Year of entry: 2021/22

Programme Specification

1	**Awarding body**	University of London							
2	**Teaching Institution**	**Birkbeck College**							
3	**Programme Title(s)**	**MSc Computing for the Financial Services**							
4	**Programme Code(s)**	TMSCOMFS_C							
5	**UCAS code**	N/A							
6	**Home Department**	Computer Science and Information Systems							
7	**Exit Award(s)**	PG Dip							
8	**Duration of Study** (number of years)	1 year FT/2 years PT							
9	**Mode of Study**	FT	**X**	PT	**X**	DL			
10	**Level of Award (FHEQ)**	Level: 7							
11	**Other teaching depts or institution**	N/A							
12	**Professional, Statutory Regulatory Body(PSRB) details**	N/A							
13	**QAA Benchmark Group**	N/A							

14	**Programme Rationale & Aims**
	The programme provides an intensive course for graduates of computer science and related subjects such as electrical engineering, specifically tailored for individuals choosing a career in financial services. As well as gaining a broad knowledge of the subject, students acquire practical skills and have the opportunity to investigate certain areas of current research more deeply. For students who are new to the subject, it provides a foundation for a career in IT for finance; for those already working in IT, it provides an opportunity to broaden their knowledge and update their skills specifically for finance while obtaining a formal qualification. Holders of the MSc will have demonstrated a systematic understanding and a critical awareness, much of it at the forefront of the discipline, a comprehensive and practical understanding of applicable techniques, the theory and practice of markets and portfolio management, the mathematical tools required in this context, originality in the application of knowledge, the ability to evaluate current research and methodologies, and the independent learning ability required for continuing professional development. Holders of the MSc may obtain automatic exemption from certain parts (Certificate/Diploma and Diploma Project) of the membership exams for the British Computer Society. A project must be completed, comprising the design, development and evaluation of a major piece of software in the target application domain. Projects may be co-supervised by an industrial host under arrangements made by the department.

15	**Entry Criteria**
	A 2nd class honours degree from a British university, or equivalent, in Computer Science. Joint honours computing graduates or graduates in related engineering and science disciplines may also be eligible, provided they have covered a substantial amount of programming, or have equivalent professional experience in the IT industry.

16	**Learning Outcomes**
	On successful completion of this programme a student will be expected to be able to: 1. Demonstrate an advanced level of understanding and ability to make decisions about a wide range of recently emerged information technologies. (SS) 2. Demonstrate an advanced level of understanding of computers, computing, software development, and how to design and implement software systems. (SS) 3. Demonstrate an advanced level of understanding of approaches to the integration of recently emerged information technologies with modern organisations or markets. (SS) 4. Demonstrate an advanced level of understanding of the management and ability to make decisions about the application of information technologies in the financial services sector. (SS) 5. Identify appropriate technical and socio-technical solutions for financial services. (I) 6. Evaluate technologies and their uses and effect in financial services systems. (I) 7. Select appropriate methods of investigation of problems of research or development in financial services contexts. (P) 8. Work and learn independently. (PS) 9. Work and learn collaboratively. (PS) 10. Plan work and work to deadlines. (PS) 11. Plan, implement and report on an implementation-based dissertation or a research project. (P)

17	**Learning, teaching and assessment methods**
	Formal lectures are the principal teaching method, but these frequently incorporate practical sessions, for example in programming, and also group exercises carried out in class. There is a large element of practical coursework, which the students carry out in their own time; some of these coursework assignments are carried out in groups. Each student also undertakes an individual project of their own devising (which includes background research) and is supervised by a member of staff. The project provides an opportunity for students to investigate an aspect of the subject that particularly interests them and to build a larger and more complex system than they encounter in the assignments.

18	**Programme Description**
	The programme is modular. It is taught in one full (30 credits) and 6 half modules (15 credits each). Students also take a 60 credit research project module.

19	**Programme Structure**			
Part Time programme – 2 years				
Year 1				
Level	**Module Code**	**Module Title**	**Credits**	**Status***
7	BUEM076S7	Financial Markets	30	Compulsory
Year 2				
7	BUCI035D7	MSc Advanced Computing Technologies Project	60	Compulsory
Indicative list of Options Options that can be taken in either Year 1 or 2 (to the value of 90 credits in total) include:				
7	COIY025H7	Advances in Data Management	15	Optional
7	COIY029H7	Component-based Software Development	15	Optional
7	COIY065H7	Intelligent Technologies	15	Optional
7	COIY064H7	Information Retrieval and Organisation	15	Optional
7	COIY062H7	Software Design and Programming	15	Optional
7	COIY027H7	Fundamentals of Concurrent Systems	15	Optional
7	BUCI050H7	Software Engineering in Practice	15	Optional
7	MOMN083H7	Accounting and Financial Management	15	Optional
7	BUEM040H7	Asset Management	15	Optional
7	BUEM043H7	Corporate Finance	15	Optional
7	BUEM077S7	Econometrics of FM	15	Optional
7	BUMN039H7	Principles of Financial Reporting	15	Optional
Other options at Level 7 from the departmental provision available by approval of the programme director.				
Full Time programme – 1 year				
Year 1				
Level	**Module Code**	**Module Title**	**Credits**	**Status***
7	BUEM076S7	Financial Markets	30	Compulsory
7	BUCI035D7	MSc Advanced Computing Technologies Project	60	Compulsory
Indicative List of Options (students select options to value of 90 credits in total)				
7	COIY025H7	Advances in Data Management	15	Optional
7	COIY029H7	Component-based Software Development	15	Optional
7	COIY065H7	Intelligent Technologies	15	Optional
7	COIY064H7	Information Retrieval and Organisation	15	Optional
7	COIY062H7	Software Design and Programming	15	Optional
7	COIY027H7	Fundamentals of Concurrent Systems	15	Optional

7	BUCI050H7	Software Engineering in Practice	15	Optional
7	MOMN083H7	Accounting and Financial Management	15	Optional
7	BUEM040H7	Asset Management	15	Optional
7	BUEM043H7	Corporate Finance	15	Optional
7	BUEM077S7	Econometrics of FM	15	Optional
7	BUMN039H7	Principles of Financial Reporting	15	Optional
Other options at Level 7 from the departmental provision available by approval of the programme director.				

Status*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

20	**Programme Director**	Professor George Roussos
21	**Start Date** ***(term/year)***	October 2010
22	**Date approved by TQEC**	Spring 2010
23	**Date approved by Academic Board**	Summer 2010
24	**Date(s) updated/amended**	August 2017