

# Computational Finance with a Year in Industry; (Taught); (MSc); 2627 September 2017 Intake

The purpose of this information sheet is to provide prospective students and applicants further information about the nature of the degree, in order to help you decide if it is the choice for you. Should you have any further questions, contact information is provided at the end of the flyer.

## Section 1 – degree programme structure

Awarding institution	Royal Holloway, University of London
Accreditation(s) (where applicable)	None
Standard length of degree	2 years full-time
Available part-time	No

The following table summarises the compulsory modules, which are referred to by Royal Holloway as mandatory course units offered on this degree programme, as well as a selection of optional course units that are likely to be available. Please note that although the College will keep changes to a minimum, new units may be offered or existing units may be withdrawn, for example, in response to a change in staff. You will be informed if any significant changes need to be made. This programme requires a minimum of 6 students to enable to College to run the course. Should this number not be reached and we are unable to run the programme we will offer an alternative or refund any deposit paid.

Course unit name	Credits	Mandatory	Optional	Notes (please see below for description)
(CS5100) Data Analysis	20	Yes		
(CS5810) Programming for Data Analysis	10	Yes		
(CS5855) Databases	10	Yes		1
(EC5320) Foundations of Finance	20	Yes		
(EC5321) Investment and Portfolio Management	20	Yes		
(CS5822) Individual Project	60	Yes		
Optional courses are chosen to complete each term to a total of 6o credits.				
(CS5920) Machine Learning	10		Yes	2
(CS5800) Computation with Data	10		Yes	1
(CS5930) Methods of Computational Finance	10		Yes	2
(CS5580 Advanced Data Communications)	10		Yes	2
(CS5220) Fundamentals of Digital Sound and				
Music	10		Yes	2
(CS5945) Intelligent Agents and Multi-Agent Systems	10		Yes	
(CS5945) Semantic Web	10		Yes	

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(CS5200) On-line Machine Learning	20	Yes	
(CS5950) Deep Learning	20	Yes	
(CS5234) Large-Scale Data Storage and			
Processing	20	Yes	
(CS5504) Business Intelligence Systems,			
Infrastructures and Technologies	20	Yes	
(CS5490) Computational Optimization	10	Yes	2
(CS <sub>5110</sub> ) Methods of Bioinformatics	10	Yes	2
(CS5250) Visualisation and Exploratory			
Analysis	20	Yes	2
(EC <sub>5333</sub> ) Financial Econometrics	20	Yes	
(EC5340) Fixed Income Securities and			
Derivatives	20	Yes	
(EC5041) Microeconomics	20	Yes	
(EC5070) Decision Theory and Behaviour	20	Yes	
(EC5360) Origins of the Financial Crisis	20	Yes	
(EC <sub>537</sub> o) Private Equity	20	Yes	
(MT5432) Inference	20	Yes	
(MT <sub>5433</sub> ) Topics in Applied Statistics	20	Yes	
(MT5436) Applied Probability	20	Yes	
(IY5522) Security Technologies	20	Yes	
(IY5502) Introduction to Cryptography	20	Yes	
(IY5511) Network Security	20	Yes	
(IY5512) Computer Security	20	Yes	
(IY5501) Security Management	20	Yes	
(IY 5606) Smart Cards, RFIDs and Embedded	-		
Systems Security	20	Yes	
(IY5609) Digital Forensics	20	Yes	
(IY5610) Security Testing	20	Yes	
(IY 5607) Software Security	20	Yes	
(IY 5604) Database Security	20	Yes	*
(IY5612) Cyber Security	20	Yes	
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### Notes

- (1) Compulsory and available only for students who lack background in the corresponding area.
- (2) Cannot be taken by Royal Holloway graduates who took a similar course.
- (\*) Only runs in block mode (normally one week in January).



#### Section 2 – degree programme costs

H/EU tuition fee 2017/18**	£8,300 (The fee for the year in industry will be 20% of the first year fee for that academic year)
Overseas tuition fee 2017/18**	£18,500 (The fee for the year in industry will be 20% of the first year fee for that academic year)
Other essential costs***	None

\*The tuition fees given above apply to students enrolled on a full-time basis. Students studying part-time are charged a pro-rata tuition fee and information is available from the Royal Holloway Student Fees Office on <u>Student-Fees@rhul.ac.uk</u>. All fees are likely to rise annually in line with inflation but no more than 5% per year. For further information, please see Royal Holloway's <u>Terms & Conditions</u>.

\*\*\* These estimated costs relate to studying this particular degree programme at Royal Holloway. Costs, such as accommodation, food, books and other learning materials and printing etc., have not been included, and further information regarding these can be found on our website.

## Section 3 – useful vocabulary

We understand some of the terminology used in this document may be new to you, and may differ from that used by other universities. To help with this, we have provided a brief description for some of the most important terminology:

*Degree programme* – Also referred to as 'degree course' or simply 'course', these terms refer to the qualification you will be awarded upon successful completion of your studies.

*Course unit* – also referred to as 'module', this refers to the individual units you will study each year to complete your degree programme. Masters programmes consist of a number of taught course units – some mandatory, and some options – plus a dissertation/project to the value of 180 UK credits in total. On completion of a minimum of 120 UK credits a student may be awarded a Postgraduate Diploma, while on completion of a minimum of 60 credits a student may be awarded a Postgraduate Certificate. Some Masters programmes may have progression requirements (where they are offered over more than one year of study) or pass requirements for degree title if they are accredited by a professional body.

*H/EU* – Different categories of students pay different levels of tuition fees. H/EU stands for students with Home or European Union fee status.

*Overseas* – Non-EU students are liable to pay the overseas rate of tuition fees, and are sometimes also referred to as international students.

#### Section 4 – contact information

If you have any further questions, you can contact the Admissions team by email at <a href="study@royalholloway.ac.uk">study@royalholloway.ac.uk</a> .

This information is final at the time of publication (26/05/2017) and supersedes any previous information provided in publications or on Royal Holloway's website.