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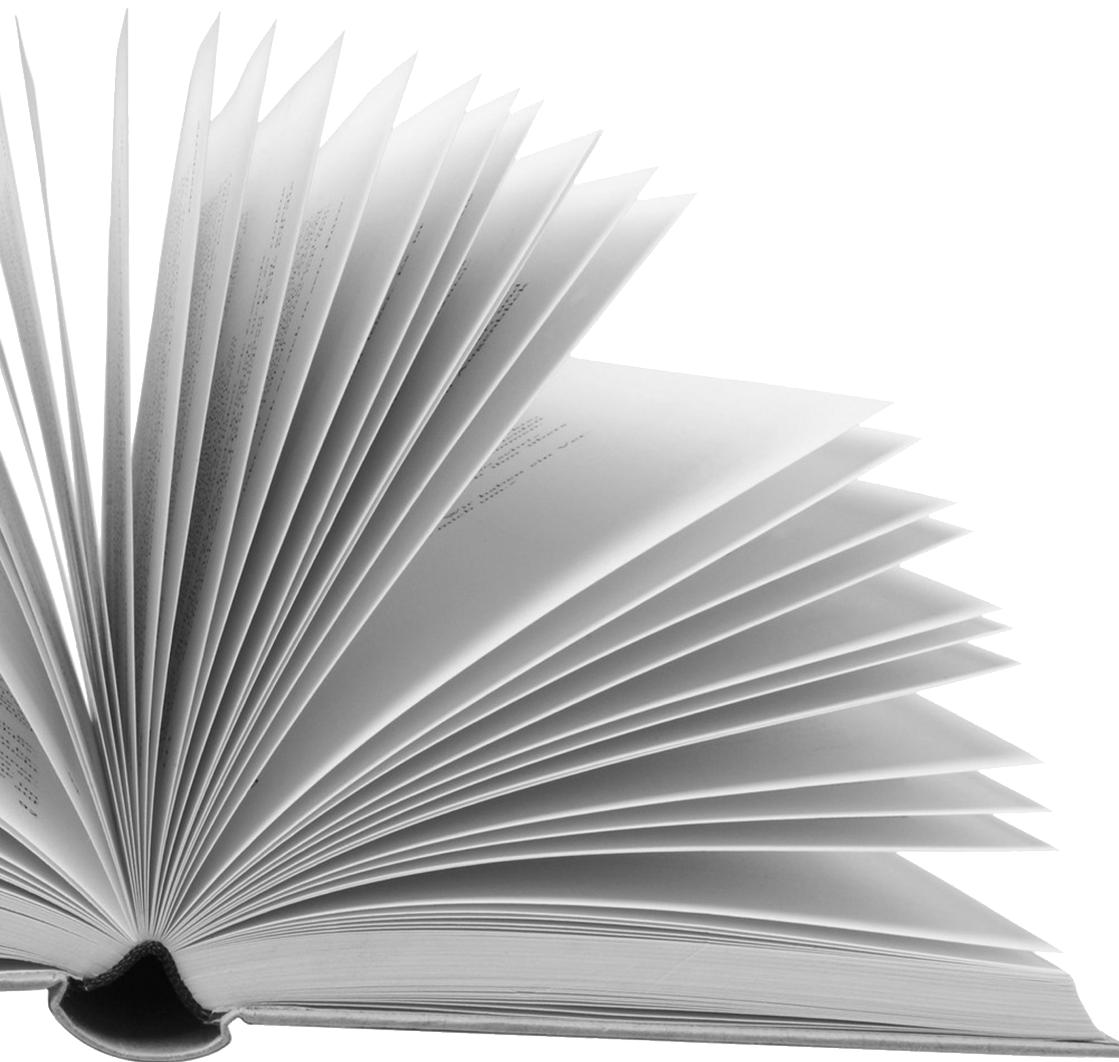
# 2008–09

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**Important document – please read**

Please read this booklet with care. It contains important information that governs your registration as an External student and your programme of study

## MSc degree and Postgraduate Diploma in Information Security



## **Important document – please read**

Regulations are reviewed and published annually, and are subject to change. Examinations, for example, are governed by the Regulations in force at the time of the examination and not at the time that a student initially registered. Students must, therefore, refer to the Regulations for the current year at all times.

All students are required to comply with the regulations, as well as the procedures, deadlines and instructions issued by the University in, for example, the student handbook/manual and Notice to candidates. The University is not responsible for any consequences arising from a student's failure to comply with these Regulations, procedures, deadlines or instructions.

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# MSc degree and Postgraduate Diploma in Information Security

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# Programme Regulations

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**The MSc degree and Postgraduate Diploma in Information Security are governed by these Programme Regulations – which are specific to this award – and the *General Regulations for Degrees and Other Awards at Graduate and Masters Levels* which govern all awards at Graduate and Masters levels. The Programme Regulations and General Regulations should be read together.**

## 1. Introduction

1.1 The University awards the degree of Master of Science in Information Security, hereafter called the MSc degree in Information Security. A Postgraduate Diploma is also awarded. The awards of the degree and the Diploma are controlled by both these Programme Regulations and the General Regulations.

1.2 The MSc degree and the Postgraduate Diploma in Information Security are awarded without classification. At the discretion of the Board of Examiners a mark of distinction or merit will be awarded to those students who have satisfied the relevant criteria given in Schedule C.

1.3 The date of the award of the MSc degree and the Postgraduate Diploma in Information Security to successful students will be **1 August**.

## 2. Structure

2.1 The Postgraduate Diploma in Information Security consists of two elements, as follows:

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

Full details are given in Schedule A.

2.2 The Core element is weighted two thirds of the total assessment of the Diploma and the Options element is weighted one third of the total assessment of the Diploma.

2.3 The MSc degree in Information Security consists of three elements, as follows:

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

Full details are given in Schedule A.

2.4 The three elements of the degree are weighted in the ratio 50:25:25.

2.5 Not all modules will necessarily be available every year.

2.6 All students who register for a module from the Options element will be required to confirm their choice of module(s) for the academic year concerned by writing to the Student Registry by **7 October** in the year of registration for that module(s).

### Online seminars

2.7 Participation in the online seminar is an assessed element of the module **Security management**. Students will

be required to participate satisfactorily in the seminar and submit a report on their participation. Students will also be required to attempt the examination for **Security management** (see also paragraph 6.3).

2.8 Online seminars for all other modules are not compulsory, but students are strongly encouraged to participate.

2.9 During virtual seminars and during all other on-line contributions, students must observe the code of conduct for on-line behaviour given in the Student handbook.

### Mixed-mode study

2.10 Students registered for the MSc degree or Postgraduate Diploma in Information Security may be permitted to study one or more modules on campus at Royal Holloway, University of London through Mixed-mode study. Mixed-mode study enables students to study some modules by distance learning and others on campus at Royal Holloway, University of London. Whilst on campus, students may study a module over a single term, or over a concentrated period of time (normally one week).

2.11 Full details relating to the modules available as on-campus study and the method of application for Mixed-mode study can be obtained from the Programme Director.

## 3. Rules of progression

3.1 In any one year, a student may attempt examinations in a maximum of **six** modules, excluding re-sits.

3.2 Students registered for the MSc degree in Information Security will be required to obtain an average of at least 50% in the Core element before proceeding to the Project.

3.3 Within the limits set out in 3.1 and 3.2 and in Schedule A, students may decide the order in which they enter examinations for various modules, and also the number of modules they will take on each occasion.

### Students registered for the Postgraduate Diploma in Information Security

3.4 In order to be able to progress to the MSc degree in Information Security students registered for the Postgraduate Diploma must normally have obtained a pass at the required level (see Schedule C) in each of the modules, and received a recommendation from the Examiners that they may proceed to the Project element for the MSc degree. Students who satisfy the Examiners in this way and wish to progress must do so immediately (i.e. in the same year as they qualify for the Postgraduate Diploma).

## Students registered for the MSc in Information Security

3.5 At the discretion of the Board of Examiners, a student registered for the MSc degree who does not pass the Project element for the degree may be awarded the Postgraduate Diploma in Information Security, provided he or she has satisfied the Examiners in the Core and Options elements according to the requirements given in Schedule C.

## 4. Entrance requirements

### Entrance requirements

4.1 In order to satisfy the entrance requirements for the MSc degree or the Postgraduate Diploma in Information Security, applicants must:

- hold a second class honours degree or the equivalent, in a relevant discipline, from a university or other institution acceptable to the University of London (a relevant discipline includes, but is not restricted to, computer science, electronics, information systems, and mathematics) **and**
- have an advanced level of ability to work in English. For this purpose, applicants may be required to pass, or to have passed within the last five years, at the appropriate level, a test of proficiency in English acceptable to the University.

4.2 Applicants without a degree but with appropriate industrial experience will also be considered.

4.3 Students are required to have regular access to the internet, and to meet the specific hardware and software requirements given in the prospectus and Student handbook.

4.4 As there is a limit to the number of students who can be registered each year, applicants who meet the entrance requirements will be given a conditional offer of registration. Registration will then only be confirmed on payment of the appropriate fee and if there is still a place available for that study year. A student whose registration is not confirmed will be made a conditional offer of registration for the following year.

## 5. Period of registration

5.1 The minimum period of registration for the Postgraduate Diploma in Information Security is **one** year from the effective date of registration for the award. The maximum period of registration for the Postgraduate Diploma is **four** years from the effective date of registration for the award.

5.2 The minimum period of registration for the MSc degree in Information Security is **two** years from the effective date of registration for the degree. The maximum period of registration for the MSc degree is **four** years from the effective date of registration for the award.

5.3 An application for an extension of registration may be considered under paragraph 5 of the General Regulations. A fee will be payable.

5.4 Students who have not completed all the requirements of the programme within the maximum period of registration may apply for a renewal of registration for a further full

period, in accordance with paragraph 5.3 of the General Regulations.

5.5 The effective date of a student's registration shall be **1 September** in the year in which he or she is initially registered.

## 6. Assessment

6.1 Each module, with the exception of the **Project**, will be assessed by one two-hour unseen written paper (see also paragraph 6.3).

6.2 The **Project** will be assessed by one two-hour unseen written paper and by submission of a dissertation, weighted in the ratio 20:80.

6.3 Students will be required to participate satisfactorily in the online seminar for **Security management** and submit a report on their participation. This report will contribute five percent to the mark given for this module.

6.4 Students who make a second attempt at the examination for any module will not be required to participate in the online seminar again but may choose to do so.

6.5 Examinations by written paper will take place on one occasion each year, normally in **May**.

### Project – MSc degree only

6.6 The written paper and dissertation that constitute the examination for the **Project** must be attempted in the same year.

6.7 Students will be required to register for the **Project** by **1 September** in the year prior to the examination.

6.8 For the project, an *outline plan* of the dissertation, of no more than 500 words, must be submitted for approval to the Programme Director not later than **31 October** in the year preceding submission of the dissertation.

6.9 Students will be required to submit one *progress report* 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. Students who do not submit the progress report may not be permitted to submit the dissertation.

6.10 The completed dissertation must be submitted to the University to arrive not later than **31 March** in the year of entry to this element of the examination. A dissertation received after this deadline will be given a mark of zero.

## 7. Number of attempts permitted

7.1 Details of the number of attempts permitted are given in paragraph 8 of the General Regulations.

7.2 In order to satisfy the criteria for the award of the MSc degree or Postgraduate Diploma in Information Security (see Schedule C), students may be required, or may choose, to make a second attempt at one or more modules as follows:

- students who obtain *less than 50%* in any module (which may include the project) at a first attempt, and who have

not yet satisfied the criteria for the award, may choose to make a second attempt at the examination for that module

- students who obtain *less than 40%* in the **Project** must make a second attempt at the **Project** by both resubmitting the dissertation (see paragraphs 7.3 and 7.4) and re-sitting the written paper
- students who obtain *50% or more* in any module will **not** be permitted to make a second attempt at the examination for that module.

7.3 If, on the second occasion that a student sits the examination for any module, he or she receives the result 'Fail', his or her registration for the MSc degree or Postgraduate Diploma will cease unless the student is eligible to proceed to the final examination (see Schedule C), in which case the highest mark achieved over the two attempts for that module may be carried forward and taken into account for classification purposes. If the student would not be able to satisfy the requirements for the award of the MSc degree or Postgraduate Diploma, his or her registration will cease.

