for withdrawal of module IYM016 (Security Testing: Theory and Practice) is given. 2023-24 is the final opportunity to register on the module for the first time. This will be available for resit only in 2024-25 (no retake/tutor support will be available then) and withdrawn completely from 2025-26.

5 Module selection

Appendix A provides details of the programme structures and module titles.

Changing modules

5.1

You will only be allowed to change your choice of module after the registration deadline in exceptional circumstances and with the approval of the Programme Director. An administrative charge is payable for this. Once you have notified us that you intend to enter the assessment for a module, we will not consider your application to change modules until all of the results for that session are published.

5.2

We will not allow you to change your choice of module if you have taken any element of the assessment for that module.

5.3

If you change your choice of options modules, we may charge you a transfer fee.

Individual modules

5.4

You may take up to four credit bearing modules (80 credits) on a stand-alone basis without being registered for the MSc or PGDip. If you apply to progress to the MSc or PGDip and this is approved, you may be credited with any individual modules successfully completed.

See Section 8 for more information on transferring from an individual module to the PGDip or MSc.

6 Assessment for the programme

An examination is defined as an ~~end of course~~ element of assessment that takes place in a

6.10

The Project's written examination and dissertation must be attempted and submitted in the same academic year.

6.11

If you start the Project in one academic year, and do not submit the dissertation by 31 March in the same academic year, you will be deemed to have interrupted the Project You are required to take the exam in the same year that you submit your project report.

6.12

Once you have been assigned a supervisor for the Project you must submit the Project dissertation and sit the Project written examination within three years. If you fail to do so, you will be deemed to have failed the Project module and you will be considered for the award of Postgraduate Diploma.

6.13

For the Project you must submit an of the dissertation for approval to the Programme Director not later than 31 October in the academic year of submission of the dissertation.

6.14

For the Project you must submit one via your supervisor to the Programme Director by 31 January in the year in which the dissertation is to be submitted. The progress report will not form part of the final assessment, but is an essential study requirement. If you do not submit the progress report, you may not be permitted to submit the dissertation.

6.15

You must submit an electronic version of the completed dissertation to arrive not later than 31 March (BST) in the academic year of submission. The electronic submission is via the VLE unless otherwise agreed. In the case of an interruption of the Project the dissertation should normally be submitted in the following year.

7 Retaking an assessment

Maximum number of attempts

7.1

The maximum number of attempts permitted at any element of assessment for a module is two. Elements of assessment include written examinations, coursework, project examinations and project dissertations.

When you can retake an assessment

7.2

If you obtain less than 50% in any module (the combined weighted mark for the elements of assessment for 'An introduction to cryptography and security mechanisms' IYM002) at a first attempt and have not yet satisfied the criteria for the award, you may choose to make a second attempt at the failed element of assessment, except for the 'Project' IYM011 where you must retake both elements of assessment.

7.3

Retaking the Project IYM011

7.9

If you receive the result of 'Fail' for the project report, with a mark of 40–49%, we will normally allow you to resubmit the project report with minor adjustments by the date specified in our response. The resubmitted project report will be considered the second and final attempt.

7.10

If you retake the Project, you must retake all assessed elements of the Project

7.11

An interrupted Project can be resumed the following year and, depending on how much supervision you have received in the academic year the Project was started, the amount of supervision when the Project is resumed will be limited to the unused supervision time. A new supervisor will be appointed if the original supervisor is no longer available.

7.12

If you interrupt your Project in two successive years you will have used up all your due supervision and will have the following options:

- to keep the same Project topic and make another attempt with no further supervision;
- to keep the same Project topic (or a related topic) and make another attempt with reduced supervision;
- to start again with a new Project topic and full supervision.

7.13

If you retake the Project module you have the following options:

- to keep the same Project topic and make another attempt with no further supervision, normally recommended for students who receive a mark of 40-49% on their first attempt at the project report
- to keep the same Project topic (or a related topic) and make another attempt with reduced supervision
- to start again with a new Project topic and full supervision.

7.14

If you submit a Project dissertation report, you will be considered to have made an attempt at the Project

If registered for an Individual module

7.15

If you are registered for an individual module and you receive the result of 'Fail' on your second attempt at the assessment for the module, then the highest mark for that module will count as the final result. If you apply to progress to the related PGDip or degree and this is approved, this mark will be taken into account for classification purposes.

8 Progression within the programme

See Section 6 for method of assessment.

8.1

In any one year you may attempt examinations in up to a maximum of six modules, excluding resits.

8.2

If you are registered for the MSc Information Security you must have completed the Core element, obtained at least 40% in all examined modules and not have more than two module marks below 50% before proceeding to the Project

Transfer from the PGDip Information Security to the MSc Information Security

8.3

If you successfully complete the Pc 0.0uo tesd( )Tj-0.001 T17.093 9 0 Td[(up to a m)3-1.24 TD[u sucon Secu3 0

Options module	Recommended previous study
Application security	Security management An introduction to cryptography and security mechanisms Network security
Advanced cryptography	An introduction to cryptography and security mechanisms
Cybercrime	None
Smart cards/tokens security and applications	An introduction to cryptography and security mechanisms
Digital forensics	Network security Computer security
Security testing: theory and practiceecurty	Network ser s

9 Schemes of award

The date of award for Information Security will be 1 August in the year of the last assessment that contributes to the award.

MSc Information Security

9.1

To be considered for the award of the MSc, you must have attempted the examinations and dissertation for all three elements of the degree:

- the Core element [comprising four mandatory core modules];
- the Options element [comprising two modules chosen from a list of options];
- the Project element [comprising one examination and one dissertation].

