

Royal Holloway, University of London Course specification for a postgraduate award MSc Cyber Security Project Management

Section 1 - Introduction to your course

This course specification is a formal document, which provides a summary of the main features of your course and the learning outcomes that you might reasonably be expected to achieve and demonstrate if you take full advantage of the learning opportunities that are provided. Further information is contained in the College prospectus, and in various handbooks, all of which you will be able to access online. Alternatively, further information on the College's academic regulations and polices can be found here. Further information on the College's Admissions Policy can be found here.

The Course will recruit students with a first degree in Science, Engineering, Technology or Management fields of study, who wish to find employment in a range of management roles within the highly sought after information security domain intersecting with project management also in application domains; here, the demand for skilled individuals will outpace the availability of qualified candidates in the foreseeable future. The course provides students with essential knowledge, skills and tools to enter into and build successful project management careers potentially leading to senior management roles across the domain and is hence of particular interest to individuals who wish to proceed from individual contributor roles.

The MSc Cyber Security Project Management course has been developed from our successful MSc Project Management course. The course if focussed on the niche area of cyber security which impacts all industries due to the rapid expansion of the digitalisation of business. The course will ensure that students are given a great base knowledge in Project Management before being given an overview of the key features in cyber security allowing them to understand how the industry and sector works.

The course is delivered over one year of full-time study (52 weeks) or up to five years of part-time study (260 weeks). Teaching takes place during the day over two terms from September to April. The dissertation is submitted in September. Whilst being a self-contained degree in its own right, each course provides suitable and recognised qualifications for entry to PhD study in the same or a closely related field.

While Royal Holloway keeps all the information made available under review, courses and the availability of individual modules, especially optional modules are necessarily subject to change at any time, and you are therefore advised to seek confirmation of any factors which might affect your decision to follow a specific course. In turn, Royal Holloway will inform you as soon as is practicable of any significant changes which might affect your studies.

The following is brief description for some of the most important terminology for understanding the content of this document:

Degree course – Also referred to as 'course', this term refers to the qualification you will be awarded upon successful completion of your studies. 'Courses' were formerly known as 'programmes' at Royal Holloway.

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Section 2 – Course details				
Date of specification update	October 2021	Location of study Egham		
Course award and title	MSc Cyber Security Project Management	Level of study	Postgraduate	
Course code	3607	Year of entry	2022/23	
Awarding body	Royal Holloway, University of London			
Department/ School	Electronic Engineering, School of Engineering, Physical and Mathematical Sciences	Other departments or schools involved in teaching the course	Information Security Group, School of Engineering, Physical and Mathematical Sciences	
Mode(s) of attendance	Full time and part time	Duration of the course	One year (52 weeks) full-time Two to five years (104260 weeks) part-time	
Accrediting Professional, Statutory or Regulatory Body requirement(s)	N/A	For queries on admissions:	study@royalholloway.ac.uk.	
Link to Coursefinder for further information:	https://www.royalholloway.ac.uk/studying-h	ere/		

Module – This refers to the credits you will study each year to complete your degree course. Postgraduate taught degrees at Royal Holloway comprise 180 credits. On some degree courses a certain number of optional modules must be passed for a particular degree title. 'Modules' were formerly known as 'course units' at Royal Holloway.



Section 3 - Degree course structure

3.1 Mandatory module information

The following table summarises the mandatory modules which students must take in each year of study

Module code	Module title	Credits	FHEQ level	Module status
PM5001	Introduction to Project Management	10	7	MNC
PM5003	Information Technology Project Management	10	7	MC
PM5004	International Strategic and Technology Management	20	7	MC
PM5010	Business Research Methods	10	7	MC
PM5005	Advanced Applied Project Management and Planning	10	7	<u>MC</u>
PM5051	Information Risk Management and Governance	20	7	MNC
PM5052	Security and Data Protection Mechanisms	20	7	MNC
PM5053	Enterprise Cyber Security	20	7	MNC
PM5018	Dissertation	<u>60</u>	7	MNC

This table sets out the most important information for the mandatory modules on your degree course. These modules are central to achieving your learning outcomes, so they are compulsory, and all students on your degree course will be required to take them. You will be automatically registered for these modules. Mandatory modules fall into two categories: 'condonable' or 'non-condonable'.