7.4 Students registered for the MSc degree in Information Security, who re-submit the dissertation under the provisions of paragraph 7.2 may choose either to submit a re-written dissertation, on the same topic as that originally submitted, or to submit a dissertation based on a new topic.

7.5 Students who submit a re-written dissertation will not receive any tutorial support and will only be liable to pay the examination re-entry fee indicated in paragraph 8.4. Students who wish to submit a dissertation on a new topic will receive tutorial support, and will be required to submit an outline plan for approval (see paragraph 6.8) and to pay a second **Project** fee (see paragraph 8.4).

## 8. Fees

8.1 The fees payable to the University for the MSc degree and Postgraduate Diploma in Information Security are as follows:

- in order to register for the MSc degree or Postgraduate Diploma, students are required to pay a **registration fee and**
- students are required to pay a **module fee** for each module they study. This fee includes entry to the first examination for that module.

Additional fees, as applicable, are as indicated in paragraphs 8.4 and 8.5.

8.2 On registration for the MSc degree or Postgraduate Diploma, students may choose to pay:

- either a **single payment**, covering the registration fee and all module fees
- or the registration fee plus the fees for the modules to be studied in the first year. To be registered, a student must pay at the same time both the registration fee and the fee for at least **one** module. In subsequent years, only the fees for any **new** modules are payable.

Students should note that by paying for the MSc degree or Postgraduate Diploma in a single payment, they will not be subject to the annual increase in registration and module fees.

8.3 The registration and module fees for 2008-2009 are as follows:

Total fee MSc degree (single payment)	£12,530
Total fee Postgraduate Diploma	

(single payment)	£9,685
Registration fee	£1,105
Module fee	£1,430
Project fee (MSc degree only)	£2,845

Registration and module fees must be paid not later than **31 July** (or as soon as the results of any examination taken in that year have been published). No study materials will be despatched until all fees due have been received.

8.4 Additional fees for 2008-2009 that will be payable, as applicable, are as follows:

Examination re-entry fees	
- for one module	£146
- for two modules	£222
- for three modules	£310
- for four modules	£392

The deadline for payment of an examination re-entry fee is **1 February** in the year of the examination.

8.5 The University reserves the right to make additional charges for issuing revised or replacement course materials.

8.6 A fee is normally levied by all examination centres (other than London) and Overseas Examination Authorities. This fee is payable by students each time they make an examination entry. The University cannot be responsible for this fee nor can it influence the level of fee charged.

## Refunds

8.7 Registration fees will not be refunded except as provided below:

If a student dies or is prevented from pursuing his or her studies through a disabling illness or that of a near relative for whose care he or she is responsible, a proportion of the registration fee which has been paid may be refunded at the discretion of the University provided that:

- the application is made within two years of the effective date of the student's registration
- no entry has been made to an examination for the degree or the postgraduate diploma
- such medical or other evidence as may be required is submitted.

8.8 A refund of module fees will be given where the fee has been paid but the student has not participated in the on-line environment. Such refund will be subject to a charge determined by the University (currently £50).

8.9 Registration and module fees will be refunded in full if a student attempts to register but a place is no longer available in the study year concerned.

# Schedule A / Structures

## Postgraduate Diploma in Information Security

### Core element

**Four compulsory core modules:**

*Security management [IC01]*  
*An introduction to cryptography and security mechanisms [IC02]*  
*Network security [IC03]*  
*Computer security [IC04]*



### Options element

**Two modules chosen from the following:**

*Secure electronic commerce and other applications [OPT5]*  
*Standards and evaluation criteria [OPT7]*  
*Advanced cryptography [OPT8]*  
*Database security [OPT9]*  
*Information crime [OP10] (formerly known as Computer crime)*  
*Smart cards/tokens security and applications [OP12]*

**Note:**

- The examination numbers are appended to the module titles in Schedule B and these numbers should be used when completing examination entry forms.

# Schedule A / Structure

## MSc in Information Security

### Core element

**Four compulsory core modules:**

*Security management [IC01]*  
*An introduction to cryptography and security mechanisms [IC02]*  
*Network security [IC03]*  
*Computer security [IC04]*



### Options element

**Two modules chosen from the following:**

*Secure electronic commerce and other applications [OPT5]*  
*Standards and evaluation criteria [OPT7]*  
*Advanced cryptography [OPT8]*  
*Database security [OPT9]*  
*Information crime [OP10] (formerly known as Computer crime)*  
*Smart cards/tokens security and applications [OP12]*



### Project element

*A compulsory Project [0011]*

**Note:**

- The examination numbers are appended to the module titles in Schedule B and these numbers should be used when completing examination entry forms.

## Schedule B / Module outlines

*The examination numbers are appended to the module titles and these numbers should be used when completing examination entry forms.*

*The use of calculators in the examination of the written papers will only be permitted as indicated on the Admissions Notice.*

### Core element

#### Security management [690IC01]

##### **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 (95%) and one Seminar Participation Report (5%).*

#### An introduction to cryptography and security mechanisms [690IC02]

##### **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 appreciation of the need for good key management. This will include an appreciation of the general nature of: encryption techniques for providing confidentiality services (including stream ciphers, block ciphers and public key techniques), mechanisms for providing data integrity and origin authentication, including MACs and digital signatures, message exchanges to provide entity authentication and/or key establishment, and the use of Trusted Third Parties, such as Certification Authorities (CAs), to provide and support Public Key Infrastructures.

Students completing this module should not expect to be able to design algorithms.

*Assessment: one two-hour unseen written paper.*

#### Network security [690IC03]

##### **Aims**

This module is concerned with the protection of data transferred over commercial information networks, including computer and telecommunications networks. After an initial brief study of current networking concepts, a variety of generic security technologies relevant to networks are studied, including user identification techniques, authentication protocols and key distribution mechanisms. This leads naturally to consideration of security solutions for a variety of types of practical networks, including LANs, WANs, proprietary computer networks, mobile networks and electronic mail.

##### **Objectives**

At the end of the module students should have gained an understanding of the fundamentals of the provision of security in information networks, as well as an appreciation of some of the problems that arise in devising practical solutions to network security requirements.

*Assessment: one two-hour unseen written paper.*

#### Computer security [690IC04]

##### **Aims**

This course deals with the more technical means of making a computing system secure. This process starts with defining the proper security requirements, which are usually stated as a security policy. Security models formalise those policies and may serve as a reference to check the correctness of an implementation. The main security features and mechanisms in operating systems will be examined as well as security related issues of computer architecture. Specific well-known operating systems are then studied as case studies. Other areas investigated include the security of middleware, software protection and web security.

##### **Objectives**

On completion of this course students should be able to:

- Demonstrate an understanding of the importance of security models with reference to the security of computer systems.
- Describe the features and security mechanisms which are generally used to implement security policies.
- Provide examples of the implementation of such features and mechanisms within particular operating systems.
- Display a breadth of knowledge of the security vulnerabilities affecting computer systems.
- Demonstrate an understanding of the main issues relating to Web security in the context of computer systems.

*Assessment: one two-hour unseen written paper.*

## Options element

### Secure electronic commerce and other applications [690OPT5]

#### Aims

This module aims to put the role of security into perspective and demonstrate how it forms part of a security system within an application. The aim is to illustrate, usually by the use of case studies, how a particular situation may make certain aspects of security important and how an entire system might fit together.

#### Objectives

On completion of the module the students should be able to:

- recognise the security issues that arise in a variety of applications
- appreciate how and why particular applications can address various security concerns
- review how the various security issues in a particular application relate to one another
- analyse how the security aims are met in a particular application.

*Assessment: one two-hour unseen written paper.*

### Standards and evaluation criteria [690OPT7]

#### Aims

Over the last few years, a variety of security-related standards have been produced by international standards bodies. This module examines some of the most important of these standards in detail. In doing so it illustrates how international standards now cover many aspects of the analysis and design of secure systems. The material covered also puts certain other aspects of the degree course in a more structured setting.

The emerging international standards for general-purpose security mechanisms and services are described in some detail. They are presented within the context of the OSI security architecture. The module also covers existing security evaluation criteria, the current process for evaluating secure systems, and guidelines for managing IT security.

#### Objectives

At the end of the module the student should have gained an appreciation of the scope and some of the technical content of existing and emerging security standards. This will have relevance both in the development of security policies, and in the procurement and configuration of systems to meet security policy needs. The topics covered within the module are also of fundamental importance in the specification and development of new security products.

*Assessment: one two-hour unseen written paper.*

### Advanced cryptography [690OPT8]

#### Aims

This module follows on from the introductory cryptography module (IC02). In IC02 cryptographic algorithms were introduced according to the properties they possessed and how they might fit into a larger security architecture. In this unit we look inside some of the most popular and widely deployed algorithms and we highlight design and cryptanalytic trends over the past twenty years. This course is, by necessity, somewhat mathematical and some basic mathematical techniques will be used. However, despite this reliance on mathematical techniques, the emphasis of the module is on understanding the more practical aspects of the performance and security of some of the most widely used cryptographic algorithms.

#### Objectives

On completion of this module, students will gain a broad familiarity of the inner-workings of many of today's most widely deployed cryptographic algorithms. Students will also develop a

more detailed understanding of some of the most prominent algorithms.

*Assessment: one two-hour unseen written paper.*

### Database security [690OPT9]

#### Aims

This module covers several aspects of database security and the related subject of concurrency control in distributed databases. We will discuss methods for concurrency control and failure recovery in distributed databases and the interaction between those methods and security requirements. We will also examine how access control policies can be adapted to relational and object-oriented databases.

#### Objectives

At the end of the module the student should

- understand how multi-level security can be preserved within a database whilst still permitting the concurrent execution of transactions.
- understand why confidentiality is so difficult to achieve within a statistical database.
- understand the implications that security and its administration have in the context of commercial databases such as Informix and Oracle.

*Assessment: one two-hour unseen written paper.*

### Information crime [690OPT10] (formerly known as Computer crime)

#### Aims

This module complements other modules by examining the subject from the criminal angle and presenting a study of computer crime and the computer criminal. We will discuss its history, causes, development and repression through studies of surveys, types of crime, legal measures, and system and human vulnerabilities. We will also examine the effects of computer crime through the experiences of victims and law enforcement and look at the motives and attitudes of hackers and other computer criminals.

#### Objectives

On completion of the module students should be able to:

- follow trends in computer crime
- relate computer security methodologies to criminal methods
- detect criminal activity in a computerised environment
- apply the criminal and civil law to computer criminality
- understand how viruses, logic bombs and hacking are used by criminals
- appreciate the views of business, governments, and the media to instances of computer crime.

*Assessment: one two-hour unseen written paper.*

## Smart cards/tokens security and applications [6900P12]

### Aims

This course will:

- provide an overview of smart cards/tokens and their properties
- introduce various applications that exploit smart cards/tokens
- examine benefits, threats and attacks
- consider systems for the development, manufacture and management of smart cards/tokens
- review smart card standards and security evaluation methodologies

### Objectives

On completion of this module students will be able to:

- identify constituent components, analyse strengths and weaknesses and identify new applications of smart cards
- identify the steps in the manufacturing/personalisation processes, analyse and evaluate potential risks and compare security safeguards
- identify and compare the systems in use, analyse the strengths and weaknesses and evaluate interoperability and security issues
- analyse the range of capabilities of SIM/USIM cards and apply them to new service ideas, evaluate the possible range of services and security measures
- understand the main standards and applications of smart cards for banking and finance, compare with earlier card solutions and analyse strengths and weaknesses of approaches
- analyse the key role of the smart card for passports, IDs and satellite TV, evaluate the security measures that have protected past and current cards
- identify and describe new technologies, including TPM and apply them to new application and evaluate the likely suitability/success of approach
- explain how common criteria may affect smart card design/development, analyse the different approaches and compare with less formal methods
- identify and describe the classes of attack and notable methods within each class, analyse countermeasures and evaluate practicality of attacks
- identify, compare and evaluate different methods of developing applications for smart cards, and understand the development cycle and the use of practical tools

- analyse the issues concerning smart card lifestyle management, and evaluate and compare methods of local and remote card management

*Assessment: One two-hour unseen written paper.*

## Project [6900011]

### Aims

A 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 the topic of the project. 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.