9.2

To pass the MSc you must achieve an overall weighted average of at least 50%. Failure marks between 40–49% can be condoned in modules which constitute up to a maximum of 40 cTjEMC /68,0 Td[(91.7

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9.15

The Board of Examiners will decide if you can be awarded the PGCert Information Security. The Board of Examiners must be satisfied that the qualification represents a coherent programme of study.

9.16

To be considered for an award with distinction for the PGCert Information Security, you must have obtained an overall average of at least 70%.

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MSc

Appendix B – Module outlines

Core element

Security management [IYM001]

Aims

This module will emphasise the need for good security management. Its aims are to identify the problems associated with security management and to show how various (major) organisations solve those problems.

Objectives

On completion of the module, the student will appreciate the complexities of security management, and have seen how some companies attempt to solve these problems.

Assessment

One two-hour unseen written paper.

An introduction to cryptography and security mechanisms [IYM002]

Aims

The approach of this module is non-technical. The main objective is to introduce the students to the main types of cryptographic mechanism, to the security services which they can provide, and to their management, including key management. The mathematical content of this module is minimal. Support materials for the elementary mathematics needed for this module will be provided.

Objectives

On completion of this module students will have gained an understanding of the use of, and services provided by, the main types of cryptographic scheme. They should also have gained an

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This foundation forms the basis of a methodical approach to surveying and auditing systems, and prepares candidates to design secure systems, identify vulnerabilities, and defend systems against intrusion.

Objectives

On completion of this module students will have:

- gained an understanding of common approaches and methodologies used for carrying out and managing security and penetration testing, as well as an understanding of the legal aspects involved in such audits;
- gained a detailed understanding of some typical network protocols, relevant computer system architectures, and web application systems;
- gained an understanding of the vulnerabilities in some existing protocols, systems, and applications, and some common forms of attack; in addition, an understanding of the security technologies designed to mitigate these vulnerabilities;
- gained practical experience of how these vulnerabilities may be exploited in practice to penetrate a system.

Assessment

One two-hour unseen written paper.

Human aspects of information security and privacy [IYM017]

Aims

This module engages with the psychological, perceptional, cultural, societal, political and ethical implications of information security and privacy. Information is a vital element of modern society. Every day, individuals and organisations generate an increasing amount of information that is automatically processed and stored. In most cases, these processes require some human intervention. Actions such as accepting an unfair privacy policy or opening a malicious email attachment cannot always be controlled by technical means, although they have a direct impact on the security and privacy of individuals and organisations. In fact, as stated by the ‘2015 Information Security Breaches Survey’

- Identity personality traits that affect individual security behaviours.
- Carry out privacy impact assessments, develop privacy policies and implement the appropriate privacy preserving controls.
- Develop, implement security awareness programs.

Assessment

One two-hour unseen written paper.

Project element

Project [IYM011]

Aims

The Project is a major individual piece of work. It can be of academic nature and aimed at acquiring and demonstrating understanding and the ability to reason about some specific area of information security. Alternatively, the Project work may document the ability to deal with a practical aspect of information security.

Objectives

The student will write a comprehensive dissertation on an information security topic. On completion of the Project students should have demonstrated their ability to:

- work independently on a security-related project, for which they have defined the objectives and rationale;
- apply knowledge about aspects of information security to a particular problem, which may be of an engineering, analytical or academic nature; and
- produce a well-structured report, including introduction, motivation, analysis, and appropriate references to existing work.

Supervisor

Each student will be assigned an academic project supervisor who may give advice on the choice of the project and will monitor its progress. However, it is primarily the responsibility of the student to define, plan and implement the MSc project.

Assessment

One two-hour unseen written paper and a submitted dissertation.

Appendix C – Assessment criteria

Where examinations feature essay-style questions, the following grade description criteria apply:

%	No specific marks are awarded for spelling, punctuation or grammar. However, any significant weaknesses in these areas which result in the examiner having difficulty comprehending an answer may result in less credit being awarded.
85+	Outstanding levels of accuracy and technical competence; deep understanding; near-comprehensive knowledge; exceptional independence of thought; exceptionally well-organised and original answers; high levels of ability in analysis of information; coherent structure; completely addresses all aspects of the question. As good as could be expected under examination conditions.
70-84	Very high levels of accuracy and technical competence; deep understanding; detailed knowledge; may show some originality in interpretation or analysis; high degree of creativity and independence of thought; high levels of ability in the analysis of quantitative or qualitative information; coherent structure; completely addresses all aspects of the question.
60-69	Good degree of accuracy and technical competence; clear understanding; good breadth of knowledge; some evidence of creativity con Aeadth of 3.7 (e 7 (r)0.7 (cd5.7 (r)0.7/M

50–59	Sound knowledge and understanding of subject area; satisfactory depth of content; satisfactory sufficiency of content; satisfactory technical accuracy and competence; aims and objectives represent an acceptable challenge; satisfactory fulfilment of aims and objectives; ability to construct coherent and relevant answers to questions; few signs of originality and independence of thought; adequately presented and structured; straightforward presentational style with some errors; adequate referencing standard.
Pass at 50	
40–49	Basic knowledge and understanding of subject area; basic depth of content; borderline sufficiency of content; lack of clarity and accuracy in technical competence; aims fall just below an acceptable standard failure to fulfil stated aims; answers are either incomplete or not entirely coherent; little evidence of independent thought; weak presentation limited structure; presentation lacks