In the case of mandatory 'non-condonable' (MNC) modules, you must pass the module to successfully graduate with a particular degree title, or before you can proceed to the next year of your course where studying part-time. In the case of mandatory 'condonable' (MC) modules, these must be taken but you can still progress or graduate even if you do not pass them (see <u>Academic Regulations</u> on condonable fails). Please note that although Royal Holloway will keep changes to a minimum, changes to your degree course may be made where reasonable and necessary due to unexpected events. For example, where requirements of relevant Professional, Statutory or Regulatory Bodies have changed and course requirements must change accordingly, or where changes are deemed necessary on the basis of student feedback and/or the advice of external advisors, to enhance academic provision.



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3.2 Optional modules			
In addition to mandatory modules, there will be a number of optional modules available du are likely to be available. However, not all may be available every year. Although Royal Howithdrawn. For example; where reasonable and necessary due to unexpected events, when changed and course requirements must change accordingly, or where changes are deemed enhance academic provision. There may be additional requirements around option selections security for further information.	olloway will k re requireme d necessary o	eep changes to a minimum, new options may be offered or existing one ents of relevant Professional, Statutory or Regulatory Bodies (PSRBs) had the basis of student feedback and/or the advice of External Advisors,	es may be ave , to
Optional modules.			
Module Title	Credits	Module Title	Credits
N/A			
3.3 Optional module requirements			
There are no optional modules on this degree course.			
and the second optional measures on this degree cooled			



Section 4 - Progressing through each year of your degree course

For further information on the progression and award requirements for your degree, please refer to Royal Holloway's Academic Regulations.

Progression throughout the year/s is monitored through performance in oral presentations, contributions to seminar discussion and coursework. Students will automatically progress onto the dissertation project but may still be awarded an exit award should they fail to achieve a pass/condonable pass across all of the modules in the taught phase.

Please note that if you hold a Tier 4 (General) Student Visa and you choose to leave (or are required to leave because of non-progression) or complete early (before the course end date stated on your CAS), then this will be reported to UKVI.

The MSc Cyber Security Project Management Course can be taken as a part time course which can run over two to five years (104 -260 weeks). The exact timescale for a part time applicants study will be agreed between the applicant and the Course Director prior to the start of the applicants study.



Section 5 - Educational aims of the course

The aims of this course are to:

- To provide students with a knowledge of different project management frameworks particularly applicable to infrastructure, development, and operation of information security projects. This will enable students to plan, monitor, and manage also large-scale projects.
- To provide students with sufficient knowledge of key information security concepts and problems such that they can evaluate and assess domain expert opinions related to the subject matter in the project.
- To provide students with an understanding of security management and supply chain assurance processes, permitting them to realise projects able to satisfy requirements from and governance processes driving both domains.
- To support critical thinking and self-directed learning ability in support of continuous professional development also after completion of the course.
- To provide students with the ability to seek out and deepen process and domain knowledge in support of specialised projects which also may require novel adaptations of commonly used practices and methods in information security project management.



Section 6 - Course learning outcomes

In general terms, the courses provide opportunities for students to develop and demonstrate the following learning outcomes. (Categories – Knowledge and understanding (K), Skills and other attributes (S), and Transferable skills (*))

- 1. Comprehensive understanding of a range of project management tools and frameworks and their application to information security projects in planning, management, monitoring, and maintenance stages; (K)(S)
- 2. Understand the fundamentals of the Prince 2 professional qualification and apply this methodology to information security project management; (K)
- 3. Gain an advanced knowledge of a variety of tools, techniques and new technology approaches applicable to the specific field of project management; (K)
- 4. The articulation of knowledge and the understanding of tools, concepts and theories relating to the chosen area of Project Management at an advanced level; (K)
- Knowledge of key information/cyber security concepts and problems adequate to enable evaluation and assessment of domain expert opinions related to the information security area; (K)
- 6. Understanding of the relation between information security management and technical information security including how this relates to the managerial aspects of the discipline. (K)