### Assignment

Each student will have 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 and plan the MSc project.

*Assessment: one two-hour unseen written paper and by submission of a dissertation.*

## Schedule C / Scheme of award

### MSc degree

1. To be considered for the award of the MSc degree in Information Security, a student must have:
  - attempted the examinations for all three elements of the degree:
    - the Core element [*comprising four compulsory core modules*];
    - the Options element [*comprising two modules chosen from a list of options*]
    - the Project
  - and**
  - obtained an average of at least 50% in the Core element
  - and**
  - obtained an average of at least 50% over the three elements (where the Core element is weighted 50%, the Options element weighted 25% and the Project element weighted 25%)
  - and**
  - obtained an average of at least 40% in both the Options and the Project elements, with an average of at least 50% in one of these.
2. To be considered for a mark of *distinction* for the MSc in Information Security, a student must have:
  - obtained an average of at least 70% over the three elements (where the weight of the Core element is double that of the Options and Project elements)
  - and**
  - obtained an average of at least 60% in each of the three elements (i.e. in the Core, Options and Project elements).

A student who has made more than one attempt at the examination for a module will not normally be considered for the award of distinction.
3. To be considered for a mark of *merit* for the MSc in Information Security, a student must have:
  - obtained an average of at least 65% over the three elements (where the weight of the Core element is double that of the Options and Project elements)
  - and**
  - obtained a minimum of 50% in each of the three elements (i.e. the Core, Options and Project elements).
4. Students who obtain less than 50% in any individual module at the first attempt are advised, within the provisions of the Regulations, and unless they satisfy the criteria for the award, to make a second attempt at the examination concerned. Students who obtain 50% or more in any module will **not** be permitted to make a second attempt in the module concerned (see paragraph 7.2 of the Programme Regulations).

### Postgraduate Diploma

5. To be considered for the award of the Postgraduate Diploma in Information Security, a student must have:
  - attempted the examinations for both the Core and the Options elements of the Postgraduate Diploma:
    - the Core element [*comprising of four compulsory core modules*];
    - the Options element [*comprising two modules chosen from a list of options*]
  - and**
  - obtained an average of at least 50% in the Core element
  - and**
  - obtained an average of at least 50% in the Options element.
6. To be considered for a mark of *distinction* for the Postgraduate Diploma in Information Security, a student must have:
  - obtained an average of at least 70% over the two elements (where the weight of the Core element is double that of the Options element)
  - and**
  - obtained an average of at least 60% in the Core and Options elements

A student who has made more than one attempt at the examination for a module will not normally be considered for the award of distinction.
7. To be considered for a mark of *merit* for the Postgraduate Diploma in Information Security, a student must have:
  - obtained an average of at least 65% over the two elements (where the weight of the Core element is double that of the Options element)
  - and**
  - obtained an average of at least 50% in the Core and Options elements
8. Students who obtain less than 50% in any individual module at the first attempt are advised, within the provisions of the Regulations, and unless they satisfy the criteria for the award, to make a second attempt at the examination concerned. Students who obtain 50% or more in any module will **not** be permitted to make a second attempt in the module concerned (see paragraph 7.2 of the Programme Regulations).

## Schedule D / Assessment criteria

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

%age	<b>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.</b>
<b>85+</b>	<p>Outstanding levels of accuracy and technical competence; deep understanding; near-comprehensive knowledge;</p> <p>exceptional independence of thought; exceptionally well-organised and original answers; high levels of ability in analysis of information;</p> <p>coherent structure; completely addresses all aspects of the question.</p> <p>As good as could be expected under examination conditions</p>
<b>70-84</b>	<p>Very high levels of accuracy and technical competence; deep understanding; detailed knowledge;</p> <p>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;</p> <p>coherent structure; completely addresses all aspects of the question.</p>
<b>60-69</b>	<p>Good degree of accuracy and technical competence; clear understanding; good breadth of knowledge;</p> <p>some evidence of creativity and independence of thought; generally effective analysis of quantitative or qualitative information;</p> <p>coherent structure; arguments are well constructed; addresses most key aspects of the question.</p>
<b>50-59</b>	<p>Satisfactory degree of competence and technical accuracy; sound understanding and knowledge;</p> <p>familiarity with correct strategies for analysis of quantitative or qualitative information, but possibly with limitations in the process of analysis;</p> <p>adequate structure; there may be some omissions, limited clarity of expression and partial or incomplete understanding of some areas of the topic; addresses some key aspects of the question.</p>
<b>Pass at 50</b>	
<b>40-49</b>	<p>There are some significant omissions or technical inaccuracies; some general understanding and knowledge; weaknesses in detail; the essay may not be fully focused on the question asked;</p> <p>familiarity with correct strategies for analysis of quantitative or qualitative information, but with significant errors in the process of analysis;</p> <p>simple structure.</p>
<b>Condonable 40</b>	
<b>20-39</b>	<p>There are serious technical errors and/or omissions that indicate poor understanding;</p> <p>there may be a failure to address the question as asked; information largely erroneous or has little or no relevance to the question; significant confusion over appropriate analysis of quantitative or qualitative information; analytical work incomplete and erroneous;</p> <p>inadequate structure, with no sense of logical argument.</p>
<b>0-19</b>	<p>The answer shows a clear lack of understanding with major technical errors and omissions;</p> <p>there is little attempt to address the question; information erroneous or has no relevance to the question;</p> <p>substantial error and confusion over appropriate analysis of quantitative or qualitative information; complete inability to analyse information.</p> <p>incomplete, fragmentary or chaotic structure.</p> <p><b>Individual marks may be gained for individual accurate facts.</b></p>

Grade description for Dissertation

%age	
85+	<p>Exceptional understanding of subject area; exceptional depth of content; outstanding technical accuracy and competence;</p> <p>significant originality in the construction of its research aims and questions; penetrating analysis and critical evaluation; ability to make informed judgements and develop original insights; ability to establish original lines of inquiry; employ different approaches to provide solutions to highly complex and novel problems.</p> <p>professionally presented; written in a incisive and fluent style with little or no errors; clearly publishable standard of referencing.</p> <p><b>A high level distinction dissertation should be publishable with editing and minor revision.</b></p>
70-84	<p>Authoritative understanding of subject area; high degree of depth of content; very high technical accuracy and competence;</p> <p>some originality in statement and fulfillment of aims; ability to analyze critically and formulate questions; excellent research potential; ability to employ different approaches to the solution of complex and novel problems.</p> <p>excellent presentation; written in a fluent and incisive style with no significant errors; close to publishable standard of referencing.</p> <p><b>A distinction dissertation should demonstrate professional standards of research.</b></p>
60-69	<p>Convincing display of understanding of subject area; good all round depth of content; good technical accuracy and competence;</p> <p>very satisfactory fulfillment of aims; challenging in parts; ability to analyze critically; clear evidence of the potential to undertake original research given appropriate guidance and support; ability to solve complex, though not entirely original problems.</p> <p>well presented and structured; written in a fluent style, with few errors; good referencing standard.</p>
50-59	<p>Sound knowledge and understanding of subject area; satisfactory depth of content; satisfactory sufficiency of content; satisfactory technical accuracy and competence;</p> <p>aims and objectives represent an acceptable challenge; satisfactory fulfillment of aims and objectives; ability to construct coherent and relevant answers to questions; few signs of originality and independence of thought;</p> <p>adequately presented and structured; straightforward presentational style with some errors; adequate referencing standard.</p>
<b>Pass at 50</b>	
40-49	<p>Basic knowledge and understanding of subject area; basic depth of content; borderline sufficiency of content; lack of clarity and accuracy in technical competence;</p> <p>aims fall just below an acceptable standard <i>and/or</i> failure to fulfill stated aims; answers are either incomplete or not entirely coherent; little evidence of independent thought;</p> <p>weak presentation <i>or</i> limited structure; presentation lacks clarity; significant errors of spelling, punctuation or grammar; weak referencing <i>and/or</i> inadequate bibliography.</p>
<b>Condonable 40</b>	
20-39	<p>Fragmentary knowledge and understanding of subject area; limited depth of content; limited sufficiency of content; little or fragmentary accuracy of technical content;</p> <p>no clear aims or questions asked; answers show only a limited degree of understanding; almost no evidence of independent thought;</p> <p><b>poorly presented <i>and/or</i> inadequate structure; consistent lack of clarity throughout; significant errors of spelling, punctuation or grammar; little or no referencing and inadequate bibliography.</b></p>
0-19	<p>Entirely lacking in knowledge and understanding of subject area; totally inappropriate depth of content; totally inappropriate sufficiency of content; entirely lacking accuracy of technical content;</p> <p>no aims or questions asked; totally devoid of independent thought;</p> <p>poorly presented <i>and/or</i> inadequate structure; confused and incoherent; substantial errors of spelling, punctuation or grammar; no references and absent bibliography.</p>

# General Regulations for Degrees and Other Awards at Masters Level

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**These General Regulations govern all degrees and other awards placed at the Masters Level of the *Qualifications Framework for the External System* of the University of London, and the programmes of study leading to those awards.**

## 1. The Regulations

### Introduction

1.1 These General Regulations govern all degrees and other awards placed at the Masters Level of the *Qualifications Framework for the External System*, as listed in paragraph 2.1. Individual programmes of study leading to degrees and other awards at those levels are governed by both these General Regulations and specific Programme Regulations.

1.2 The rules within these General Regulations apply, in their entirety, to all of the awards listed in paragraph 2.1, except where indicated otherwise.

1.3 Registered External students are required to comply with these General Regulations and the appropriate Programme Regulations. They must also comply with the procedures, deadlines and instructions issued by the University in, for example, the student handbook/manual and Notice to Candidates. The University is not responsible for any consequences arising from failure to comply with these Regulations, procedures, deadlines or instructions.

1.4 It is a student's responsibility to ensure that his or her choice of subjects complies with the Regulations that are current for that year.

1.5 The rules relating to a particular programme of study in any given year are those included in the Regulations for that current year and not in the year in which the student initially registered (see also paragraph 1.8).

1.6 On all matters concerning the interpretation of these Regulations, or on which they are silent, the decision of the University shall be final.

### Changes to the Regulations

1.7 The Regulations are reviewed and published annually, and are subject to change.

1.8 Two years' notice will normally be given to registered students of any major amendment of the Regulations. Five years' notice will be given to registered students should the University be required to withdraw the programme of study for which they are registered.

### Terminology and definitions

1.9 The programmes of study leading to degrees and other awards may be referred to, in the Regulations, as 'programmes'. Postgraduate Certificates are referred to as 'certificates', and Postgraduate Diplomas as 'diplomas'. Postgraduate degrees are referred to as 'degrees'.

1.10 These General Regulations describe the individual elements of a degree or diploma as 'subjects'. In the Programme Regulations, these may be called 'courses', 'units', 'modules' or 'sections'.

1.11 The term 'examination' used in these Regulations refers to the entire assessment for a subject, and includes not only the written paper for that subject but also any coursework, project, dissertation or online participation that contributes towards the final assessment.

1.12 'Credit' for a subject, on the basis of the same or an equivalent subject previously passed, may be awarded to a student who has been registered with the University of London for a programme of study. The mark obtained at the examination at which the subject was passed will be carried forward to the student's record and will contribute towards his or her award, in accordance with the criteria for awards given in the respective Programme Regulations.

1.13 'Exemption' from a subject may be granted to a student who has studied **either** for an award with another institution **or** for a programme of study with the University of London, where the subject passed is not sufficiently equivalent for credit to be awarded. The mark obtained at the examination at which the subject was passed will **not** be carried forward to the student's record and therefore will not contribute towards his or her award.

1.14 The 'Admission Notice' is provided to each student who has made an entry to an examination. The Admission Notice contains the student's candidate number and confirmation of the dates and time of the examination(s) for which he/she has entered.

1.15 The 'Notice to Candidates' contains prescribed rules for the examinations. The Notice to Candidates is provided to students together with their Admission Notice.

