Year of entry: 2021/22

Programme Specification

1	**Awarding body**	University of London					
2	**Teaching Institution**	**Birkbeck College**					
3	**Programme Title(s)**	**Cert HE Mathematical Studies**					
4	**Programme Code(s)**	UCHMATHS_C					
5	***UCAS code (if applicable)***	N/A					
6	**Home Department**	School of Science (Biological Sciences)					
7	**Exit Award(s)**	Cert CE					
8	**Duration of Study** (number of years)	1 year intensive or 2 years					
9	**Mode of Study**	FT		PT	**x**	DL	
10	**Level of Award (FHEQ)**	4					
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**
	• to widen participation and build confidence in the study of mathematics by mature learners • to promote equal opportunities for non-traditional learners needing to study part-time • to provide a sound framework and body of knowledge for understanding the ideas and methodology of mathematics and its applications • to provide an enjoyable and stimulating learning experience • to encourage and support the development of self-confidence and independence in the learning of mathematics • to provide a programme of study that will enable successful students to progress to more advanced programmes of study in mathematics and related areas • Classes for this programme take place on a part-time evening basis with six hours weekly of face to face evening teaching to enable participation of students with employment, domestic or job-seeking responsibilities during the day. This is the only course of this type and level in the London area.

15	**Entry Criteria**
	Applicants are advised that this intensive programme requires a high level of commitment and that although there are no formal qualifications for admission they need to have a keen interest in mathematics and sufficient time to devote to their studies The department runs a guidance and self-assessment system that all applicants for this programme have to undertake before enrolment.

	All applicants for this Award first have to complete short self-assessment exercises at home in numeracy and in basic algebra and then attend on one of the guidance days run by the department for an informal follow-up meeting with members of the lecturing team. The completed diagnostic material provides a good idea of students' skills in relation to the starting level of each module and assists students and lecturers in deciding if the programme meet applicants' interest and potential. Some preparatory mathematics modules are available if students are not immediately ready to join this Cert HE level 4 programme. In addition those offered places may be required to attend one of the summer top-up courses or be set pre-coursework to revise and improve their numerical and algebraic skills before the start of the modules in September.

16	**Learning Outcomes**
	On successful completion of this programme a student will be expected to be able to: **Subject specific:** 1. demonstrate knowledge of the underlying concepts and principles associated with mathematics and its applications and be able to interpret these within the context of their studies 2. apply mathematical concepts to the solution of a diverse range of problems 3. analyse and interpret data provided in exercises **Intellectual:** 4. extract, evaluate and accurately document relevant information from mathematical texts and on-line sources 5. present and interpret qualitative and quantitative data, develop lines of mathematical argument in accordance with basic theories and concepts 6. communicate the results of their study/work accurately and reliably in writing with structured and coherent arguments and using academic conventions **Practical:** 7. use standard mathematical symbols and representation of data confidently and correctly 8. demonstrate mathematical literacy Personal and Social 9. work independently and in a group including in a laboratory setting 10. manage their time and work to deadlines 11. identify and apply for a further programme of study as appropriate 12. demonstrate qualities and transferable skills which would be necessary for employment requiring the exercise of some personal responsibility

17	**Learning, teaching and assessment methods**
	A range of teaching methods including lectures, problem-solving, group work, open-book in-class tests and exercises are used.

