

# Information Security

**This programme is no longer recruiting. Please refer to the updated programme specification of the same name.**

<b>Final award</b>	Professional Doctorate
<b>Intermediate awards available</b>	PGDipin Information Security
<b>UCAS code</b>	N/A
<b>Details of professional body accreditation</b>	N/A
<b>Relevant QAA Benchmark statements</b>	
<b>Date specification last up-dated</b>	June 2011

## Profile

### **The summary - programme advertising leaflet**

#### **Programme content**

The principal aim of the professional doctorate programme is to make a significant contribution to the advanced professional and academic development of information security, digital forensics and compliance.

#### **Studying at UEL**

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#### **Admission requirements**

Applicants are normally expected to hold a good Master's degree from a British university or an equivalent qualification from another recognised institution, and to have at least three years professional experience. Applicants who do not have a Master's degree but who have a first or upper second class honours degree, or a qualification which is regarded as equivalent, and who have exceptional professional experience may be considered. Applicants whose first language is not English need to supply evidence of proficiency in English equivalent to IELTS 6.5 or TOEFL 250/600.

#### **Programme structure**

The Professional Doctorate in Information Security is a flexible Full-time or part-time programme.

Part 1, leading up to the Advanced Award and taken over one year full-time and two years part time study, consists of a number of taught elements.

Part 2, leading to the Professional Doctorate in Information Security consists of supervised work towards a thesis of 40,000 words. The normal period of registration and study for Part 2 is 2 years.

## **Learning environment**

Work discussion, theory, observation, policy and research methods are all taught in small seminar groups

## **Assessment**

Each module in **Stage One** is assessed by an assignment and Exam scheduled on the Module Specification.

In order to proceed on to **Stage Two** of the Programme, candidates are required to pass all modules in stage 1.

## **Relevance to work/profession**

Career opportunities for experienced security professionals who have recognition beyond Masters level in the field of information security is expected to continue increasing during the foreseeable future and this programme is designed to meet the demand. The requirements of industry are varied, challenging and continually changing, with information security and corporate governance at the forefront of the knowledge explosion.

Linked to the increase in the number of M level programmes in the UK and demands from professionals for higher forms of learning and qualification, the ISD has become a popular route to a professional doctorate, not only at the national level, but internationally. It is popular in the UK as it allows participants to study while continuing in their professional careers. Internationally, the ISD is popular because of the structured nature of the programme, and the face to face input.

## **Thesis/Dissertation/project work**

Throughout Part 1 and Part 2 of the programme, students have opportunities to develop and discuss their ideas and experiences in small seminar groups and individual tutorials/supervisions. All the assignments provide opportunities for making creative contributions to understanding practice based on experience. In Part 2, students research an area of professional practice relevant to their own interests leading to the writing of an original thesis

## **Added value**

This is an extremely flexible programme that facilitates the professional and academic learning of information security students at different stages of their careers. It offers a range of post-qualifying and academic awards –including the Professional Doctorate in Information Security. This is the only professional doctorates in the UK and unique, in that it provides a practice based programme, emphasising learning from experience, leading to various intermediate qualifications and, ultimately, the professional doctorate.

## **Your future career**

The programme provides opportunities to develop specialist skills and leadership capacities. It is expected that the programme will considerably enhance the career pathways for students within Information Security.

### **How we support you**

Support is offered through the individualised learning programme, one to one relationships with tutors and supervisors and learning in a small group setting.

### **Bonus factors**

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## **Outcomes**

### **Programme aims and learning outcomes**

#### **What is this programme designed to achieve?**

- Engage at an advanced level with range of issues of concern to professionals in information security field
- Develop appropriate research skills for researching professional concerns
- Carry out independent research which will represent a contribution to professional knowledge or practice.

#### **What will you learn?**

##### **Knowledge**

- an in depth advanced understanding of the theoretical, methodological and research literature relevant to Information Security, Audit & Compliance and be able to relate this creatively to your own specialised areas of practice
- at doctorate level, creating and interpreting new knowledge, through original research, of a quality to satisfy peer review, which extends the forefront of the discipline and merits publication.