### Student complaints procedure

1.16 The University has a *Procedure for External student complaints* which can be found in the student handbook/manual (or the equivalent publication) and on the External System web site.

## 2. Awards to External students

2.1 The University grants the following awards at Masters Level to External students:

- Postgraduate Certificates
- Postgraduate Diplomas
- Postgraduate (or Master's) degrees.

2.2 The definition, level, volume and learning outcomes of these awards are described in the *Qualifications Framework for the External System*, which can be accessed via the External System web site.

2.3 The degrees, diplomas and certificates listed in paragraph 2.1 are awarded without classification, although some may be awarded with a mark of Distinction or Merit (see paragraph 1 of the Programme Regulations).

2.4 A certificate under the seal of the University will be delivered to each successful student who is granted a degree or other award. The date of the award will be as indicated in paragraph 1 of the Programme Regulations concerned.

2.5 External students are examined to the same standard as that required of students enrolled at individual Colleges or Institutes of the University. The Ordinances and Regulations of the University state that “*candidates granted degrees and other awards shall have attained the same academic standard irrespective of mode or place of study or examination.*”

2.6 To be eligible for an award of the University as an External student, a student must have:

- registered with the University as an External student **and**
- satisfied the requirements for the relevant award and complied with the Regulations for the programme concerned in all respects **and**
- made satisfactory payment to the University of all due fees and accounts.

The University reserves the right not to grant the award to students who fail to satisfy any of these conditions.

2.7 To register for a programme of study as an External student, an applicant must satisfy the conditions given in paragraph 4 of the relevant Programme Regulations. In addition, an applicant who was previously either registered as an External student or enrolled at a constituent College or Institute of the University of London must have made satisfactory payment to the University or College/Institute of all due fees and accounts. An applicant who fails to satisfy this condition will **not** be permitted to register, or to register again, as an External student.

2.8 An intermediate award or awards (i.e. a related certificate or diploma), if applicable, may be granted to a student registered for a diploma or degree in the following circumstances:

- (a) At the discretion of the Board of Examiners, and as indicated in paragraph 3 of the Programme Regulations, a student registered for a diploma or degree who does not complete the programme of study **or** who does not satisfy the Examiners (at the level required for the award) in all subjects may be awarded a related certificate or diploma (if applicable). Such students will be required to have satisfied the Examiners (at the level required for the award concerned) in the subjects that comprise the certificate or diploma.
- (b) At the discretion of the University, and where permitted in Paragraph 1 of the Programme Regulations, a student registered for a diploma or degree, and in circumstances other than those described in (a), may be considered for the award of a related certificate or diploma (if applicable), provided that he or she has satisfied in full the requirements for the certificate or diploma concerned.

The award of the certificate or diploma will be with effect from the year in which the requirements for the certificate or diploma were satisfied.

2.9 An External student who has successfully completed the examinations for a certificate or diploma and has not accepted that award, may apply to transfer his or her registration to a related diploma or degree (if applicable) subject to the rules of progression in paragraph 3 of both these and the Programme Regulations. A student who has accepted the award of the certificate or diploma may also apply to transfer his or her registration unless the Programme Regulations state otherwise.

2.10 An applicant who has previously received an award of the University of London, or whose registration with the University was terminated because he or she had exhausted the permitted number of attempts at an examination, may apply to register again as an External student for a programme of study in a different subject or field of study.

2.11 Unless paragraph 1 of the relevant Programme Regulations states otherwise, an applicant who has previously received an award of the University of London, or whose registration with the University was terminated because he or she had exhausted the permitted number of attempts at an examination, may apply to register again for a programme of study in the same subject or field of study. All applications will be considered on an individual basis. Permission to register in these circumstances will be given at the discretion of the University and will be subject to any further conditions specified in these General Regulations and in the relevant Programme Regulations, or by the University.

2.12 A former student of the University who is applying to register again as an External student under the provisions of paragraphs 2.10 or 2.11 will be required to satisfy the entrance requirements for the programme of study for which he or she is applying and the conditions given in paragraph 2.7.

### 3. Application, entrance requirements and exemptions

#### Application

3.1 In order to be considered for registration as an External student, applicants are required to submit an application in accordance with the procedures and deadlines given in the relevant prospectus.

#### Entrance requirements

3.2 To be eligible to register as an External student for a programme of study leading to an award at Masters Level, an applicant must satisfy in full the entrance requirements specified in paragraph 4 of the relevant Programme Regulations.

3.3 The University reserves the right to request applicants to provide evidence acceptable to the University of oral and written competence in English before an offer of registration can be made.

#### Exemptions

3.4 At the discretion of the University, students who satisfy the relevant entrance requirements to register for a programme of study and are appropriately qualified may apply for exemption from specified subjects. Applications will be considered on the basis of studies successfully completed at a level considered by the University to be appropriate.

3.5 Where permitted in paragraph 4 of the Programme Regulations students can be considered for exemption from up to **one third** of the programme concerned. Exemption can be granted from core and optional subjects, but cannot be granted from the dissertation, project or final examination (as appropriate) of the programme.

3.6 No exemption will be granted unless the student has made an application in accordance with the University's procedures and deadlines.

3.7 Applications for exemption cannot be considered after a student has made entry to the examination for the subject concerned. Students who have failed an examination may not, at a later stage, apply for exemption from that examination.

3.8 A fee is payable for all applications for exemption (see paragraph 11).

3.9 All exemptions are granted at the discretion of the University.

3.10 Exemptions are valid only for a limited time and as indicated in the offer of exemption. If a student does not enter an examination within this period, then the exemption will lapse and it will be necessary to make a fresh application.

3.11 Exemptions are valid only for the particular programme of study and subject for which they have been awarded. Exemptions will no longer be valid if the programme is withdrawn before the student registers. Students who transfer their registration to another programme may be required to submit a further application for exemption.

3.12 Students who are exempt from a specific subject are not required or permitted to offer the same, or equivalent, subject at a later stage.

## 4. Rules of progression

### Progression within a programme of study

4.1 Students are required to comply with the rules of progression given in paragraph 3 of the Programme Regulations.

4.2 Students are not required to enter examinations every year nor to enter on the date they indicate at the time of registration, unless the Programme Regulations state otherwise.

### Progression from a certificate or diploma to a related award

4.3 There is no automatic progression between certificates, diplomas and degrees. Satisfactory completion of a certificate or diploma does not in itself guarantee entry to a related diploma or degree. In order to proceed to a related award, a student registered for a certificate or diploma must normally successfully complete all the prescribed certificate/diploma subjects at the required level and receive a recommendation from the Examiners that he or she may proceed.

4.4 A student who progresses from a certificate or diploma to a related award will be credited the same or equivalent subjects passed. Any restriction on the use of credited subjects is given in the Programme Regulations.

4.5 The attempts at any failed subjects which are common to the diploma or degree to which the student progresses will be carried forward and will count towards the number of attempts permitted at those subjects.

### Progression from a short course

4.6 Successful completion by formal assessment of a short course or courses may be taken into account for admission to a related or unrelated certificate, diploma or degree (with the exception of the LLM degree under the Old Regulations).

4.7 Successful completion by formal assessment of a short course or courses may be taken into account for credit towards a certificate, diploma or degree, provided that the application is made within **three** years of the completion of the relevant course or courses.

4.8 Successful completion of a short course or courses does not in itself automatically satisfy entry requirements for any certificate, diploma or degree or ensure credit.

4.9 A student who does not successfully complete the formal assessment for a short course will be permitted to proceed to a certificate, diploma or degree **provided** he or she satisfies the entrance requirements for the certificate, diploma or degree concerned.

4.10 All applications for progression from a short course to a certificate, diploma or degree will be considered on an individual basis and permission to progress, and, where appropriate, to receive credit, will be at the discretion of the University.

## 5. Period of registration

5.1 The minimum and maximum periods of registration are described in paragraph 5 of the individual Programme Regulations. No reduction in the prescribed minimum period of registration will be permitted, except within the parameters given in paragraph 5.2 and at the discretion of the University.

5.2 Postgraduate Certificates may not be completed in less than **six months**. Master's degrees and Postgraduate Diplomas may not be completed in less than **one year**.

5.3 Where permitted in paragraph 5 of the Programme Regulations, application for a renewal of registration for a further period may be made by students who have not completed all the requirements of the programme for which they are registered within the maximum period of registration. The University will take into account the progress made by the student during registration. A fee will be payable if renewal is granted.

5.4 Where permitted in paragraph 5 of the Programme Regulations, an application for an extension of registration of **one** year beyond the prescribed maximum period may be made by students who have not completed all the requirements of the award for which they are registered. A fee may be payable.

5.5 Renewal of registration and extension of registration are approved only at the discretion of the University and will be subject to the Regulations in force at the time of renewal or extension.

5.6 Students who are permitted to proceed from a certificate or diploma to a related diploma or degree (see paragraph 4) will have the maximum period of registration for the related award counted from the effective date of initial registration for the certificate or diploma for which they were initially registered.

5.7 Students who are permitted to proceed from a short course to a certificate, diploma or degree will be given a new period of registration as an External student, effective from the date of registration for the certificate, diploma or degree concerned. The maximum period of registration permitted will be the same as for all other students registered for the same programme, as indicated in paragraph 5 of the relevant Programme Regulations.

5.8 The University reserves the right to apply *The Disciplinary Procedure* and the *Suspension and Termination of Registration of Students in Debt* process as described in the University of London Ordinances (Ordinances 26 and 28 respectively).

## 6. Transfer

Transfer of External students to different programmes at Masters Level, and within the same programme

6.1 Unless otherwise prohibited by the Programme Regulations concerned, an External student registered for a programme of study at Masters Level who wishes to change to another programme at one of those Levels may apply to transfer his or her registration. The student will be required to satisfy the regulations and entrance requirements for the programme to which he or she wishes to transfer.

6.2 A student registered for a programme of study with more than one 'scheme' or 'route' may apply to transfer between those schemes or routes.

6.3 The rules in paragraphs 6.4 to 6.9 apply both to students transferring between different programmes of study and to students transferring within the same programme. Further rules are given in the relevant Programme Regulations.

6.4 All applications to transfer will be considered on an individual basis, and permission to transfer will be at the discretion of the University and subject to the Programme Regulations concerned. Students may be required to cancel their registration and register afresh.

6.5 Any additional fees payable (see also paragraph 11.5) and any period of transferred registration granted shall be at the discretion of the University. Any refund of fees already paid will be subject to the conditions in paragraph 11.

6.6 An application to transfer which is submitted after a student has made entry to any examination will **not** be considered until after the result of that examination has been published. The result of that examination will then be taken into account by the University in instances when permission to transfer is dependent on the student's examination record and/or where the student is applying to transfer between the routes or schemes of the same programme of study.

6.7 In certain circumstances, students who transfer may receive credit for subjects already passed. Details of such credit arrangements are given in the Programme Regulations.

6.8 Students who receive credit for subjects passed will not be permitted to re-enter the examination for those subjects. The marks obtained at the examinations at which the subjects were passed will contribute towards the student's award, in accordance with the criteria for awards given in the respective Programme Regulations.

6.9 Students who are not permitted to transfer to a particular programme but who wish to register for that programme must cancel their registration for the other award and apply to register afresh, subject to satisfying the requirements of paragraph 4 of the Programme Regulations. Students who are permitted to register afresh in this way:

- will **not** be permitted to carry credit for any subjects previously passed either to the programme concerned, or, in the event of a subsequent transfer, to another programme **and**
- will **not** be permitted to carry any failed attempts at subjects from their previous registration.

Transfer of External students to a programme at Certificate, Intermediate or Honours Level

6.10 Students registered for a programme of study at Masters Level (see paragraph 2.1) are not permitted to transfer their registration to a programme at Certificate, Intermediate or Honours level. Students will instead be required to cancel their existing registration and to submit a fresh application for registration and comply with the Regulations for the programme concerned.

Registration and credit transfer of College-based students

6.11 A student in attendance at a College or Institute of the University of London may apply to complete their studies for the same award as an External student and may be considered for credit and/or exemption for subjects previously passed. All applications for credit and/or exemption will be considered on an individual basis and at the discretion of the University.