	On-line learning materials are provided on Blackboard (BLE), and students are encouraged to make use of the discussion boards. All modules emphasise the development of active and scholarly engagement with the curriculum. The 15-Credit module 'Study and Research Skills for Physics and Mathematics' supports students in the acquisition of independent study skills including skills for revision and examination preparation. The 15-Credit module 'Personal progress and Development Planning' assists students with their application for further study and career planning. Diagnostic exercises set in the first two weeks of the Autumn Term enable students to identify gaps in their skills and on-line material is provided to assist them in the practice and enhancement of skills in identified areas. Home study is encouraged by referenced weekly reading and text book problems, question and problem sheets, and by a programme of home assignments. The assessment strategy is designed to support the students' development with a balance of coursework, in class tests and examination changing as the programme progresses. The final examinations for the Part 3 Physics and Mathematics modules are double-marked, and all coursework and tests are subject to sampling and moderation. **Mathematics and Further Mathematics modules:** The first two modules (Parts 1&2) in both these subject areas provide the opportunity for four assessments as follows: two home assignments, one in-class open book test , and an unseen in-class End-of-Module Test which provides formative examination practice for the final examination at the end of Module 3. Students are strongly encouraged to attempt all four assessments and the overall mark for each of the Part 1 & 2 modules is calculated from the average of the best three marks gained requiring a minimum total of 120 marks for a pass of 40%. A minimum of two of the four assessments has to be submitted to have a chance of gaining a pass. Students are strongly encouraged to attempt all four assessments and the overall mark for each of the Part 1 & 2 modules is calculated from the average of the best two marks gained in the two theory (home) assignments and in-class assignment open-hook exercise in mathematics and further mathematics) and the unseen in-class End-of-Module test. The three total assessments require a minimum total of 120 marks for a pass of 40%. A minimum of two of the four assessments has to be submitted to have a chance of gaining a pass. Taking the best three marks for these Part 1 and Part 2 modules allows students to treat the end of module tests as formative assessment in line with QAA guidance of avoiding premature summative assessment and the provision of sufficient time for students to mature and synthesise the knowledge, which is tested summatively in the 3 hour examination at the end of the Part 3 module. The final module (Part 3) for each subject is assessed by a final unseen 3 hour examination, which contributes 80% of the final mark for the module. The remaining 20% is calculated from a coursework assignment. Both, the examination and the coursework element must be passed in order to gain an overall pass for each Part 3 science module. **Module -Personal Progress and Development Planning. Assessed Pass/Fail only** Online application and Personal Statement for further study or employment submitted via password protected web-site.

	(50%) and an essay/report based on career research submitted via password accessed plagiarism software (50%) **Module -Study and Research Skills for Physics and Mathematics. Assessed Pass/Fail only.** Skills Portfolio (50%), and Critical Review of on-line web-sites/ background texts (50%) submitted via password accessed plagiarism software. The minimum pass mark for each module is 40%, and students must pass all eight modules to be awarded the Certificate of Higher Education. Students may apply for re-assessment in modules they failed at the next possible opportunity, which is usually in the subsequent academic year.

18	**Programme Description**
	To gain the Certificate of Higher Education, students must successfully complete the following 8 modules (all 15 credits each), worth a total of 120 credit points: Further Mathematics: Part 1 of 3 (FFMT012H4) Further Mathematics: Part 2 of 3 (FFMT022H4) Further Mathematics: Part 3 of 3 (FFMT032H4) Mathematics: Part 1 of 3 (FFMT011H4) Mathematics: Part 2 of 3 (FFMT021H4) Mathematics: Part 3 of 3 (FFMT031H4) Personal Progress and Development Planning (SCBS041H4) Study and Research Skills for Science and Mathematics (FFSC300H4)

19 **Programme Structure**

Part-time 1 Year Intensive Programme : Students take 120 credits

Year 1

Level	Module Code	Module Title	Credits	Status*
4	SCBS041H4	Personal Progress and Development Planning	15	Comp
4	FFSC300H4	Study and Research Skills for Physics and Mathematics	15	Comp
4	FFMT011H4	Mathematics: Part 1 of 3	15	Comp
4	FFMT021H4	Mathematics: Part 2 of 3	15	Comp
4	FFMT031H4	Mathematics: Part 3 of 3	15	Comp
4	FFMT012H4	Further Mathematics: Part 1 of 3	15	Comp
4	FFMT022H4	Further Mathematics: Part 2 of 3	15	Comp
4	FFMT032H4	Further Mathematics: Part 3 of 3	15	Comp

Part Time 2 Year Programme: Students take 60 credits per year

Year 1

Level	Module Code	Module Title	Credits	Status*
4	FFSC300H4	Study and Research Skills for Physics and Mathematics	15	Comp
4	FFMT011H4	Mathematics: Part 1 of 3	15	Comp
4	FFMT021H4	Mathematics: Part 2 of 3	15	Comp
4	FFMT031H4	Mathematics: Part 3 of 3	15	Comp

Year 2				
Level	**Module Code**	**Module Title**	**Credits**	**Status***
4	SCBS041H4	Personal Progress and Development Planning	15	Comp
4	FFMT012H4	Further Mathematics: Part 1 of 3	15	Comp
4	FFMT022H4	Further Mathematics: Part 2 of 3	15	Comp
4	FFMT032H4	Further Mathematics: Part 3 of 3	15	Comp

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**	Dr Vincent Tong
21	**Start Date** ***(term/year)***	Autumn 2011
22	**Date approved by TQEC**	Autumn 2010
23	**Date approved by Academic Board**	Spring 2011
24	**Date(s) updated/amended**	October 2015