- 7. the ability to critically develop and evaluate approaches and practices in the fields of project management in the information security domain; (S)
- 8. the ability to analyse, critically interpret and utilise software tools, empirical findings and data;(*) (S)
- 9. the ability to conduct research independently at an advanced level using traditional and electronic resources including a critical evaluation of the reliability and trustworthiness of sources; (S)
- 10. The ability to further develop skills of reflection on reading and learning, and skills in information handling and retrieval;(*) (S)
- 11. The ability to independently present logical and coherent written and oral arguments of varying lengths;(*) (S)
- 12. The ability to acquire and use advanced software skills required to manage large scale project management tasks;(*) (S)
- 13. the ability to organise and interpret complex information in a structured and systematic way, and to comprehend and develop sophisticated concepts; (*) (S)
- 14. enhanced interpersonal skills and collaborative teamwork, involving recognising and respecting the viewpoints, and interacting constructively with other people;(*) (S)
- 15. Enhanced time management and organisational skills including working to deadlines, prioritising tasks, organising work-time.(* (S)
- 16. Gain knowledge and understanding from the use of a range of subject specific case studies including examples from companies and organisations from across the world and not limited to examples from "western" cultures.



Section 7 - Teaching, learning and assessment

Teaching and learning is mostly by means of formal but interactive lectures, seminar discussions, oral presentations, lab work, in-class and information security project management related problem-solving exercises, guided independent research, coursework essays, and a dissertation on management in information security project management and related practice. The basic strategies are to nurture the interest and enthusiasm of the students for the field, to embed the student in frontier knowledge in the field, to develop the students' critical and communication skills and to develop analytical, research, creativity and innovative problem-solving skills. Assessment of knowledge and understanding will be performed through summative coursework in the form of essays, examinations, and a dissertation which integrates and crystallises knowledge and understanding across the domains in the field as well as of analytical objectives. Full details of the assessments for individual courses can be obtained from the Module Catalogue.

Section 8 – Additional costs

There are no single associated costs greater than £50 per item on this degree course.

These estimated costs relate to studying this particular degree course at Royal Holloway. General costs such as accommodation, food, books and other learning materials and printing etc., have not been included, but further information is available on our <u>website</u>.

Section 9 – Indicators of quality and standards

QAA Framework for Higher Education Qualifications (FHEQ) Level

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Your course is designed in accordance with the FHEQ to ensure your qualification is awarded on the basis of nationally established standards of achievement, for both outcomes and attainment. The qualification descriptors within the FHEQ set out the generic outcomes and attributes expected for the award of individual qualifications. The qualification descriptors contained in the FHEQ exemplify the outcomes and attributes expected of learning that results in the award of higher education qualifications. These outcomes represent the integration of various learning experiences resulting from designated and coherent courses of study.

QAA Characteristics Statement (Master's Degrees) - September 2015

 $\underline{https://www.qaa.ac.uk/en/quality-code/supporting-resources}$

Subject benchmark statements provide a means for the academic community to describe the nature and characteristics of courses in a specific subject or subject area. They also represent general expectations about standards for the award of qualifications at a given level in terms of the attributes and capabilities that those possessing qualifications should have demonstrated.



Section 10 - Further information

This specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate when taking full advantage of the learning opportunities that are available. More detailed information on modules, including teaching and learning methods, and methods of assessment, can be found via the online module catalogue. The accuracy of the information contained in this document is reviewed regularly by the university, and may also be checked routinely by external agencies.

Your course will be reviewed regularly, both by the university as part of its cyclical quality enhancement processes, and/or by your department or school, who may wish to make improvements to the curriculum, or in response to resource planning. As such, your course may be revised during the course of your study at Royal Holloway. However, your department or school will take reasonable steps to consult with students via appropriate channels when considering changes. All continuing students will be routinely informed of any significant changes.

Section 11 - Intermediate exit awards (where available)

You may be eligible for an intermediate exit award if you complete part of the course as detailed in this document. Any additional criteria (e.g. mandatory modules, credit requirements) for intermediate awards is outlined in the sections below.

Award	Criteria	Awarding body
PG Diploma	Passes in at least 120 credits, with fails of between 40% to 49% for up to 40 credits condonable (with the exception of any course specific requirements).	Royal Holloway and Bedford New College
PG Certificate	Passes in at least 60 credits with no condonable fails	Royal Holloway and Bedford New College

Section 12 - Associated award(s) with Banner Codes	
MSc Cyber Security Project Management (3607)	



PGDip Cyber Security Project Management (exit award) (3608)	
PGCert Cyber Security Project Management (exit award) (3609)	