6.12 Students who receive credit for subjects passed will not be permitted to re-enter the examination for that subject. The mark obtained at the examination at which the subject was passed will contribute towards the student's award, in accordance with the criteria for awards given in the respective Programme Regulations.

6.13 The rules concerning exemptions are given in paragraph 3.

## 7. Assessment

7.1 Students are required to satisfy the assessment requirements for the subject(s) taken and may not make more than the number of attempts permitted in paragraph 8.

7.2 An examination is governed by the Regulations in force at the time of the examination and not at the time that a student was initially registered or first attempted the examination concerned (but see also paragraph 1.8).

7.3 In order to sit an examination, a student must:

- have completed the relevant application and registration/enrolment procedures with the University by the appropriate deadlines and be registered as an External student for the programme concerned **and**

- have made an examination entry in accordance with both the University's and the appropriate examination centre/Overseas Examination Centre's instructions and deadlines.

7.4 Except in the circumstances of paragraph 7.5, all examinations by written paper, wherever held, will take place on the same date and at the same time. The University reserves the right to set different papers in the same subject in separate countries and in different time zones.

7.5 In the event of any unavoidable delay in the arrangement of examinations in a country other than the United Kingdom, the Overseas Examination Centre will arrange for the relevant papers to be taken with as little deviation as possible from the original dates and times assigned to them. Students are required to abide by any such revised arrangements. The University reserves the right not to mark a paper taken at a different time from that prescribed.

7.6 Where it is deemed necessary, Examiners may change the format or rubric of a written paper, from that of a previous year, without prior notice to students.

7.7 Except where the syllabus/course outline or rubric for a written paper for a particular subject indicates otherwise, all answers to examinations must be written in English.

## Examination centres

7.8 Examinations by written paper are held at established examination centres worldwide.

7.9 Outside the United Kingdom and Republic of Ireland, examinations are conducted by independent bodies known as Overseas Examination Centres.

7.10 In countries where an established Overseas Examination Centre exists, students must use the facilities provided by that Centre. The University will not establish an alternative centre in those countries.

7.11 All examinations are held at the discretion of the examination centre/Overseas Examination Centre and are subject to any conditions they may impose.

7.12 Students are required to apply to the relevant examination centre/Overseas Examination Centre for permission to sit an examination. The University can accept no responsibility for making examination arrangements on behalf of a student. It is entirely at the discretion of the examination centre or Overseas Examination Centre to accept or refuse an entry to an examination.

7.13 A fee is normally levied by all examination centres (other than London) and Overseas Examination Centre. This fee is payable by students each time they make an examination entry. The University cannot be responsible for this fee nor can it influence the level of fee charged.

## 8. Number of attempts permitted

8.1 A student who fails to satisfy the Examiners in an examination, and who has not yet satisfied the conditions for the Board of Examiners to determine his or her final result, will be permitted or required to make **one** further attempt at that examination. The maximum number of attempts permitted at any examination is **two**.

8.2 A student who enters an examination hall to attempt a written paper will be considered to have made an examination attempt. Unless otherwise stated in the Programme Regulations, absence from an examination will not count as an attempt.

8.3 The mark or grade awarded for a second attempt at an examination will supersede any previously awarded mark or grade for that examination, unless the Programme Regulations state otherwise.

8.4 If a student fails to satisfy the Examiners at a second attempt at any examination his or her registration will cease unless the Programme Regulations permit the student to proceed as the requirements for that award may still be satisfied, in which case the mark or grade obtained on the latest occasion may be carried forward and may count towards the final award.

8.5 Except as otherwise provided for by the University, students may not make a further attempt at any subject already passed or for which credit has been awarded.

## 9. Students with a disability and/or special needs

9.1 The University has a policy for External students with a disability and/or special needs and a statement explaining this policy is given on the External System web site.

9.2 As part of its policy, the University will make every reasonable effort to accommodate the requirements of a student with a disability and/or special needs by, wherever possible, providing any study materials in a different format (e.g. large print) or another medium, and/or by making special examination arrangements. If the University is unable to provide the study materials in the format which has been requested, the University will endeavour to make an alternative suggestion.

### Special examination arrangements

9.3 The University has a Panel which considers special examination arrangements for students with a disability and/or special needs. The aim of the Panel is to make sure that a student with a disability and/or special needs is neither disadvantaged nor advantaged when compared to other students. The University cannot guarantee that special examination arrangements will be possible in every case.

9.4 Applications from students with a disability and/or special needs may be considered for the use of special aids or for extra time in the examinations.

9.5 Special arrangements for examinations at an *ad hoc* centre may be made in very exceptional circumstances and then only in the United Kingdom. Arrangements **cannot** be made for oral or practical examinations to be held at an *ad hoc* centre, although in exceptional cases it may be possible to permit the use of special aids. Arrangements for examinations in a student's home are **not** made. Additional fees may be payable for arrangements at an *ad hoc* centre.

9.6 A student who finds handwriting difficult due to medical or learning difficulties must apply to the University for special arrangements to be made. The University will not transcribe illegible scripts. Any script deemed illegible by the Board of Examiners will be assigned a mark of zero and a fail result will be given. This will count as an attempt at the examination.

## 10. Conduct of examinations

10.1 All students sitting examinations are required to comply with the rules governing the conduct of examinations given below and in the Notice to Candidates accompanying the Admissions Notice.

### Representations about examinations

10.2 Students who wish the Board of Examiners to know of any illness or other adequate cause which they think may have affected their performance must **immediately** inform the Examinations Office and furnish a supporting medical certificate or other supporting certification obtained at the time of illness. Notification received more than **three weeks** after the date of the last examination will **not** be taken into account by the Examiners.

10.3 Appeals against the results of examinations **may not be made** on academic grounds. The University will consider representations concerning examination results made on the grounds of administrative error or where there is concern that the examination may not have been conducted in accordance with the relevant Instructions and/or Regulations. An administration fee (currently £50 per paper) is payable for the consideration of such representations (refundable in the event that an error is found). Any representation must be made within **one month** of the publication of the decision of the Board of Examiners to which it relates and should be addressed to the Head of Special Examination Services and be accompanied by payment of the administration fee. Representations must state the grounds on which the appeal is made and provide evidence to support it. Further information on the procedure may be obtained from the Head of Special Examination Services.

### Permitted materials

10.4 A student may use in the examination only such books, notes, statutes, statistical tables, instruments, or other materials as are specifically permitted in the **Admission Notice/timetable**. No other books, notes, instruments, or other materials or aids whatsoever may be introduced into an examination room or be handled or consulted during an examination. Any such materials or aids in the possession of a student on entry to the examination room must be deposited immediately with the Invigilator before the examination starts. It is an examination offence to introduce unauthorised materials into the examination room.

10.5 The use of calculators in the examinations is strictly controlled. Students may use their own electronic calculators in the examinations provided that:

- a) the Programme Regulations permit this
- b) the calculator complies with the specification given in paragraph 10.6
- c) where no such permission is given in the Programme Regulations, calculators may **not** be used.

10.6 Where calculators are permitted, the following specification will apply, unless the Programme Regulations state otherwise:

- Non-programmable. The use of a calculator or other electronic device that communicates, stores textual or numerical information, or displays textual (except error) messages, graphical or algebraic information is strictly forbidden. The use of a calculator with alphabet and/or symbol keys not listed below is strictly forbidden.
- PDAs, mobile phones or other devices are forbidden
- Hand held
- Compact

- Portable
- Solar and/or battery powered
- Quiet in operation
- The use of calculators with the following symbols and functions **only** are permitted:
  - Digit keys 0 to 9 and decimal point;
  - Keys for basic arithmetical functions of addition, subtraction, multiplication, division and equals;
  - Percentage key;
  - Square root key;
  - Basic 3 key memory (MRC, M-, M+);
  - Clear keys (C, AC);
  - On/off key.

10.7 The use of any calculator other than the type specified in the paragraph 10.6 of the General Regulations, or in paragraph 6 of the Programme Regulations, will constitute an examination offence and will be subject to the provisions in paragraph 10.16 of these regulations. Students are responsible for ensuring that their calculators are in working order for the examination. Students must ensure that they have alternative means of calculation in the event of the calculator failing during the examination, either through the use of a second calculator, which complies with the specification given in the Programme Regulations, or to continue the examination without the use of a calculator. If students use electronic calculators in examinations they must indicate on their examination scripts the name and type of machine used. Calculators will **not** be provided by the University.

### Examination offences

10.8 It is an examination offence to introduce into, or use in the examination room, unauthorised materials or aids. Any unauthorised materials or aids brought into an examination room and not deposited with the Invigilator (see paragraph 10.4) must be surrendered to the Invigilator on request. Any materials or aids so surrendered may be handed over by the Invigilator to the University which may make copies of them. The original materials or aids (together with all such copies) may be retained by the University at its absolute discretion.

10.9 Students must not pass any information from one to another during an examination of a written paper. A student may not act in collusion with another student or any other person, nor copy from another student, nor engage in any similar activity. Any of these activities constitutes an examination offence.

10.10 Plagiarism is the presentation of another person's thoughts or words as if they were the student's own: for example, copying from text books and other sources (including the Internet) without due acknowledgement that the passages quoted are copied and without giving the source of those passages (see paragraph 10.12). Plagiarism is an examination offence.

10.11 All work submitted as part of the requirements for any examination must therefore be expressed in the student's own words and incorporate his or her own ideas and judgements.

10.12 Direct quotations from the published or unpublished work of another person must always be clearly identified as such and a full reference to the source must be provided in the proper form. A series of short quotations from several different sources, if not clearly identified as such, constitutes plagiarism in the same way as an unacknowledged quotation from a single source. Equally, if another person's ideas or judgements are summarised, the student must refer to that person in the text, and give details of the work to which reference is made.

Further instructions on acknowledging other people's work and the extent to which other sources may be quoted is given in student handbooks/manuals.

10.13 It is an examination offence to submit work which has been written jointly by two or more persons, unless expressly permitted in the relevant Programme Regulations.

10.14 Assignments, essays, projects, reports, dissertations and other similar work must therefore be the student's own work and must be written without the assistance of other people, except where expressly permitted in the Programme Regulations. Students will be required to submit a signed declaration for all such work submitted, stating that they understand what is meant by plagiarism, and confirming that the work submitted is entirely their own and that the use of published or unpublished works of other people has been acknowledged in accordance with the University's requirements.

10.15 It is the responsibility of the student to safeguard his or her assignments, essays, projects, reports, dissertations and other similar work and to prevent them from being copied by other students.

10.16 The examination offences listed in the foregoing paragraphs will be treated as cheating or irregularities of a similar character under the provisions of the Regulations for Proceedings in respect of Examination Offences by Candidates for University Awards, except as otherwise provided for in the relevant Programme Regulations. Under the Regulations for Proceedings in respect of Examination Offences by Candidates for University Awards students found to have committed an offence may have the results of their examinations withheld, and may be excluded from all future examinations of the University. A copy of these Regulations may be obtained from the Head of Student Assessment.

## Other matters

10.17 The University reserves the right to require students sitting an examination for a written paper to remain within the examination hall or its precincts for the duration of the relevant paper.

10.18 All examination scripts are the property of the University and will not be returned to students. Answers to assignments, essays, course projects and other similar work written in the student's own time will only be returned to the student as described in the relevant Programme Regulations. Final reports on research projects or dissertations will not be returned to students, unless indicated otherwise in the Programme Regulations.

10.19 All question papers will be retained by the University.

## 11. Fees

11.1 Students are required to pay the fees that are due in any particular year in full at the time when they fall due. Fees must be paid in accordance with the University's procedures and deadlines given in the prospectus and Student handbook/manual or equivalent publication (as applicable).

11.2 The University reserves the right to amend previously announced fees. The University also reserves the right to make additional charges (see paragraph 8 of the Programme Regulations).

11.3 Students who are permitted to proceed from a certificate or diploma to a related diploma or degree (see paragraph 4) will be required to pay the fees indicated in paragraph 8 of the Programme Regulations.