##### **Thinking skills**

- the capacity to make connections between observations, relevant theoretical constructs and practice interventions
- at doctorate level, the ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline and to adjust problem design in the light of unforeseen problems

##### **Subject-Based Practical skills**

- capacities for leadership in your area of expertise
- skills in developing and implementing a programme of research and/or in-depth security study

- advanced practice skills in two of three domains (practice, management, education)

### **Skills for life and work (general skills)**

- helps you to make links across subject areas, paradigms and theoretical orientations
- continuing development and enhancement of suitability for practice skills
- at doctorate level, ability to continue to undertake research and development at an advanced level, contributing substantially to the development of new techniques, ideas or approaches

## **Structure**

### **The programme structure**

#### **Introduction**

All programmes are credit-rated to help you to understand the amount and level of study that is needed.

One credit is equal to 10 hours of directed study time (this includes everything you do e.g. lecture, seminar and private study).

Credits are assigned to one of 5 levels:

- 0 - equivalent in standard to GCE 'A' level and is intended to prepare students for year one of an undergraduate degree programme
- 1 - equivalent in standard to the first year of a full-time undergraduate degree programme
- 2 - equivalent in standard to the second year of a full-time undergraduate degree programme
- 3 - equivalent in standard to the third year of a full-time undergraduate degree programme
- M - equivalent in standard to a Masters degree

#### **Credit rating**

The overall credit-rating of this programme is 180 for Masters, 60 for PGCert, 120 for PGDip.

#### **Typical duration**

The programme involves study in seminars for one year or two years (Part 1) full-time or part-time. In Part 2, research seminars take place once a fortnight. Additionally there are individual meetings with research supervisors and time needed for individual study and research

#### **How the teaching year is divided**

The teaching year is divided into two semesters of roughly equal length. A typical student registered in a full-time attendance mode will study two 30 credit modules per semester and a typical student registered in a part-time attendance mode will study one or two modules per semester

### **What you will study when**

**Application Process:** Candidate applies and application is considered by two Programme Team. Interview may be required. Offer is made.

**Entry to Programme:** Candidate enters programme and is immediately assigned a Personal Tutor.

#### **STAGE ONE**

##### *Research Methods Modules*

GSM007            **Understanding the research process and context**

GSM008            **Research Preparation and Planning**

##### *Subject Specific Modules*

IMM024            **Information Technology and Internet Law**

CNM026            **Seizure and Examination of Computer Systems**

**Assessment for Stage One:** Modules 1, 2, 3 and 4 are assessed by an assignment scheduled on the Module Specification. Details of the assessment process are provided in module handbook.

#### **STAGE TWO**

A 40,000 word thesis assessed by an internal and external examiner and defended at oral examination. Successful examination leads of the award of Doctor of Information Security.

<b>Year</b>	<b>Module title</b>	<b>Credit status</b>
1	<b>Understanding the research process and context</b>	Core
1	<b>Research Preparation and Planning</b>	Core
1	<b>Information Technology and Internet Law</b>	Core
1	<b>Seizure and Examination of Computer Systems</b>	core
2 and 3	A 40,000 word thesis assessed by an internal and external examiner and defended at oral examination. Successful examination leads of the award of Doctor of Information Security	Core

### **Requirements for gaining an award**

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### **Masters Award Classification**

Where a student is eligible for an Masters award then the award classification is determined by calculating the arithmetic mean of all marks and applying the mark obtained as a

percentage, with all decimal points rounded up to the nearest whole number, to the following classification

70% - 100% Distinction

60% - 69% Merit

50% - 59% Pass

0% - 49% Not Passed

## **Assessment**

### **Teaching, learning and assessment**

#### **Teaching and learning**

##### **Knowledge is developed through**

- Developing capacities to integrate observation, practice, theory and research
- At doctorate level, the undertaking of original research involving the creation and interpretation of new knowledge at the forefront of the profession

##### **Thinking skills are developed through**

- Making increasing links in the three fields (observations, theoretical constructs and practice interventions)
- At doctorate level, designing and implementing a research project for the generation of new knowledge, applications or understanding at the forefront of the profession – requiring the capacity to adjust problem design in the light of unforeseen problems and the development of an ability to make informed judgements on complex issues, often in the absence of complete data, and to communicate ideas and conclusions effectively to specialist and non-specialist audiences

##### **Practical skills are developed through**

- Increasing the capacity to make links between theory and practice, thus developing both expertise and leadership skills
- Supervised practice placements in practice, management and/or education