11.4 Students who are permitted to proceed from a short course to a certificate, diploma or degree (see paragraph 3) will be required to pay the registration fee for the relevant programme of study and the fee for the remaining subjects, unless indicated otherwise in the Programme Regulations.

11.5 Students who are permitted to transfer their registration to another programme of study (see paragraph 6) shall be required to pay the relevant fees, for the programme concerned, in order to do so. Any additional fee payable shall be at the discretion of the University. Any refund of fees already paid will be subject to the conditions in paragraphs 11.8 and 11.9.

11.6 Students who cancel their registration for one programme of study and register afresh for another programme of study (see paragraph 6.2) will be required to pay the relevant fees, for the programme concerned, in order to do so. Any refund of fees already paid will be subject to the conditions in paragraphs 11.8 and 11.9.

11.7 Students who are permitted to renew their registration at the expiry of the initial period of registration (see paragraph 6) will, as applicable, be required to pay a further full registration fee. Students who are permitted to renew their registration for a programme of study which is being phased out will be required to pay a proportion of the full registration fee (as applicable), the amount depending on the number of years remaining before the last examination for the programme concerned. In addition to the registration fee, **all** students will be required to pay the appropriate subject fees, under the Regulations in force at that time.

## Refunds

11.8 Fees will only be refunded in exceptional circumstances and at the discretion of the University (but see also paragraphs 11.9 and 11.10). All refunds will be subject to an administrative charge determined by the University. Any further information is given in paragraph 8 of the Programme Regulations.

11.9 Exemption application fees are **not** refundable.

11.10 Examination entry fees where applicable are **not** refundable nor can they be transferred from one examination to a later one. A student is liable for the full fee at any subsequent entry, in accordance with the Regulations then in force.

# Programme Regulations for Short Courses

**These Programme Regulations apply to the short course programme that is related to the MSc degree and Postgraduate Diploma in Information Security.**

## 1. Introduction

1.1 The University offers individual modules of the MSc and Postgraduate Diploma in Information Security as credit bearing short courses.

1.2 The rules governing this short course programme are given in both these Programme Regulations and the General Regulations for Short Courses that follow.

## 2. Short course programme of study

2.1 The following modules are offered as credit bearing short courses under this short course programme:

Security management	[IC01]
An introduction to cryptography and security mechanisms	[IC02]
Network security	[IC03]
Computer security	[IC04]

All courses accommodate 200 notional study hours.

2.2 In addition, the following modules are offered as short courses to students who have completed the MSc or Postgraduate Diploma in Information Security:

Secure electronic commerce and other applications	[OPT5]
Standards and evaluation criteria	[OPT7]
Advanced cryptography	[OPT8]
Database security	[OPT9]
Information crime	[OP10]
Smart cards/tokens security and applications	[OP12]

2.3 Students may take up to **four** modules as short courses (see also paragraph 2.2 of the Short Course General Regulations).

2.4 Not all modules will necessarily be available in every year.

2.5 In addition, as there are limits to the number of students who can be registered for each module in any year, the University cannot guarantee that a student's preferred choice of modules will always be available. On registration, therefore, students will be asked to indicate their alternative choices.

### Period of registration

2.6 All students registering for a short course will be registered for a maximum period of **two** years (Short Course General Regulations paragraph 4.1). The minimum period of registration for students who choose to be assessed in a short course on this programme is **one** year.

2.7 Further information on the period of registration is given in paragraph 4 of the Short Course General Regulations.

### Online seminars

2.8 Participation in the online seminar is an assessed element of the module **Security management**. Students will be required to participate satisfactorily in the seminar and submit a report on their participation. Students will also be required to attempt the examination for **Security management** (see also paragraph 5.3).

2.9 Online seminars for all other modules are not compulsory, but students are strongly encouraged to participate.

2.10 During virtual seminars and during all other on-line contributions, students must observe the code of conduct for on-line behaviour given in the Student handbook.

## 3. Progression to the related awards

3.1 Students who successfully complete the assessment for one or more of the short courses in this short course programme may be considered for progression to the MSc degree or Postgraduate Diploma in Information Security.

3.2 Students who are permitted to progress may be credited with any short courses successfully completed.

3.3 Further rules governing progression to the degree or diploma are given in paragraph 3 of the Short Course General Regulations.

## 4. Entrance requirements

4.1 In order to be eligible to register for a short course governed by these Regulations, an applicant must:

- hold a second class honours degree or the equivalent, in a relevant discipline, from a university or other institution acceptable to the University of London (a relevant discipline includes, but is not restricted to, computer science, electronics, information systems, and mathematics) **and**
- have an advanced level of ability to work in English. For this purpose, applicants may be required to pass, or to have passed within the last five years, at the appropriate level, a test of proficiency in English acceptable to the University.

4.2 Applicants without a degree but with appropriate industrial experience will also be considered.

4.3 Students are required to have regular access to the internet, and to meet the specific hardware and software requirements given in the prospectus and Student handbook.

4.4 As there is a limit to the number of students who can be registered each year, applicants who meet the entrance requirements will be given a conditional offer of registration. Registration will then only be confirmed on payment of the appropriate fee and if there is still a place available for that study year. A student whose registration is not confirmed will be made a conditional offer of registration for the following year.

## 5. Assessment

5.1 Students may choose whether or not to be formally assessed in the credit bearing short course for which they are registered. Students who choose to be formally assessed will be examined to the same standard as that required by students registered for the related degree. **Paragraphs 5.2 to 5.7 apply to all students who wish to be assessed.**

5.2 Each module taken as a short course will be assessed by one two-hour unseen written paper.

5.3 Students will be required to participate satisfactorily in the online seminar for **Security management** and submit a report on their participation. This report will contribute five percent to the mark given for this module (see paragraph 2.7).

5.4 Students who make a second attempt at the examination for any module will not be required to participate in the online seminar again but may choose to do so.

5.5 Examinations by written paper will take place on one occasion each year, normally in **late-May**.

5.6 A student who fails to satisfy the Examiners in an examination at the first attempt will be permitted to make **one** further attempt at that examination. The maximum number of attempts permitted at any examination is **two** (Short Course General Regulations, paragraph 6.1), *provided* the student's registration has not expired.

5.7 If, on the second occasion that a student sits the examination for any short course, he or she receives the result 'Fail', his or her registration for that short course will cease, in which case the highest mark achieved over the two attempts for that short course will count.

### Marks

5.8 The pass mark for a short course is 50%.

5.9 Information on assessment criteria and how a mark achieved for a credit-bearing short course might contribute to a related award, for students who progress to such an award, are given in Schedule D of the Programme Regulations for the awards.

## 6. Fees

6.1 The fees payable to the University are as follows:

Fee per short course	£1,620
Examination re-entry fee	
One module	£146
Two modules	£222
Three modules	£310
Four modules	£392

*(Payable by students who enter an examination on a second occasion, having failed on the first occasion.)*

6.2 The fee payable per short course must be paid not later than **31 July**. The deadline for payment of an examination re-entry fee is **1 February** in the year of the examination.

6.3 The fees above refer to the 2008-2009 year only.

6.4 A fee is normally levied by all examination centres (other than London) and Overseas Examination Authorities. This fee is payable by students who choose to be assessed each time they make an examination entry. The University cannot be responsible for this fee nor can it influence the level of fee charged.

### Progression to an award

6.5 When a student progresses from a short course to the related MSc degree or Postgraduate Diploma in Information Security, the following additional fees shall be payable:

- a registration fee to register for the MSc degree or Postgraduate Diploma in Information Security
- the relevant module fees.

### Refunds

6.6 A refund of module fees will be given where the fee has been paid but the student has not participated in the on-line environment. Such refund will be subject to a charge determined by the University (currently £50).

6.7 Registration and module fees will be refunded in full if a student attempts to register but a place is no longer available in the study year concerned.

## Schedule A / Module outlines

*The examination numbers are appended to the module titles and these numbers should be used when completing the examination entry forms.*

*The use of calculators in the examination of the written papers will only be permitted as indicated on the Admissions Notice.*

### Security management [690IC01]

#### **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 (95%) and one Seminar Participation Report (5%).*

### An introduction to cryptography and security mechanisms [690IC02]

#### **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 appreciation of the need for good key management. This will include an appreciation of the general nature of: encryption techniques for providing confidentiality services (including stream ciphers, block ciphers and public key techniques), mechanisms for providing data integrity and origin authentication, including MACs and digital signatures, message exchanges to provide entity authentication and/or key establishment, and the use of Trusted Third Parties, such as Certification Authorities (CAs), to provide and support Public Key Infrastructures.

Students completing this module should not expect to be able to design algorithms.

*Assessment: one two-hour unseen written paper.*

### Network security [690IC03]

#### **Aims**

This module is concerned with the protection of data transferred over commercial information networks, including computer and telecommunications networks. After an initial brief study of current networking concepts, a variety of generic security technologies relevant to networks are studied, including user identification techniques, authentication protocols and key distribution mechanisms. This leads naturally to consideration of security solutions for a variety of types of practical networks, including LANs, WANs, proprietary computer networks, mobile networks and electronic mail.

#### **Objectives**

At the end of the module students should have gained an understanding of the fundamentals of the provision of security in information networks, as well as an appreciation of some of the problems that arise in devising practical solutions to network security requirements.

*Assessment: one two-hour unseen written paper.*

### Computer security [690IC04]

#### **Aims**

This course deals with the more technical means of making a computing system secure. This process starts with defining the proper security requirements, which are usually stated as a security policy. Security models formalise those policies and may serve as a reference to check the correctness of an implementation. The main security features and mechanisms in operating systems will be examined as well as security related issues of computer architecture. Specific well-known operating systems are then studied as case studies. Other areas investigated include the security of middleware, software protection and web security.

#### **Objectives**

On completion of this course students should be able to:

- Demonstrate an understanding of the importance of security models with reference to the security of computer systems.
- Describe the features and security mechanisms which are generally used to implement security policies.
- Provide examples of the implementation of such features and mechanisms within particular operating systems.
- Display a breadth of knowledge of the security vulnerabilities affecting computer systems.
- Demonstrate an understanding of the main issues relating to Web security in the context of computer systems.

*Assessment: one two-hour unseen written paper.*

The following modules are offered as credit bearing short courses to students who have completed the MSc or Postgraduate Diploma in Information Security.

### Secure electronic commerce and other applications [690OPT5]

#### **Aims**

This module aims to put the role of security into perspective and demonstrate how it forms part of a security system within an application. The aim is to illustrate, usually by the use of case studies, how a particular situation may make certain aspects of security important and how an entire system might fit together.

#### **Objectives**

On completion of the module the students should be able to:

- recognise the security issues that arise in a variety of applications
- appreciate how and why particular applications can address various security concerns
- review how the various security issues in a particular application relate to one another
- analyse how the security aims are met in a particular application.

*Assessment: one two-hour unseen written paper.*

### Standards and evaluation criteria [690OPT7]

#### **Aims**

Over the last few years, a variety of security-related standards have been produced by international standards bodies. This module examines some of the most important of these standards in detail. In doing so it illustrates how international standards now cover many aspects of the analysis and design of secure systems. The material covered also puts certain other aspects of the degree course in a more structured setting. The emerging international standards for general-purpose security mechanisms and services are described in some detail. They are presented within the context of the OSI security architecture. The module also covers existing security evaluation criteria, the current process for evaluating secure systems, and guidelines for managing IT security.

#### **Objectives**

At the end of the module the student should have gained an appreciation of the scope and some of the technical content of existing and emerging security standards. This will have relevance both in the development of security policies, and in the procurement and configuration of systems to meet security policy needs. The topics covered within the module are also of fundamental importance in the specification and development of new security products.

*Assessment: one two-hour unseen written paper.*

### Advanced cryptography [690OPT8]

#### **Aims**

This module follows on from the introductory cryptography module (IC02). In IC02 cryptographic algorithms were introduced according to the properties they possessed and how they might fit into a larger security architecture. In this unit we look inside some of the most popular and widely deployed algorithms and we highlight design and cryptanalytic trends over the past twenty years. This course is, by necessity, somewhat mathematical and some basic mathematical techniques will be used. However, despite this reliance on mathematical techniques, the emphasis of the module is on understanding the more practical aspects of the performance and security of some of the most widely used cryptographic algorithms.

#### **Objectives**

On completion of this module, students will gain a broad familiarity of the inner-workings of many of today's most widely deployed cryptographic algorithms. Students will also develop a more detailed understanding of some of the most prominent algorithms.

*Assessment: one two-hour unseen written paper.*

### Database security [690OPT9]

#### **Aims**

This module covers several aspects of database security and the related subject of concurrency control in distributed databases. We will discuss methods for concurrency control and failure recovery in distributed databases and the interaction between those methods and security requirements. We will also examine how access control policies can be adapted to relational and object-oriented databases.

#### **Objectives**

At the end of the module the student should

- understand how multi-level security can be preserved within a database whilst still permitting the concurrent execution of transactions.
- understand why confidentiality is so difficult to achieve within a statistical database.
- understand the implications that security and its administration have in the context of commercial databases such as Informix and Oracle.

*Assessment: one two-hour unseen written paper.*

### Information crime [690OP10]

*(formerly known as Computer crime)*

#### **Aims**

This module complements other modules by examining the subject from the criminal angle and presenting a study of computer crime and the computer criminal. We will discuss its history, causes, development and repression through studies of surveys, types of crime, legal measures, and system and human vulnerabilities. We will also examine the effects of computer crime through the experiences of victims and law enforcement and look at the motives and attitudes of hackers and other computer criminals.

#### **Objectives**

On completion of the module students should be able to:

- follow trends in computer crime
- relate computer security methodologies to criminal methods
- detect criminal activity in a computerised environment
- apply the criminal and civil law to computer criminality
- understand how viruses, logic bombs and hacking are used by criminals
- appreciate the views of business, governments, and the media to instances of computer crime.

*Assessment: one two-hour unseen written paper.*

## Smart cards/tokens security and applications [690OP12]

### **Aims**

This course will:

- provide an overview of smart cards/tokens and their properties
- introduce various applications that exploit smart cards/tokens
- examine benefits, threats and attacks
- consider systems for the development, manufacture and management of smart cards/tokens
- review smart card standards and security evaluation methodologies

### **Objectives**

On completion of this module students will be able to:

- identify constituent components, analyse strengths and weaknesses and identify new applications of smart cards
- identify the steps in the manufacturing/personalisation processes, analyse and evaluate potential risks and compare security safeguards
- identify and compare the systems in use, analyse the strengths and weaknesses and evaluate interoperability and security issues

- analyse the range of capabilities of SIM/USIM cards and apply them to new service ideas, evaluate the possible range of services and security measures
- understand the main standards and applications of smart cards for banking and finance, compare with earlier card solutions and analyse strengths and weaknesses of approaches
- analyse the key role of the smart card for passports, IDs and satellite TV, evaluate the security measures that have protected past and current cards
- identify and describe new technologies, including TPM and apply them to new application and evaluate the likely suitability/success of approach
- explain how common criteria may affect smart card design/development, analyse the different approaches and compare with less formal methods
- identify and describe the classes of attack and notable methods within each class, analyse countermeasures and evaluate practicality of attacks
- identify, compare and evaluate different methods of developing applications for smart cards, and understand the development cycle and the use of practical tools
- analyse the issues concerning smart card lifestyle management, and evaluate and compare methods of local and remote card management

*Assessment: One two-hour unseen written paper.*

# Short Course General Regulations: Masters Level Programmes

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## 1. The Regulations

1.1 The University offers a number of short course programmes to External students. These short course programmes include credit bearing and non-credit bearing short courses.

1.2 The provision of credit bearing and non-credit bearing short course programmes at Masters level, and the registration of External students for credit and non-credit bearing short courses, is regulated by both these General Regulations and the Short Course Programme Regulations.

1.3 Registered External students are required to comply with these General Regulations and the appropriate Short Course Programme Regulations. They must also comply with the procedures, deadlines and instructions issued by the University in, for example, the relevant Student handbook and in the Notice to Candidates, which is sent to students prior to an examination. The University is not responsible for any consequences arising from failure to comply with these Regulations, procedures, deadlines or instructions.

1.4 The rules relating to credit bearing and non-credit bearing short courses in any given year are those included in the General Regulations and the relevant Short Course Programme Regulations for that current year and not in the year in which the student initially registered.

1.5 To register for a short course programme as an External student, an applicant must satisfy any entrance requirements for the programme concerned. In addition, an applicant who was either previously registered as an External student or who was previously enrolled at a constituent College or Institute of the University of London must have made satisfactory payment to the University or College/Institute of all due fees and accounts. An applicant who fails to satisfy this condition will **not** be permitted to register, or to register again, as an External student.

1.6 On all matters concerning the interpretation of these Regulations and the Short Course Programme Regulations, or on which they are silent, the decision of the University shall be final.

### Changes to the short course provision

1.7 Short course programmes are reviewed annually and are subject to change. Two years' notice will normally be given to registered students of any major amendment to a programme, particularly where courses are to be withdrawn.

### Terminology and definitions

1.8 A 'short course programme' is a collection of short courses in a particular field of study, as defined in the Short Course Programme Regulations.

1.9 'Credit bearing' short courses are short courses that may be taken into account for admission, and for credit, to a related or unrelated Postgraduate degree, diploma or certificate provided the formal assessment of that short course has been successfully completed.

1.10 'Non-credit bearing' short courses are short courses that may **not** be taken into account for admission to a related or unrelated Postgraduate degree, diploma or certificate. No credit or exemption for the related or unrelated degree, diploma or certificate will be given.

1.11 Credit bearing and non-credit bearing short courses are collectively known as 'short courses' in these Regulations.

1.12 These Short Course General Regulations describe the individual elements of a short course programme as 'subjects'. In the Short Course Programme Regulations these may be called 'courses', 'units', 'modules' or 'sections'.

1.13 'Formal assessment' is the means by which credit bearing short courses are examined. The forms of assessment associated with the appropriate level of postgraduate study are used.

1.14 The term 'examination' used in these Regulations refers to the **entire** assessment for a credit bearing short course, and includes not only the written paper for that short course but also any coursework, project, dissertation or online requirements that count towards the final assessment.

1.15 Where short courses are associated with a particular Postgraduate degree, diploma and/or certificate, these are referred to as '**related**' degrees, diplomas and certificates.

1.16 The 'Admission Notice' is provided to each student who has made an entry to an examination. The Admission Notice contains the student's candidate number and confirmation of the dates and time of the examination(s) for which he/she has entered.

1.17 The 'Notice to Candidates' contains prescribed rules for the examinations. The Notice to Candidates is provided to students together with their Admission Notice.

### Student complaints procedure

1.18 The University has a *Procedure for External student complaints* which can be found on the External System web site.

## 2. Short courses

2.1 The short courses available are given in the relevant Short Course Programme Regulations for the current year.

2.2 The maximum number of credit bearing and non-credit bearing short courses that may be taken is indicated in the relevant Short Course Programme Regulations.

2.3 All credit bearing short courses will accommodate no less than 50 notional study hours.

2.4 Notional hours for non-credit bearing short courses are indicated in the relevant Short Course Programme Regulations.

2.5 Students may apply to take any short course available in that year unless they have already been awarded a related degree/diploma/certificate, in which case they may not normally

offer a short course which is the same as, or equivalent to, a subject previously taken.

2.6 All students registering for any short course will receive a certificate of registration. A certificate of achievement will be presented to students who have satisfactorily completed any study requirements indicated in the relevant Short Course Programme Regulations and who successfully complete the assessment of a short course.

2.7 To be eligible for a certificate of registration and a certificate of achievement, a student must have been registered for that short course as an External student and must have complied with the Regulations in all respects, and have made satisfactory payment to the University of all due fees. The University reserves the right not to present a certificate to students who fail to satisfy any of these conditions.

2.8 A mark or grade awarded for a short course will not replace any mark or grade for a degree, diploma or certificate already awarded.

2.9 Unless the relevant Short Course Programme Regulations state otherwise, a student whose registration for a short course has been terminated because he or she has exhausted the permitted number of attempts at an examination may apply to register again as an External student for a short course or award in the same or different subject or field of study. All applications will be considered on an individual basis. Permission to register in these circumstances will be given at the discretion of the University and will be subject to any further conditions specified in these Short Course General Regulations or in the relevant Short Course Programme Regulations, or by the University.

### 3. Progression to a degree, diploma or certificate

#### Credit bearing short courses

3.1 Successful completion by formal assessment of a credit bearing short course or courses may be taken into account for admission to a related or unrelated Postgraduate degree, diploma or certificate.

3.2 Successful completion by formal assessment of a credit bearing short course or courses may be taken into account for credit towards the related Postgraduate degree, diploma or certificate, provided that the application is made within **three** years of the completion of the relevant course or courses.

3.3 Where indicated in the relevant Short Course Programme Regulations, a student who has successfully completed the formal assessment of the relevant credit bearing short courses may apply to receive any related awards provided they satisfy the requirements for those awards and the application is made within **three** years of the completion of the relevant short courses.

3.4 Successful completion of a credit bearing short course or courses does not in itself automatically satisfy entry requirements for any Postgraduate degree, diploma or certificate, or ensure credit.

3.5 All applications for progression from a credit bearing short course to a Postgraduate degree, diploma or certificate will be considered on an individual basis and permission to progress,

and, where appropriate, to receive credit, will be at the discretion of the University.

3.6 A student who does not successfully complete the assessment for a credit bearing short course may be permitted to proceed to a degree, diploma or certificate **provided** he or she satisfies the entrance requirements for the degree, diploma or certificate concerned. Such students may be required to cancel their existing registration and to submit a fresh application for registration and comply with the Regulations for that degree, diploma or certificate.

#### Non-credit bearing short courses

3.7 The completion of a non-credit bearing short course or courses will not be taken into account for admission, or for credit, to a related or unrelated Postgraduate degree, diploma or certificate.

3.8 A student who is registered for a non-credit bearing short course or courses may apply to register for a degree, diploma or certificate provided he or she satisfies the entrance requirements for the degree, diploma or certificate concerned. Such students may be required to cancel their existing registration and to submit a fresh application for registration and comply with the Regulations for that degree, diploma or certificate.

### 4. Period of registration

4.1 Students registering for a short course will be registered for a maximum period of two years. There is no minimum period of registration, unless indicated otherwise in the relevant Short Course Programme Regulations.

4.2 Applications for a renewal of registration for a further two years, or for an extension of registration of one year beyond the prescribed maximum period, may be made by students who have not completed all the requirements for a short course for which they are registered. A fee may be payable.

4.3 Renewal of registration and extension of registration are approved only at the discretion of the University and will be subject to the General Regulations and Short Course Programme Regulations that are current at the time of renewal or extension.

4.4 Students who are permitted to proceed from a credit bearing short course to a Postgraduate degree, diploma or certificate will be given a new period of registration as an External student, effective from the date of registration for the degree, diploma or certificate concerned. The maximum period of registration permitted will be the same as for all other degree, diploma or certificate students registered for that programme, as indicated in paragraph 5 of the relevant Programme Regulations.

4.5 The University reserves the right to apply the Disciplinary Procedure and The Suspension and Termination of Registration of Students in Debt process as described in the University of London Ordinances (Ordinances 26 and 28 respectively).

### 5. Assessment

5.1 The assessment of a short course or courses is governed by the Short Course General Regulations and the relevant Short Course Programme Regulations that is applicable at the time of the examination and **not** at the time that a student was initially

registered or first attempted the examination/assessment concerned.

### Credit bearing short courses

5.2 The assessment for credit bearing short courses varies and is as described in the Short Course Programme Regulations.

5.3 Credit bearing short courses will be formally assessed using the forms of assessment associated with the appropriate level of postgraduate study.

5.4 Students may choose whether or not to be formally assessed in the credit bearing short course for which they are registered. Students who choose to be formally assessed will be examined to the same standard as that required by students registered for the related degree, diploma or certificate. All students must comply with the rules given in the Short Course Programme Regulations for those examinations, and may not make more than the number of attempts permitted.

5.5 In order to sit an examination, a student must:

- have completed the relevant application and registration/enrolment procedures with the University by the appropriate deadlines and be registered as an External student for the short course concerned **and**
- have made an examination entry in accordance with both the University's and the appropriate examination centre/Overseas Examination Centre's instructions and deadlines.