##### **Skills for life and work (general skills) are developed through**

- Enhancing the transferable skill of making links across theories and paradigms
- At doctorate level, enhancing the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative, in complex and unpredictable situations

## **Assessment**

### **Knowledge is assessed by**

- Essays in theory, policy and research methodologies
- The capacity to develop and implement a research project and/or in-depth case study
- At doctorate level, the undertaking and completion of an original research programme, involving the creation and interpretation of new knowledge, of a quality to satisfy peer review, which extends the forefront of the profession and merits publication

#### **Thinking skills are assessed by**

- The capacity to integrating theory and practice, policy and observation, as evidenced through assignments
- Discussion within the groups

#### **Practical skills are assessed by**

- The developing capacity to observe and record, as demonstrated in assignments
- Assessment of supervised placements in practice, management and/ or education
- At doctorate level, application of research techniques evidenced through thesis

#### **Skills for life and work (general skills) are assessed by**

- The ability to hold different points of view and make links across theories and paradigms, as evidenced through written assignments
- Increasing the capacity to tolerate anxiety when faced with new ideas and challenged by areas of experience inside the self, evidenced by seminar discussions and written assignments

## **Quality**

### **How we assure the quality of this programme**

#### **Before this programme started**

Before this programme started, the following was checked:

- there would be enough qualified staff to teach the programme;
- adequate resources would be in place;
- the overall aims and objectives were appropriate;
- the content of the programme met national benchmark requirements;
- the programme met any professional/statutory body requirements;
- the proposal met other internal quality criteria covering a range of issues such as admissions policy, teaching, learning and assessment strategy and student support mechanisms.

This is done through a process of programme approval which involves consulting academic experts including some subject specialists from other institutions.

#### **How we monitor the quality of this programme**

The quality of this programme is monitored each year through evaluating:

- external examiner reports (considering quality and standards);
- statistical information (considering issues such as the pass rate);
- student feedback.

Drawing on this and other information, programme teams undertake the annual Review and Enhancement Process which is co-ordinated at School level and includes student participation. The process is monitored by the Quality and Standards Committee.

Once every six years an in-depth review of the whole field is undertaken by a panel that includes at least two external subject specialists. The panel considers documents, looks at student work, speaks to current and former students and speaks to staff before drawing its conclusions. The result is a report highlighting good practice and identifying areas where action is needed.

### **The role of the programme committee**

This programme has a programme committee comprising all relevant teaching staff, student representatives and others who make a contribution towards the effective operation of the programme (e.g. library/technician staff). The committee has responsibilities for the quality of the programme. It provides input into the operation of the Review and Enhancement Process and proposes changes to improve quality. The programme committee plays a critical role in the quality assurance procedures.

### **The role of external examiners**

The standard of this programme is monitored by at least one external examiner. External examiners have two primary responsibilities:

- To ensure the standard of the programme;
- To ensure that justice is done to individual students.

External examiners fulfil these responsibilities in a variety of ways including:

- Approving exam papers/assignments;
- Attending assessment boards;
- Reviewing samples of student work and moderating marks;
- Ensuring that regulations are followed;
- Providing feedback through an annual report that enables us to make improvements for the future.

### **Listening to the views of students**

The following methods for gaining student feedback are used on this programme:

- Module evaluations
- Student representation on programme committees (meeting 2 times year)
- Student/Staff consultative committee (meeting 3 times a year)

Students are notified of the action taken through:

- circulating the minutes of the programme committee
- a newsletter published three times a year
- providing details on the programme noticeboard

### **Listening to the views of others**

The following methods are used for gaining the views of other interested parties:

- Questionnaires to former students
- Annual student satisfaction questionnaire
- Industrial liaison committee

## **Further Information**

### **Where you can find further information**

This is a unique opportunity as the Docklands campus is in the middle of the London financial community, all of whom have need qualified professionals in information security, digital forensics and compliance.

Further information about this programme is available from:

- The UEL web site (<http://www.uel.ac.uk>)
- UEL Manual of General Regulations and Policies <http://www.uel.ac.uk/qa/>
- UEL Quality Manual <http://www.uel.ac.uk/qa/>
- Regulations for UELResearch Degrees
- School of Computing, Information Technology and Engineering web page, <http://www.uel.ac.uk/cite>