5.6 Except in the circumstances of paragraph 5.7, all examinations by written paper for the same short course, wherever held, will take place on the same date and at the same time. The University reserves the right to set different papers in the same subject in separate countries and in different time zones.

5.7 In the event of any unavoidable delay in the arrangement of examinations in a country other than the United Kingdom, the Overseas Examination Centre will arrange for the relevant papers to be taken with as little deviation as possible from the original dates assigned to them. Students are required to abide by any such revised arrangements. The University reserves the right not to mark a paper taken at a different time from that prescribed.

5.8 Where it is deemed necessary, Examiners may change the format or rubric of a written paper, from that of a previous year, without prior notice to students.

5.9 Except where the syllabus/course outline or rubric for a written paper for a particular short course indicates otherwise, all answers to examinations must be written in English.

### Examination centres

5.10 Examinations by written paper are held at established examination centres worldwide.

5.11 Outside the United Kingdom and Republic of Ireland, examinations are conducted by independent bodies known as Overseas Examination Centres.

5.12 In countries where an established Overseas Examination Centre exists, students must use the facilities provided by that Centre. The University will not establish an alternative centre in those countries.

5.13 All examinations are held at the discretion of the examination centre/Overseas Examination Centre and are subject to any conditions they may impose.

5.14 Students are required to apply to the relevant examination centre/Overseas Examination Centre for permission to sit an examination. The University can accept no responsibility for making examination arrangements on behalf of a student. It is entirely at the discretion of the examination centre or Overseas Examination Centre to accept or refuse an entry to an examination.

5.15 A fee is normally levied by all examination centres (other than London) and Overseas Examination Centres. This fee is payable by students each time they make an examination entry. The University cannot be responsible for this fee nor can it influence the level of fee charged.

### Non-credit bearing short courses

5.16 The assessment for non-credit bearing short courses varies and is as described in the Short Course Programme Regulations. There is **no** formal assessment for non-credit bearing courses.

5.17 Students may choose whether or not to be assessed in the non-credit bearing short course for which they are registered. All students who choose to be assessed must comply with the rules and deadlines given in the Short Course Programme Regulations for the assessment.

5.18 All forms of assessment must be written in English, unless the Short Course Programme Regulations state otherwise.

5.19 In addition to paragraph 5, students are required to comply with the rules on the conduct of examinations given in paragraph 8 of these Regulations.

## 6. Number of attempts permitted

6.1 A student who fails to satisfy the Examiners in an examination at the first attempt will be permitted to make one further attempt at that examination. The maximum number of attempts permitted at any examination is **two**.

6.2 A student who enters an examination hall to attempt a written paper will be considered to have made an examination attempt. Unless otherwise stated in the Programme Regulations, absence from an examination will not count as an attempt

6.3 The mark or grade awarded for a second attempt at an examination will supersede any previously awarded mark or grade for that examination, unless otherwise indicated in the relevant Short Course Programme Regulations.

6.4 If a student fails to satisfy the Examiners at a second attempt at any examination his or her registration for the short course concerned will cease.

6.5 Except as otherwise provided for by the University, students may not make a further attempt at the examination for a short course that has been passed.

## 7. Students with a disability and/or special needs

7.1 The University has a policy for External students with a disability and/or special needs and a statement explaining this policy is given on the External System web site.

7.2 As part of its policy, the University will make every reasonable effort to accommodate the requirements of a student with a disability and/or special needs by, wherever possible, providing any study materials in a different format (e.g. large print) or another medium, and/or by making special examination arrangements. If the University is unable to provide the study materials in the format which has been requested, the University will endeavour to make an alternative suggestion.

### Special examination arrangements

7.3 The University has a Panel which considers special examination arrangements for students with a disability and/or special needs. The aim of the Panel is to make sure that a student with a disability and/or special needs is neither disadvantaged nor advantaged when compared to other students. The University cannot guarantee that special examination arrangements will be possible in every case.

7.4 Applications from students with a disability and/or special needs may be considered for the use of special aids or for extra time in the examinations.

7.5 Special arrangements for examinations at an ad hoc centre may be made in very exceptional circumstances and then only in the United Kingdom. Arrangements cannot be made for oral or practical examinations to be held at an ad hoc centre, although in exceptional cases it may be possible to permit the use of special aids. Arrangements for examinations in a student's home are not made. Additional fees may be payable for arrangements at an ad hoc centre.

7.6 A student who finds handwriting difficult due to medical or learning difficulties must apply to the University for special arrangements to be made. The University will not transcribe illegible scripts. Any script deemed illegible by the Board of Examiners will be assigned a mark of zero and a fail result will be given. This will count as an attempt at the examination.

## 8. Conduct of examinations

8.1 All students are required to comply with the rules governing the conduct of examinations given below, and for credit bearing short course students, in the Notice to Candidates accompanying the Admissions Notice.

### Representations about examinations

8.2 Students who wish the Board of Examiners to know of any illness or other adequate cause which they think may have affected their performance must immediately inform the Examinations Office and furnish a supporting medical certificate or other supporting certification obtained at the time of illness. Notification received more than three weeks after the date of the last examination will not be taken into account by the Examiners.

8.3 Appeals against the results of examinations may not be made on academic grounds. The University will consider representations concerning examination results made on the grounds of administrative error or where there is concern that the

examination may not have been conducted in accordance with the relevant Instructions and/or Regulations. An administration fee (currently £50 per paper) is payable for the consideration of such representations (refundable in the event that an error is found). Any representation must be made within one month of the publication of the decision of the Board of Examiners to which it relates and should be addressed to the Head of Special Examination Services and be accompanied by payment of the administration fee. Representations must state the grounds on which the appeal is made and provide evidence to support it. Further information on the procedure may be obtained from the Head of Special Examination Services.

### Permitted materials

8.4 A student may use in the examination only such books, notes, statutes, statistical tables, instruments, or other materials as are specifically permitted in the Admission Notice/timetable. No other books, notes, instruments, or other materials or aids whatsoever may be introduced into an examination room or be handled or consulted during an examination. Any such materials or aids in the possession of a student on entry to the examination room must be deposited immediately with the Invigilator before the examination starts. It is an examination offence to introduce unauthorised materials into the examination room.

8.5 The use of calculators in the examinations is strictly controlled. Students may use their own electronic calculators in the examinations provided that:

- the Short Course Programme Regulations permit this
- the calculator complies with the specification given in paragraph 8.6
- Where no such permission is given in the Short Course Programme Regulations, calculators may **not** be used.

8.6 Where calculators are permitted, the following specification will apply, unless the Short Course Programme Regulations state otherwise:

- Non-programmable. The use of a calculator or other electronic device that communicates, stores textual or numerical information, or displays textual (except error) messages, graphical or algebraic information is strictly forbidden. The use of a calculator with alphabet and/or symbol keys not listed below is strictly forbidden.
- PDAs, mobile phones or other devices are forbidden
- Hand held
- Compact
- Portable
- Solar and/or battery powered
- Quiet in operation
- The use of calculators with the following symbols and functions **only** are permitted:
  - Digit keys 0 to 9 and decimal point;
  - Keys for basic arithmetical functions of addition, subtraction, multiplication, division and equals;
  - Percentage key;
  - Square root key;
  - Basic 3 key memory (MRC, M-, M+);
  - Clear keys (C, AC);
  - On/off key.

8.7 The use of any calculator other than the type specified in the paragraph 8.6 of the Short Course General Regulations, or in paragraph 6 of the Short Course Programme Regulations, will constitute an examination offence and will be subject to the provisions in paragraph 8.16 of these regulations. Students are responsible for ensuring that their calculators are in working order for the examination. Students must ensure that they have alternative means of calculation in the event of the calculator

failing during the examination, either through the use of a second calculator, which complies with the specification given in the Short Course Programme Regulations, or to continue the examination without the use of a calculator. If students use electronic calculators in examinations they must indicate on their examination scripts the name and type of machine used. Calculators will **not** be provided by the University.

## Examination offences

8.8 It is an examination offence to introduce into, or use in the examination room, unauthorised materials or aids. Any unauthorised materials or aids brought into an examination room and not deposited with the Invigilator (see paragraph 8.4) must be surrendered to the Invigilator on request. Any materials or aids so surrendered may be handed over by the Invigilator to the University which may make copies of them. The original materials or aids (together with all such copies) may be retained by the University at its absolute discretion.

8.9 Students must not pass any information from one to another during an examination of a written paper. A student may not act in collusion with another student or any other person, nor copy from another student, nor engage in any similar activity. Any of these activities constitutes an examination offence.

8.10 Plagiarism is the presentation of another person's thoughts or words as if they were the student's own: for example, copying from text books and other sources (including the Internet) without due acknowledgement that the passages quoted are copied and without giving the source of those passages (see paragraph 8.12). Plagiarism is an examination offence.

8.11 All work submitted as part of the requirements for any examination must therefore be expressed in the student's own words and incorporate his or her own ideas and judgements.

8.12 Direct quotations from the published or unpublished work of another person must always be clearly identified as such and a full reference to the source must be provided in the proper form. A series of short quotations from several different sources, if not clearly identified as such, constitutes plagiarism in the same way as an unacknowledged quotation from a single source. Equally, if another person's ideas or judgements are summarised, the student must refer to that person in the text, and give details of the work to which reference is made. Further instructions on acknowledging other people's work and the extent to which other sources may be quoted is given in student handbook.

8.13 It is an examination offence to submit work which has been written jointly by two or more persons, unless expressly permitted in the Short Course Programme Regulations or student handbook.

8.14 Assignments, essays, projects, reports, dissertations and other similar work must therefore be the student's own work and must be written without the assistance of other people, except where expressly permitted in the Short Course Programme Regulations or student handbook. Students will be required to submit a signed declaration for all such work submitted, stating that they understand what is meant by plagiarism, and confirming that the work submitted is entirely their own and that the use of published or unpublished works of other people has been acknowledged in accordance with the University's requirements.

8.15 It is the responsibility of the student to safeguard his or her assignments, essays, projects, reports, dissertations and other

similar work and to prevent them from being copied by other students.

8.16 The examination offences listed in the foregoing paragraphs will be treated as cheating or irregularities of a similar character under the provisions of the Regulations for Proceedings in respect of Examination Offences by Candidates for University Awards, except as otherwise provided for in the Short Course Programme Regulations or student handbook. Under the Regulations for Proceedings in respect of Examination Offences by Candidates for University Awards students found to have committed an offence may have the results of their examinations withheld, and may be excluded from all future examinations of the University. A copy of these Regulations may be obtained from the Head of Special Examination Services.

## Other matters

8.17 The University reserves the right to require students sitting an examination for a written paper to remain within the examination hall or its precincts for the duration of the relevant paper.

8.18 All examination scripts are the property of the University and will not be returned to students. Answers to assignments, essays, course projects and other similar work written in the student's own time will only be returned to the student as described in the relevant short course programme manual. Final reports on research projects or dissertations will not be returned to students, unless indicated otherwise in the Short Course Programme Regulations.

8.19 All question papers will be retained by the University.

## 9. Fees

9.1 Students are required to pay the fees that are due in any particular year in full at the time when they fall due. Fees must be paid in accordance with the University's procedures and deadlines given in the prospectus and the relevant Short Course Programme Regulations.

9.2 The University reserves the right to amend previously announced fees. The University also reserves the right to make additional charges.

9.3 Students who are permitted to proceed from a short course to a Postgraduate diploma, degree or certificate (see paragraph 3) will be required to pay the registration fee for the diploma, degree or certificate and the fee for the remaining subjects.

9.4 Students who are permitted to renew their registration at the expiry of the initial period of registration (see paragraph 4.2) will, as applicable, be required to pay a further fee for the relevant short course concerned.

## Refunds

9.5 Fees will only be refunded in exceptional circumstances and at the discretion of the University. All refunds will be subject to an administrative charge determined by the University.

9.6 Examination re-entry fees, where applicable, are not refundable nor can they be transferred from one examination to a later one. A student is liable for the full fee at any subsequent entry, in accordance with the Regulations then in force.



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